

# SERIES #56 PROPRIETARY TRADER / LIMITED REPRESENTATIVE STUDY PROGRAM

## ABOUT THE SERIES #56 EXAMINATION

The Series #56 Proprietary Trader Examination, created by the options exchanges, is required for any individual that is a proprietary trader in options and equities. The exam is weighted heavily towards options trading rules, but also includes equity trading rules. This exam is not recognized by FINRA, which has its own Series #55 OTC Equity Trader Exam that has no options coverage.

The examination is administered by computer on weekdays through the PROCTOR System at Prometric Learning Centers or Pearson Vue Centers. The #56 examination consists of 100 multiple choice questions to be completed within 2 1/2 hours. (The exam also includes 5 trial questions per test, which are not included in the grading.) In the study outline, the CBOE did not publish a passing grade. Most exams have a 70% passing score, but some exams require higher scores. When the definitive passing score is determined, we will include it here.

## ABOUT THIS STUDY PROGRAM

The **PassPerfect** Series #56 Study Program is designed to cover all items that are tested on the examination while making the most efficient use of a candidate's time. The preparer of this material, Edward Fleur, has spent over 25 years developing and writing training materials for all securities examinations and has personally trained thousands of individuals in class for the securities licensing examinations. His in-depth knowledge of the material is presented in this course in an organized, concise, and clear format.

The course is divided into 5 chapters. Each chapter and the approximate number of questions included on the Series #56 test for that chapter are:

|                                  |            |
|----------------------------------|------------|
| EQUITY SECURITIES.....           | 5          |
| OPTIONS STRATEGIES.....          | 25         |
| TRADING MARKETS.....             | 15         |
| TRADING PRACTICES.....           | 40         |
| TRADING SYSTEMS.....             | 15         |
| <b>TOTAL NUMBER OF QUESTIONS</b> | <b>100</b> |

(If you compare our breakdown to the study outline for this exam, they will not match. We divide our course material into a learning order that is different than the outline, but all content areas in the outline are covered.)

Each chapter is followed by a chapter examination with detailed answers and explanations. Separate from the course material is a "Final Examinations" segment containing 4 practice tests.

## HOW TO USE THIS STUDY PROGRAM

To prepare for the examination, each chapter must be studied thoroughly, and each chapter examination must be completed within the text. The examinations are very important because they reinforce your knowledge of the material and highlight any weak areas that you might have. Before proceeding to the next chapter, review those areas where questions were answered incorrectly.

Certain areas of the examination are weighted more heavily than others and should be emphasized when studying. The most important chapters by test weight are: Chapter 2: Options Strategies and Chapter 4: Trading Practices These 2 chapters comprise 65% of the exam.

The 4 Final Exams are weighted similarly to the actual exam. A grade of 75% on each of these should be achieved before attempting to take the real test.

The total study time needed to complete the course is about 32 hours for the text and 12 hours for the Final Examinations. Since a person can only study effectively for about 4 hours a day, about 11 days of study are needed to complete the material.

## OTHER COURSES

**PassPerfect** training materials are available for other examinations that you may need in the future. The current list includes:

### Registered Representative Programs

- # 3 - Commodities / Futures Representative
- # 6 - Investment Company / Variable Annuity Representative
- # 7 - General Securities Representative
- # 11 - Sales Assistant / Order Processor
- # 17 - General Securities Representative for An Individual Holding A British Securities License
- # 55 - OTC Equity Trader
- # 56 - Proprietary Options / Equity Trader
- # 62 - Corporate Securities Representative
- # 63 - Uniform State Law Agent Examination
- # 65 - Registered State Investment Adviser
- # 66 - Combined State Agent and Investment Adviser
- # 82 - Private Securities Offerings Representative

## Principal Programs

- # 9 / 1 0 - General Sales Supervisor
- # 1 4 - Compliance Officer
- # 2 4 - General Securities Principal
- # 2 6 - Investment Companies / Variable Annuities Principal
- # 2 7 - Financial and Operations Principal
- # 2 8 - Limited Financial and Operations Principal
- # 4 - Registered Options Principal
- # 5 1 - Municipal Fund Securities Limited Principal
- # 5 3 - Municipal Securities Principal

In addition, many of our programs are available in various computer-based formats, including virtual classroom training. For information about our materials or classes: For information about our products or classes, call toll free:

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Or visit our web site at:

**[www.passperfect.com](http://www.passperfect.com)**

## COMMENTS AND QUESTIONS

We welcome your comments on the material and any recommendations you may have for improving this product. Our address is:

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Greenwich, Connecticut  
06831

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## EQUITIES CHAPTER (1)

|   | PAGES          |
|---|----------------|
| <b>SECTION 1: COMMON STOCK</b>                                  | <b>1 - 16</b>  |
| 1a. ISSUANCE OF COMMON STOCK.....                               | 1 - 2          |
| 1 b. SHAREHOLDER RECORDKEEPING.....                             | 3              |
| 1 c. RIGHTS OF A COMMON SHAREHOLDER.....                        | 3 - 6          |
| 1 d. CORPORATE DISTRIBUTION PROCEDURES.....                     | 6 - 9          |
| 1 e. RIGHTS DISTRIBUTIONS.....                                  | 9 - 11         |
| COMMON STOCK SECTION EXAMINATION.....                           | 12 - 14        |
| COMMON STOCK EXAM EXPLANATIONS.....                             | 15 - 16        |
| <b>SECTION 2: PREFERRED STOCK</b>                               | <b>17 - 26</b> |
| 2 a. ISSUANCE OF PREFERRED STOCK.....                           | 17 - 18        |
| 2 b. INTEREST RATE MOVEMENTS AND<br>PREFERRED STOCK PRICES..... | 18 - 20        |
| 2 c. PREFERRED STOCK FEATURES.....                              | 20 - 23        |
| PREFERRED STOCK SECTION EXAMINATION.....                        | 24 - 25        |
| PREFERRED STOCK EXAM EXPLANATIONS.....                          | 26             |
| <b>SECTION 3: SPECIAL SECURITIES</b>                            | <b>27 - 38</b> |
| 3 a. WARRANTS.....  | 27             |
| 3 b. RIGHTS.....  | 27 - 28        |
| 3 c. AMERICAN DEPOSITORY RECEIPTS.....                          | 28 - 29        |
| 3 d. EXCHANGE TRADED FUNDS (ETFs).....                          | 29 - 31        |
| 3 e. EXCHANGE TRADED NOTES (ETNs).....                          | 31 - 33        |
| SPECIAL SECURITIES SECTION EXAMINATION..                        | 34 - 35        |
| SPECIAL SECURITIES EXAM EXPLANATIONS....                        | 36 - 38        |

|   | PAGES          |
|---|----------------|
| .....   |                |
| <b>SECTION 4: SECURITIES ACTS / RULES</b>         | <b>39 - 54</b> |
| .....   |                |
| 4 a. OVERVIEW.....                                | 3 9            |
| 4 b. SECURITIES ACT OF 1933.....                  | 39 - 41        |
| 4 c. EXEMPT SECURITIES AND TRANSACTIONS.....      | 41 - 42        |
| 4 d. THE EFFECTIVE DATE.....                      | 43 - 45        |
| 4 e. SEC REGULATION M.....                        | 45 - 50        |
| .....   |                |
| SECURITIES ACTS / RULES SECTION EXAM.....         | 51 - 52        |
| SECURITIES ACTS / RULES EXAM<br>EXPLANATIONS..... | 53 - 54        |
| .....   |                |

## SECTION 1: COMMON STOCK

### 1a. ISSUANCE OF COMMON STOCK

#### Common Is Equity

#### Issued By Regular Corporations And Investment Companies

#### Authorized Stock

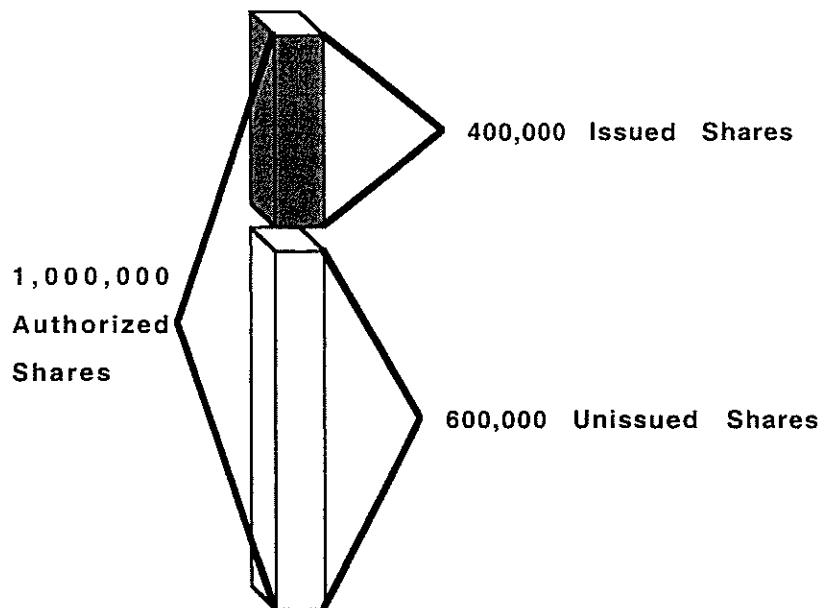
#### Arbitrary Low Par Value

#### Issued Stock

A common stockholder is an "owner" of a corporation. Owners are considered to have an equity position in the corporate structure. Therefore, common stock is an "equity" security. Aside from regular corporations, issuers of common stock include investment companies, such as mutual funds and real estate investment trusts.

When a corporation is formed, its corporate charter authorizes that a fixed number of common shares may be issued. This is called "authorized" stock. The stock is assigned an arbitrary par value, which is typically set quite low. For example, common stock might be assigned a par value of 10 cents a share or \$1 per share. Sometimes, par value is even set at zero, which is termed no par common stock. Par value for common has no bearing on the market price of the stock. Market value is based on investor expectations about the future of the company. The reason why par value is set so low is that many states tax corporations based on the par value of their shares.

Assume that a corporation is authorized under its charter to sell 1,000,000 common shares with a \$1 par value. The corporation does not "issue" all of its authorized shares. It sells only part of the authorized amount to the public so that it has the ability to sell more shares at a later date without having to amend its corporate charter. If this corporation issues 400,000 shares, it still has 600,000 shares available for issuance at a later date. This looks as follows:



**Outstanding Shares**

This corporation now has 400,000 shares outstanding in the hands of the public. These are the shares that trade in the market. After issuance, the corporation may "buy back" shares that are trading in the market. Repurchased shares are called "Treasury Stock" and are no longer outstanding in the hands of the public. Corporations will repurchase shares because:

**Treasury Stock - Repurchased Shares**

The market price is low and the corporation feels that the stock is a "good buy" at that price;

As Treasury stock is repurchased, the number of outstanding shares is reduced. Because earnings per share is based on outstanding shares, with fewer shares outstanding, earnings per share will rise;

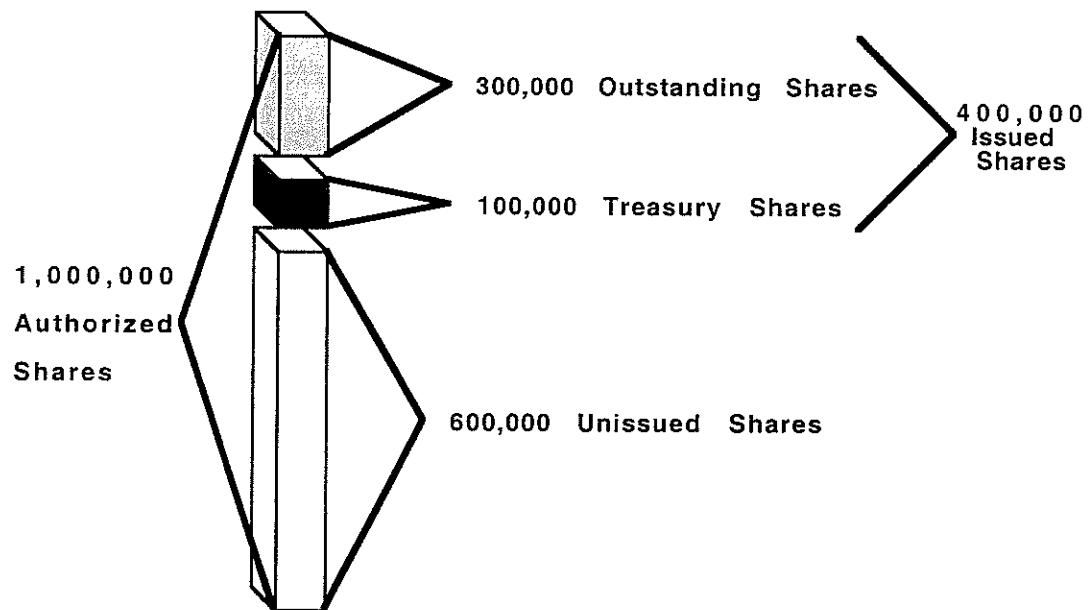
The shares can be used to fund pension plan and stock option plan obligations;

The shares can be used at a later date as "payment" for an acquisition or merger.

**Treasury Stock Does Not Vote Or Receive Dividends**

Treasury shares do not have the usual privileges accorded to outstanding common shares. For example, Treasury shares cannot vote and do not receive dividends. (These rights of a common shareholder are covered in Section 1c.)

Assume that our sample corporation has repurchased 100,000 common shares for its Treasury. The common stock structure of the corporation is:



## 1b. SHAREHOLDER RECORDKEEPING

### Registered In Owner's Name

The corporation must keep detailed records of the number of shares outstanding and the names and addresses of the owners of the shares. These shares are "registered" in the name of the owner. All equity securities are registered, so that the corporation can send dividends and other mail to the proper owners.

### Registrar

The corporation hires an outside firm (usually a bank or trust company) to act as registrar. The registrar maintains a record of all shareholder names and addresses and is given the responsibility to make sure that the company does not issue more shares than authorized under its charter.

### Transfer Agent

The corporation also hires an outside firm, a bank or trust company, to act as transfer agent. Every day, as trades of the stock settle (meaning payment takes place), a report is made to the transfer agent. The transfer agent then cancels old shares which have been sold and issues new shares in the name of new buyers of the stock. The transfer agent keeps an accurate record of the shareholders updated daily. Because it maintains the shareholders' names and addresses, the transfer agent usually handles the mailings to shareholders (e.g., dividends, corporate reports and voting materials).

### Record Book Of Stockholders

The registrar acts as a watchdog over the transfer agent. Transfer agents can, and have, made mistakes, such as canceling 100 shares and transferring those shares to the new owner as 1000 shares. The registrar is supposed to catch these mistakes and assure correction.

### Book-Entry Certificate

Instead of physically issuing and canceling certificates, a newer method of recording owners is through "book-entry" certificates. When securities are issued "book-entry," no certificates are issued. Instead, the ownership record is simply kept by the transfer agent and by the clearing corporation that settles trades.

## 1c. RIGHTS OF A COMMON SHAREHOLDER

Common shareholders enjoy limited liability as owners of the company (the most they can lose is their investment) and have a number of rights. These rights are:

### Right To Vote

Right to Vote: Common stockholders vote at the company's annual meeting. They vote for the Board of Directors (most corporate charters have half the Board come up for election each year) and on matters that affect the shareholder's "ownership interest."

For example, the common shareholders must approve the issuance of convertible bonds, since these securities can be converted into more common shares. If conversion occurs, with more shares outstanding, each existing shareholder's "ownership interest" will be diluted. Shareholders do not vote on management or dividend decisions - these are made by the Board.

**Items That Require Shareholder Vote**

Voting rules may vary, to some degree, from state to state. Generally, shareholder approval is required if the corporation wishes to:

- Declare a stock split;
- Declare a reverse stock split;
- Issue convertible bonds or preferred stock;
- Issue stock options to officers on a preferential basis.

The logic for requiring shareholder approval for these items is simple. The issuance of convertible securities is highly "dilutive," resulting in the issuance of many more common shares, reducing each existing shareholder's ownership interest. Issuing "preferential" stock options to officers benefits a select group of individuals, and could be viewed as "self-dealing" by these persons - hence shareholder approval is required. Stock splits and reverse stock splits have a major impact on the number of shares outstanding and the resultant share price, so shareholder approval is required.

**Items That Do Not Require Voting**

Shareholder approval is **not** required if the corporation wishes to:

- Declare a cash dividend;
- Declare a stock dividend;
- Declare a rights distribution (discussed later in this section);
- Repurchase shares for its Treasury.

Dividend decisions are made at the sole discretion of the Board of Directors - no shareholder vote is required. This is true for both cash dividends and stock dividends (defined as any stock distribution that is less than 25% of the outstanding shares). Rights distributions preserve a shareholder's ownership interest, so no voting is required. Finally, repurchase of Treasury shares results in fewer common shares outstanding, increasing each shareholder's percentage ownership, so no voting is required.

**1 Vote Per Share**

Each shareholder gets 1 vote per share. An owner with 100 shares gets 100 votes on each item being voted on that year. The corporation will use one of two voting methods - either statutory voting or cumulative voting. Assume that

6 directorships are open (6 voting items), with a choice of one of three persons for each directorship. Voting for a 100 share owner works as follows:

**Statutory Voting**

Statutory Voting: 100 votes maximum are allowed for each directorship. In total, 600 votes are cast.

**Cumulative Voting**

Cumulative Voting: 6 directorships x 100 votes = 600 votes which may be cast in **any manner**. For example, 300 could be cast for one director, 200 for a second, 100 for a third, with no votes for the remaining three directors.

Most corporations use statutory voting. Cumulative voting is considered to be an advantage for the "small investor" since he or she can vote disproportionately and can achieve more influence in the election of "selected" directors.

If a shareholder does not attend the annual meeting, he or she cannot vote. For this reason, many companies are infamous for having the meetings in places like East Gulch, Texas. If the only people who show up at the meeting are management (who usually hold large positions) and only they vote, they get to do whatever they want with the company.

**Proxies - Completed By Shareholders Who Do Not Attend Annual Meeting**

To stop this, shareholders not attending the meeting are required to receive voting cards from the company. By filling out these cards and mailing them to the company, at the annual meeting these votes will be counted. These cards are called "proxies" since a person at the annual meeting is acting as the shareholder's "proxy" (stand-in) and voting for them. Many shareholders receiving proxies do not respond. If this happens, management controls the voting at the annual meeting.

**Common Stock With Different Classes**

Some companies issue different classes of stock with different voting rights. For example, a family-owned company may go public by issuing Class A stock for family members and Class B stock for the public. Class A stock will have all voting privileges or "concentrated" privileges. Class B stock does not vote or has limited voting ability.

**Right To Inspect Books And Records**

Right To Inspect Books and Records: Common shareholders may inspect the books and records of a company. In practice, this doesn't happen since audited financial statements are required to be sent to shareholders annually by the Securities and Exchange Commission under the Securities Act of 1934.

**Right To Transfer Ownership**

Right To Transfer Ownership: Common shareholders have the right to sell their shares to anyone else without restriction. The shares are "negotiable" securities. They

**Negotiable**

can be traded. Certain securities are "non-negotiable." They cannot be traded. As an example, mutual fund shares are non-negotiable. Instead, they are redeemed with the issuer at a calculated value.

**Preemptive Right**

Preemptive Right: If the corporation wishes to issue more shares, common stockholders have the right to buy these shares before anyone else. Thus, they can maintain their proportionate ownership interest in the company. The offer of these shares to existing shareholders is called a "rights offering" and is discussed in Section 1e.

**Right To Corporate Distributions**

Right To Corporate Distributions: The Board of Directors decides if the corporation will pay a cash dividend, a stock dividend, or if it will "split" its stock (usually done when the market price of the stock rises too high for an average investor to buy the shares; by splitting the stock, the number of shares is increased and the price reduced, making the issue more accessible to investors). The common shareholder has the right to his pro-rata share of these distributions. Most corporations declare and pay common dividends quarterly.

**Right To Corporate Assets Upon Dissolution**

Right To Corporate Assets Upon Dissolution: If the corporation goes bankrupt or is dissolved, the common stockholder is paid **last** (if any assets remain).

## **1d. CORPORATE DISTRIBUTION PROCEDURES**

When a corporation decides to make a distribution (for example, a cash dividend) or if the corporation is going to issue "preemptive rights" to its existing shareholders, it makes an announcement which is published in such newspapers as The Wall Street Journal. Below is a sample:

**Monday, March 31, 200x**

**The Board of Directors of Acme Manufacturing Company today declares a dividend of 50 cents per share to stockholders of record on April 15, 200x. The dividend will be paid on April 30th, 200x.**

The Board of Directors has set the:

**Declaration Date**

Declaration Date: The date the dividend is declared;

**Record Date**

Record Date: The date on which the corporation takes the shareholder names and addresses from the transfer agent records for mailing the dividend;

**Payable Date**

Payable Date: The date the dividend checks will be mailed by the corporation's transfer agent.

These dates show on the calendar as:

| April 200X       |       |    |             |    |    |    |              |
|------------------|-------|----|-------------|----|----|----|--------------|
| S                | M     | T  | W           | T  | F  | S  |              |
| Declaration Date | → 3 1 | 1  | 2           | 3  | 4  | 5  |              |
|                  | 6 7   | 8  | 9           | 10 | 11 | 12 |              |
|                  | 13 14 | 15 | 16          | 17 | 18 | 19 |              |
|                  | 20 21 | 22 | 23          | 24 | 25 | 26 |              |
|                  | 27 28 | 29 | 30          |    |    |    |              |
|                  |       |    | Record Date |    |    |    | Payable Date |

**Regular Way Settlement**  
3 Business Days

**Must Settle By Record Date To Receive Dividend**

**If Trade Settles After Record Date, Do Not Receive Dividend**

Once the distribution is announced, the exchange where the stock trades has some work to do. To be an owner of record for the distribution, a customer must have paid for the stock by the close of business on the 15th (the record date). If the trade settles on the record date or before, the buyer will be on record as of the evening of the 15th and will be mailed the dividend.

Regular way settlement occurs 3 business days after trade date, so that the last day to buy and get the dividend is 3 business days prior to the record date. If the stock is bought after this date, the trade will settle after the record date and no dividend is received.

| April 200X   |       |    |             |    |    |    |  |
|--|-------|----|-------------|----|----|----|--|
| S  | M     | T  | W           | T  | F  | S  |  |
| Last Day To Buy Stock Regular Way And Receive Dividend | → 3 1 | 1  | 2           | 3  | 4  | 5  |  |
|  | 6 7   | 8  | 9           | 10 | 11 | 12 |  |
|  | 13 14 | 15 | 16          | 17 | 18 | 19 |  |
|  | 20 21 | 22 | 23          | 24 | 25 | 26 |  |
|  | 27 28 | 29 | 30          |    |    |    |  |
|  |       |    | Record Date |    |    |    |  |

**Cum-Dividend**

If a customer buys on the 10th or before in a regular way trade, he or she will get the dividend. The stock is trading with the dividend - "cum-dividend."

**Ex-Dividend**

If the customer buys on the 11th or later, he does not get the dividend - the stock is now trading "ex-dividend."

| April 200X   |    |    |    |    |    |    |    |
|--------------|----|----|----|----|----|----|----|
| S            | M  | T  | W  | T  | F  | S  |    |
| Last Day     | 3  | 1  | 2  | 3  | 4  | 5  |    |
| To Buy Stock | 6  | 7  | 8  | 9  | 10 | 11 | 12 |
| Regular Way  |    |    |    |    |    |    |    |
| And Receive  | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| Dividend     | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|              | 27 | 28 | 29 | 30 |    |    |    |
| Record Date  |    |    |    |    |    |    |    |
| First Day    |    |    |    |    |    |    |    |
| Stock Trades |    |    |    |    |    |    |    |
| Without      |    |    |    |    |    |    |    |
| Dividend     |    |    |    |    |    |    |    |

If a customer buys on the 9th, the trade will settle on the 14th, regular way, and the customer will get the dividend. If the customer buys on the 10th, the trade will settle on the 15th, and since the record book list is taken that night, the customer will get the dividend. If the customer buys on the 11th, the trade will settle on the 16th, and the customer will not be on the record book for the dividend, since the list was taken the previous night.

#### On Ex-Date The Exchange Reduces Price Of Stock

As of April 11th, any purchaser in a regular way trade does not get the dividend. The exchange sets this date as the "ex-dividend" date and reduces the price of the stock by the amount of the distribution when the stock opens for trading, since purchasers no longer qualify for the payment.

| April 200X   |    |    |    |    |    |    |    |
|--------------|----|----|----|----|----|----|----|
| S            | M  | T  | W  | T  | F  | S  |    |
| Last Day     | 3  | 1  | 2  | 3  | 4  | 5  |    |
| Stock Trades | 6  | 7  | 8  | 9  | 10 | 11 | 12 |
| Cum-Dividend |    |    |    |    |    |    |    |
|              | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|              | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
|              | 27 | 28 | 29 | 30 |    |    |    |
| Record Date  |    |    |    |    |    |    |    |
| Ex-Date      |    |    |    |    |    |    |    |

#### Ex-Date For Cash Dividends Is 2 Business Days Prior To Record Date

The "ex-date" is set by the exchange as 2 business days prior to the record date. (Remember, if one buys the stock 3 business days prior to the record date, the trade will settle on the record date and that person will get the distribution.)



Assume that Acme stock was trading at \$20 on the 10th. As of the 11th (the "ex"- date), the stock will open for trading at a price reduced by the \$.50 dividend, so it opens at \$19.50. Reduction on ex-date is done for a very simple reason. It stops traders from making windfall profits. If there was no reduction, a day trader could buy the stock on the 10th (getting on the record book for the 15th) and then sell on the 11th (going off the record book on the 16th) and be on the record book for the one day necessary to get a \$.50 dividend check. If there is no reduction, he could buy at \$20 and then sell at \$20 the next day and get a \$.50 check for 1 day's investment.

With the reduction, he buys at \$20 and sells at \$19.50, but receives the \$.50 dividend, so the end result is a "wash."

**Ex-Dates For Cash Dividends, Stock Dividends And Splits, And Rights Offerings**

Ex-dates (adjustment dates) are set not only for cash dividends, but also for stock dividends, stock splits, and rights offerings (discussed in the next section). For example, a corporation is splitting its stock 2 for 1. Just prior to the ex-date, the stock is trading at 44. As of the morning of the ex-date, the exchange will open the stock at 22 (\$44 / 2).

As another example, a corporation declares a 20% stock dividend. Just prior to the ex-date, the stock is trading at \$48. As of the ex-date, the exchange will open the stock at \$40 (\$48 / 1.20).

## 1e. RIGHTS DISTRIBUTIONS

We know that shareholders have the "preemptive" right to maintain proportionate ownership in the company. If a company wants to issue new shares, it gives its existing shareholders "first chance" on the issue.

**Existing Owners Can Subscribe At A Lower Price**

The existing shareholders are able to buy these shares for less than the current market price. The discount reflects the amount that would have to be paid to an underwriter to handle the offering if the issue were being sold to the general public. By selling directly to its existing shareholders, the company avoids using an underwriter and can pass the savings on to the existing shareholders.

**Rights Agent**

To handle the mechanics of the offering, the corporation hires a "rights agent." This is usually the existing transfer agent of the issuer. The rights agent issues the additional shares upon presentation of the rights certificates with the appropriate dollar subscription amount.

**Rights Expire In 30 - 60 Days**

Since the existing shareholders can buy the stock for less than the current market price, their subscription rights

have value. Shareholders are free to exercise their subscription rights or they can sell them to someone else. Since these rights typically last for 30 to 60 days and then expire, shareholders must decide quickly. Below is a sample rights announcement:

### **Monday March 31, 200x**

**The Board of Directors of Acme Manufacturing Corporation today declares a rights distribution to stockholders of record on April 15th, 200x. The rights will be distributed on April 30, 200x.**

**Under the terms of the offer, 5 rights are necessary to subscribe to one new share at a price of \$14 per share. Any residual rights totaling less than 5 can be rounded to 5 rights to purchase 1 additional share. The offer expires Midnight May 31, 200x.**

**The current market price of Acme stock is \$20.**

#### **1 Right Per Share**

Assume that a customer owns 100 shares of Acme stock. He will receive 100 rights from Acme on April 30th. These come as a physical certificate which can be sent to Acme with money to buy ("subscribe") more shares or they can be traded in the open market until expiration.

#### **Cum Rights**

Assume that it is March 31st and the customer wants to know how much the rights will be worth in the market. The stock is still trading "cum rights," since any purchaser will settle before the record date of April 15th and will receive the rights.

In theory the value of the right is included in the current market price of the stock. The formula for the value of the right is:

$$\text{Value Of Right (Cum Rights)} = \frac{\text{Market Price} - \text{Subscription Price}}{N + 1}$$

where  $N$  = number of rights to buy 1 share

$$= \frac{\$20 - \$14}{5 + 1} = \frac{\$6}{6} = \$1 \text{ Value Per Right}$$

The right is worth \$1 and theoretically can be sold for this amount.

When the stock trades "ex rights," any purchaser will no longer get the distribution. The market price will be reduced by \$1 ( $\$20 - \$1 = \$19$  new market price). As of the ex-date, the formula to calculate the value of a right is:

$$\text{Value Of Right (Ex Rights)} \quad \text{Value of Right (ex)} = \frac{\text{Adjusted Market Price} - \text{Subscription Price}}{N}$$

$$= \frac{\$19 - \$14}{5} = \frac{\$5}{5} = \$1 \text{ Value Per Right}$$

Please notice that the theoretical value did not change. This is not an accident - the values must always be the same.

This shareholder receives 100 rights which are worth \$100. He can send his certificate for 100 rights to Acme with a check for \$280 and receive 20 shares of stock (remember, it takes 5 rights to buy 1 share, so 100 rights buys 20 shares at \$14 subscription price = \$280). Or the rights can be traded in the market and the customer should get about \$100 for them. The shareholder must act fast though, since the rights expire in 2 months.

**Fractional Shares Rounded To Whole Shares**

If the customer had 104 shares, he would get 104 rights. Under the terms of the offer, he can "round up" to 105 rights and buy 21 shares at \$14.

## COMMON STOCK SECTION EXAMINATION

1.

The definition of Treasury Stock is:

- a. issued stock minus authorized stock
- b. issued stock minus outstanding stock
- c. authorized stock minus outstanding stock
- d. outstanding stock minus authorized stock

2.

Which of the following have an equity position?

- I Common Shareholders
- II Preferred Shareholders
- III Convertible Bondholders
- IV Warrant Holders

- a. I and II
- b. II and III
- c. I, II, IV
- d. I, II, III, IV

3.

The market price of common stock will be influenced by which of the following?

- I The par value of the shares
  - II Expectations for future earnings of the company
  - III Expectations for future dividends to be paid by the company
  - IV Book value of the company
- a. I and IV
  - b. II and III
  - c. I, II, III
  - d. II and IV

4.

Which are true statements regarding the activities of the registrar?

- I The registrar cancels old shares
  - II The registrar transfers shares to new owners
  - III The registrar accounts for the number of shares issued
  - IV The registrar keeps the shareholder record
- a. I and II
  - b. II and IV
  - c. III and IV
  - d. I, II, III, IV

5.

Cumulative voting is considered to be an advantage to the:

- a. large investor
- b. institutional investor
- c. small investor
- d. novice investor

6.

Which are functions of the transfer agent?

- I Mails dividend payments to shareholders
- II Cancels old share and issues new shares
- III Prepares and mails proxies
- IV Sets the Declaration Date

- a. I and II
- b. III and IV
- c. I, II, III
- d. I, II, III, IV

7.

Which of the following terms describes common stock?

- a. negotiable
- b. redeemable
- c. non-negotiable
- d. callable



8.

The Board of Directors of a company will set all of the following **EXCEPT**:

- a. declaration date
- b. record date
- c. ex-date
- d. payable date

Use the following information to answer the next 3 questions

ABC Corporation has declared a rights offering to stockholders of record on Wednesday, December 10th. Under the offer, shareholders need 10 rights to subscribe to 1 new share at a price of \$19. Fractional shares can be rounded up to purchase 1 full share.

9.

The regular way ex-date for cash dividends is set at:

- a. 1 business day before record date
- b. 2 business days before record date
- c. 3 business days before record date
- d. 3 business days after record date

12.

A customer owning 111 shares wishes to subscribe. The market price of the stock is currently \$30. The customer can buy:

- a. 11 shares for \$209
- b. 12 shares for \$228
- c. 11 shares for \$341
- d. 12 shares for \$372

13.

As of Monday December 1st, the stock is trading at \$30. The value of the right is:

- a. \$.90
- b. \$1.00
- c. \$1.10
- d. \$1.25

14.

After the ex-date, the stock is trading at \$29. The value of the right is:

- a. \$.90
- b. \$1.00
- c. \$1.10
- d. \$1.25

10.

ABC Corporation has declared a 5:4 stock split to shareholders of record on November 10th. A stockholder of record with 100 shares will receive how many additional shares?

- a. 20
- b. 25
- c. 120
- d. 125

11.

Referring to the previous question, the price of the stock will be reduced on ex-date by:

- a. 20%
- b. 25%
- c. 30%
- d. 50%

15.

Shareholder approval is needed for all of the following **EXCEPT**:

- a. declaration of a stock split
- b. declaration of a stock dividend
- c. declaration of a reverse stock split
- d. issuance of convertible preferred stock

**16.**

Which of the following statements are true regarding Treasury stock?

- I Treasury stock receives dividends
  - II Treasury stock votes
  - III Treasury stock reduces the number of shares outstanding
  - IV Treasury stock purchases are used to increase reported Earnings Per Share
- a. I and II
  - b. III and IV
  - c. II, III, IV
  - d. I, II, III, IV

**20.**

In a corporate liquidation, common stockholders are paid:

- a. before bondholders and preferred stockholders
- b. after bondholders and preferred stockholders
- c. after bondholders but before preferred stockholders
- d. before all creditors

**17.**

All of the following are rights of a common shareholder **EXCEPT**:

- a. right to vote
- b. right to receive a dividend
- c. right to manage
- d. right to transfer shares

**18.**

Common dividends are usually paid:

- a. monthly
- b. quarterly
- c. semi-annually
- d. annually

**19.**

A customer owns 200 shares of ABC stock. ABC is having a rights offering where 20 rights are needed to subscribe to 1 new share. The customer will receive:

- a. 1 right
- b. 10 rights
- c. 100 rights
- d. 200 rights

## COMMON STOCK EXAMINATION EXPLANATIONS

1. The best answer is b. Treasury stock consists of issued shares that have been repurchased by the corporation. Repurchased shares are no longer "outstanding," so the definition of Treasury Stock is issued shares minus outstanding shares.
2. The best answer is a. "Owners" have an equity position - and the only owners of a company are shareholders - both common and preferred. Convertible bondholders are creditors of a company. Their position only becomes equity if they convert to common shares. Warrant holders have long-term options to buy stock (covered in Section 3 of this chapter). They only become equity holders if they exercise their options.
3. The best answer is b. The market price of common stock is determined by investor expectations about the future of the company. Par value and book value have no bearing on the market price of the common.
4. The best answer is c. The transfer agent cancels old shares and issues new shares, keeping a record of current shareholder names and addresses. The registrar insures that all shares are properly accounted for and also keeps a record of the shareholders' names and addresses.
5. The best answer is c. Cumulative voting allows a disproportionate voting weight to be placed on selected directors and is considered to be an advantage for the small investor who wishes to have specific directors elected.
6. The best answer is c. The declaration date is set by the Board of Directors of the company. The transfer agent cancels old shares and issues new shares, mails voting materials (proxies), annual reports, and dividend payments to the shareholders.
7. The best answer is a. Common stock is a negotiable (transferable) security. It is not redeemable with the issuer nor is it callable by the issuer.
8. The best answer is c. The ex-date is set by the exchange where the stock trades once the Board of Directors sets the Record date. The Board of Directors, when it announces a dividend, sets the Declaration date, Record date, and Payable date.
9. The best answer is b. The regular way ex-(reduction) date is set at 2 business days prior to the record date. If the stock is bought before this date in a regular way trade (3 business day settlement), settlement will occur on the record date or before; and the purchaser will be on the record books for the distribution.
10. The best answer is b. A 5:4 stock split is a  $5/4 = 1.25 = 25\%$  split. The shareholder with 100 shares will get 25% more shares or 25 additional shares.
11. The best answer is a. This is a very tricky question. Since the stockholder has 1.25 times the number of shares after the split, the market price will be reduced on ex date by a factor of 1.25. Assume the market price of the stock is \$50 before the split. After the split, the new market price is  $\$50/1.25 = \$40$ . The new price is \$10 less than the original \$50.  $\$10/\$50 = 20\%$  reduction from the original price.

12. The best answer is b. The subscription offer allows fractional shares to be rounded up to buy 1 whole share. Since 10 rights are needed to buy 1 new share, the customer receiving 111 rights can buy  $111/10 = 11.1$  shares which rounds up to 12 shares at \$19 each = \$228 total for 12 shares.

13. The best answer is b. Since the record date is Wednesday, December 10th, a customer buying on Monday December 1st would settle prior to the record date and would be on the record books for the distribution. (The trade would settle on December 4th - 3 business days after the December 1st trade date.) Therefore, the stock is trading cum rights. The value of a right "cum rights" is:

$$\frac{\text{Market Price} - \text{Subscription Price}}{N + 1} = \frac{\$30 - \$19}{10 + 1} = \frac{\$11}{11} = \$1 \text{ Value "Cum Rights"}$$

14. The best answer is b. After the stock is trading "ex-rights," any purchaser is not entitled to the rights distribution. As of the ex-date, the price of the stock has been reduced on the exchange where the stock trades, so the price of \$29 already reflects the adjustment. The value of a right "ex rights" is:

$$\frac{\text{Adj. Market Price} - \text{Subscription Price}}{N} = \frac{\$29 - \$19}{10} = \frac{\$10}{10} = \$1 \text{ Value "Ex Rights"}$$

Notice that the market price of \$29 was **already** adjusted on the ex-date by the exchange where the stock trades. Do not try and reduce the price again!

15. The best answer is b. Stockholder approval is not required for a corporation to declare either a cash or stock dividend, nor is it required if a corporation wishes to issue rights or to repurchase shares for its Treasury. Stockholder approval is required if the corporation wishes to split its stock (or perform a reverse split); if the corporation wishes to issue convertible securities; or if the corporation wishes to issue preferential stock options to its officers.

16. The best answer is b. Treasury stock does not vote or receive dividends. Treasury stock is deducted from outstanding shares, and since outstanding shares are reduced, Earnings Per Share increases.

17. The best answer is c. The common shareholder does **not** manage the company - this is the domain of the Board of Directors and corporate officers. The common shareholder does have the right to vote, receive a dividend, and to sell his shares.

18. The best answer is b. Common dividends are usually declared and paid quarterly.

19. The best answer is d. The customer receives a right for each common share held. Since he owns 200 shares, he gets 200 rights. 20 rights are needed to buy 1 new share, so 200 rights / 20 rights per share allows the purchase of 10 new shares.

20. The best answer is b. In a liquidation, common shareholders are paid **last**, after creditors, bondholders, and preferred stockholders.

## SECTION 2: PREFERRED STOCK

### 2a. ISSUANCE OF PREFERRED STOCK

**Senior Security**

**Priority Of Claim  
To Dividend And  
Corporate Assets**

**\$100 Par**

**Fixed Dividend Rate**

**Semi-Annual Or  
Quarterly Payments**

**Recent Issues Of  
Preferred Stock  
Are \$50 Par Or  
\$25 Par**

**Bought By  
Corporations With  
Excess Funds - 70%  
Of Dividends  
Received Are Not  
Taxable To Small  
Corporate Investor**

Preferred stock is termed a "senior" security because it has priority over the common stock issued by the company. If the company declares a dividend, preferred shareholders must receive the dividend before the common dividend can be paid. If the company liquidates, preferred shareholders are paid before common shareholders.

Preferred stock is typically issued at \$100 par with a stated dividend rate. For example, a company issues \$100 par 10% preferred stock. The annual dividend is 10% of \$100 par = \$10 per year. Preferred dividends are paid semi-annually by many companies (similar to bond interest payments), so each 6-month payment will be \$5. Please note that there are a large number of companies that pay preferred dividends in a similar fashion to common dividends. These companies pay both common and preferred dividends quarterly, if declared by the Board.

A recent trend in preferred stock issuance is the offering of \$50 par preferred stock and \$25 par preferred stock. Many issuers are using these lower par values, because they make a "round lot" (100 shares) more affordable to investors (\$5,000 for a round lot of \$50 par preferred or \$2,500 for a round lot of \$25 par preferred, as opposed to \$10,000 for a round lot of \$100 par preferred).

Preferred differs from common in that it pays a fixed dividend rate. Common dividends are a discretionary decision made by the Board of Directors. If the company's earnings improve, the Board may vote to increase the common dividend. Preferred shareholders do not enjoy this increase - they always get the same dollar dividend - a fixed percentage of par value.

The benefit for preferred shareholders is the known dividend rate and the priority of claim over common shareholders. But if the Board of Directors votes to omit a dividend, the preferred dividends are **not** paid and the preferred shareholders have no recourse.

The typical purchaser of preferred shares is a corporate treasurer with excess funds on hand. The tax code gives the corporate treasurer a big incentive to invest in stock. If the treasurer were to buy bonds, all of the interest income is taxable to the corporate owner of the bonds. But if the corporation buys stock and receives dividends, 70% of the dividends received are excluded from tax (if the

position held is less than 20% of the outstanding stock. If more than 20% is held, the exclusion increases to 80%). Unfortunately, individuals do not get this loophole.

**Cash Dividends Received By Individual Investors Taxed At A Maximum 15% Rate**

However, under tax law revisions of 2003, cash dividends received by individuals who hold either common or preferred stock are taxed at a preferential rate (15% maximum); as opposed to a maximum tax rate on ordinary income of 35%. Thus, there is now a strong tax incentive to invest in stock that pays cash dividends (taxed at a maximum 15% rate) as opposed to, say, investing in bonds that pay interest (taxed at a maximum 35% rate).

**Price Of Preferred Influenced By Interest Rate Moves**

Once the preferred shares are issued, they trade in the market as does any other negotiable security. Unlike common stock, preferred stock price movements are not based on future expectations for the company. This makes sense since preferred does not share in earnings increases. Because preferred gets a fixed return, its price movement is influenced by interest rate movements.

## **2b. INTEREST RATE MOVEMENTS AND PREFERRED STOCK PRICES**

**Preferred Is Priced At Par At Issuance**

When preferred stock is issued, the dividend rate printed on the issue is set at a level comparable with the market rate of interest at the time. For example, assume that the market rate of interest for similar securities is 10%. The market is "pricing" these securities to give a 10% rate of return. Therefore, a new preferred issue will be priced in the market to give a yield of 10%.

For preferred shares we can derive the theoretical market price from the Current Yield formula:

**Current Yield**

**Current Yield** =

**Annual Income From Security**

**Market Price of Security**

**10%** =

**\$10 Annual Dividends**

**? Market Price**

Restated, the formula for the theoretical market price of the preferred stock is:

**Theoretical Market Price**

**Theoretical Market Price** = **Annual Income** = **\$10**  
**Market Yield** = **10%** = **\$100**



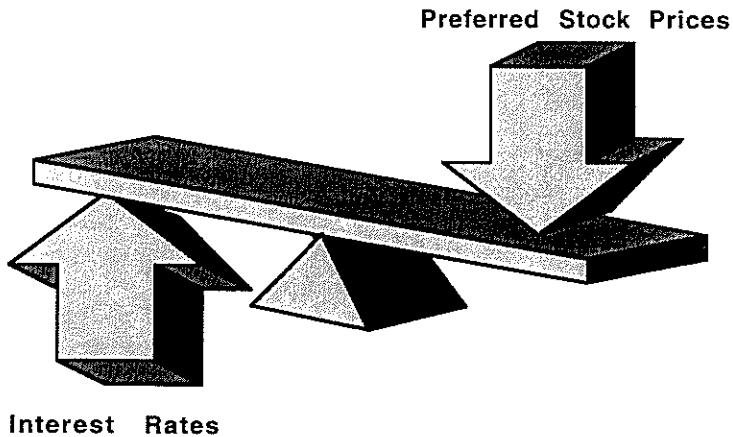
Therefore, this issue should sell in the market for \$100. Since the issuer prints "\$100 par" on the preferred shares, the issue sells at its par value.

**Interest Rates Rise  
Theoretical Price  
Must Fall**

Once the issue is outstanding in the market, assume that interest rates in general rise to 20%. If this occurs, any new preferred issues will be sold with 20% dividend rates. To be competitive with the market, a holder of the old 10% preferred wishing to sell, must drop his price. The price must fall to a level where the old preferred will give a current yield of 20%. The new theoretical price is:

$$\text{Theoretical Market Price} = \frac{\text{Annual Income}}{\text{Market Yield}} = \frac{\$10}{20\%} = \$50$$

If interest rates double (as in this example), the price of the issue drops in half.

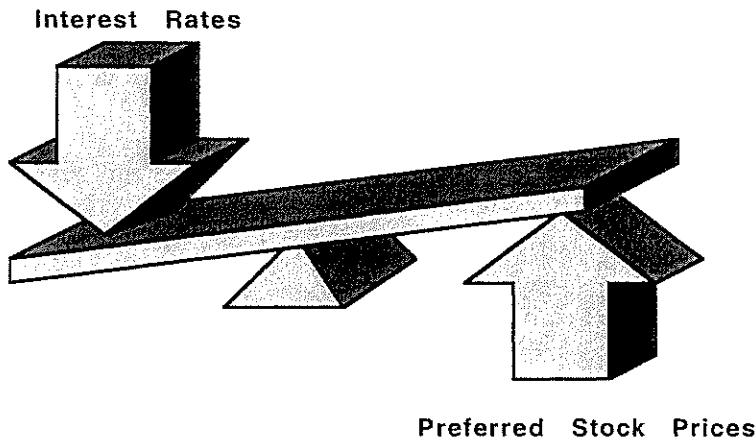


**Interest Rates Fall  
Theoretical Price  
Must Rise**

On the other hand, assume that market interest rates fall to half the original level and are now at 5%. If this occurs, any newly issued preferred shares will be sold with 5% dividend rates. To be competitive with the market, a holder of old 10% preferred shares wishing to sell will get more than par. The price will rise to a level where the issue gives a current yield of 5%. The new theoretical price is:

$$\text{Theoretical Market Price} = \frac{\text{Annual Income}}{\text{Market Yield}} = \frac{\$10}{5\%} = \$200$$

If interest rates drop in half (as in this example), the price of the issue doubles.



The inverse relationship between interest rate movements and preferred stock prices also holds true for bond prices since they also make fixed payments.

## 2c. PREFERRED STOCK FEATURES

### No Voting Or Preemptive Rights

Unlike common stock, preferred stock does not vote and does not have preemptive rights (since issuance of additional preferred shares does not dilute existing preferred holders' returns). We already know that the owner has preference to dividend distributions (paid semi-annually, though many preferred issues now pay dividends quarterly), and to company assets upon liquidation.

### Preferred Stock Has Similar Features To Bonds

In reality, preferred stock is very similar to a bond. Bondholders also receive a fixed interest rate, paid semi-annually, and do not have voting or pre-emptive rights.

The differences are:

Bonds mature on a set date while preferred stock has an indefinite life;

Bondholders have priority of claim to interest payments and corporate assets upon liquidation before preferred shareholders;

Bondholders have a legal right to the interest payments; preferred dividends are only paid if declared by the Board of Directors.

Bondholders who receive interest payments from issuers are taxed at a maximum rate of 35%; while holders of preferred (and common) stock who receive cash dividends are taxed at a maximum rate of 15%.



Preferred stock features are very similar to bond features. These features are:

**Cumulative**

Cumulative Preferred: If the issuer omits dividend payments, they "accumulate" and are paid if the issuer can ever resume making dividend payments. All accumulated preferred dividends must be paid, of course, in order to make a common dividend distribution.

**Callable**

Callable Preferred: The issuer has the right to "call in" the shares after a set date, usually at par. Issuers will call in the shares if interest rates have fallen. After retiring the old high rate shares, new preferred shares can be issued at the current lower rates.

**Convertible**

Convertible Preferred: The preferred shareholder can "convert" his shares into the common stock of the issuer based on a predetermined price. If the market price of the common rises, the convertible's value is pushed up as well (since it can be turned into the common stock). In addition to the fixed dividend rate, convertible holders can enjoy capital gains if the price of the common stock moves up. The issuer can sell convertibles at lower dividend rates because of the value of the conversion feature.

**Conversion Ratio**

For example, an issuer sells \$100 par convertible preferred stock, convertible at \$25, when the market price of the common is \$10 per share. The preferred stockholder has the right, at any time, to convert 1 preferred share at \$100 par, into common at a price of \$25 per share. Thus, the conversion ratio is: \$100 par preferred/\$25 conversion price = 4 common shares per preferred share.

To summarize, the formula for the conversion ratio is:

$$\text{Conversion Ratio} = \frac{\text{Par}}{\text{Conversion Price}}$$

Thus, this preferred stockholder can always convert into 4 shares of common. Also note that at issuance, the conversion feature has no value, since the preferred stockholder can convert based upon a common price of \$25 per share; and the common is worth \$10 per share at issuance. For the conversion feature to have value, the price of the common must rise above \$25 in the market.

**Parity Price**

If the price of the common rises above \$25 per share, the price of the preferred will rise; not because interest rates have fallen; but because the preferred is equivalent to 4 of

those common shares. Thus, the preferred will trade at "parity" with the common.

Continuing from the previous example, if the common stock price rises to \$30 per share, the preferred must be trading at a price equal to 4 times this amount, since each preferred share can be converted into 4 common shares. Thus, the preferred will be trading at  $4 \times \$30 = \$120$  per share, not because interest rates have fallen, but because the price of the common has increased.

To summarize, the formula for the parity price of the preferred stock is:

$$\text{Parity Price Of Preferred} = \frac{\text{Market Price Of Common} \times \text{Conversion Ratio}}{4}$$

#### Forced Conversion

When the price of the convertible preferred stock rises due to an increase in the market value of the common, if the issuer originally made the convertible preferred stock callable, then the issuer can "force conversion" of the preferred.

Continuing from the previous example, assume that the convertible preferred stock is callable at \$110 per share by the issuer; and that the preferred is trading in the market at the current parity price of \$120. If the issuer calls in the preferred stock, the preferred stockholder who tenders his or her shares will get \$110 per share. If the preferred stockholder converts, he or she will get 4 shares of common, currently worth \$30 each, receiving common stock with a total value of \$120. This is the better deal for the customer, who is "forced" to convert, since if he does nothing, once the preferred is called, dividend payments cease.

By forcing conversion, the issuer eliminates the preferred stock on which it pays a higher fixed dividend rate; and replaces it with common shares on which it pays a lower dividend rate. Note that conversion can only be forced if the convertible preferred is trading at a premium to the call price.

#### Participating

Participating Preferred: In addition to the fixed dividend rate, the preferred "participates" in any "extra" dividends declared by the Board of Directors. For example, assume that ABC pays a \$1.50 quarterly common dividend. After having an exceptionally strong year, the Board declares a special year-end dividend of \$5.00. The preferred as well as



the common will receive this dividend if the preferred has a "participating" feature.

**Also Known As  
Performance  
Preferred Stock**

Sometimes, participating preferred stock is referred to as "performance preferred," because the preferred shareholders are able to receive a higher dividend amount if the company's performance is better than usual.

**Adjustable Rate  
(Reset)**

**Adjustable Rate Preferred:** This is a relatively new type of preferred stock. Instead of paying a "fixed" dividend rate, the dividend rate is "reset" periodically (usually once a year) to an index of market rates. If interest rates rise, the rate will increase at the reset date. If interest rates fall, the rate will decrease at the reset date. Sometimes this type of issue is called "reset" preferred.

**Variable Rate  
Security Price  
Stays At, Or Close  
To, Par**

Please note that with any "variable rate" security, because the interest or dividend rate is continually reset to the market, the price of the security stays at, or very close to, par. The inverse relationship between preferred stock prices and market interest rate levels does not hold for a variable rate security because as market interest rates move, the rate on the security is moved in tandem, so the price stays at par.

## PREFERRED STOCK SECTION EXAMINATION

1.

Which of the following statements are true about preferred stock?

- I Dividends are paid before common
- II Dividends are paid monthly
- III Dividends are based on corporate earnings
- IV Preferred shareholders have a prior claim to common shareholders

- a. I and II
- b. I and IV
- c. II, III, IV
- d. I, II, III, IV

2.

A customer buys 100 shares of preferred at \$80 per share. The par value is \$100. The dividend rate is 10%, with dividends paid semi-annually. The customer will receive how much in each dividend payment?

- a. \$400
- b. \$500
- c. \$800
- d. \$1000

3.

Which investment gives the highest after-tax return to a **small** corporate investor in the 50% tax bracket?

- a. 10% Corporate Bond
- b. 10% Preferred Stock.
- c. 15% Corporate Bond
- d. 5% Preferred Stock

4.

All of the following are terms associated with preferred stock **EXCEPT**:

- a. callable
- b. cumulative
- c. redeemable
- d. convertible

5.

ABC Company has issued 10% cumulative preferred stock. Two years ago, ABC paid a 6% preferred dividend. Last year, ABC paid a 7% preferred stock dividend. This year, ABC wishes to pay a common dividend. The preferred shareholders must receive:

- a. 0%
- b. 7%
- c. 10%
- d. 17%

6.

ABC 10% \$100 par preferred is trading at \$120 in the market. The current yield is:

- a. 5%
- b. 8.33%
- c. 10%
- d. 125

7.

As interest rates rise, preferred stock prices will:

- a. remain unaffected
- b. rise
- c. fall
- d. fluctuate

8.

Which statement is best regarding participating preferred stock?

- a. The dividend rate is fixed
- b. The dividend rate varies depending on the decision of the Board of Directors
- c. The dividend rate is fixed as to maximum but not as to minimum
- d. The dividend rate is fixed as to minimum but not as to maximum

9.

Callable preferred stock is likely to be redeemed by the issuer if:

- a. interest rates rise
- b. interest rates fall
- c. the common stock price rises
- d. the common stock price falls

10.

All of the following are the same for preferred stock and bonds **EXCEPT**:

- a. fixed payment rate
- b. periodic payments to owners
- c. can be callable
- d. fixed maturity date

## PREFERRED STOCK EXAMINATION EXPLANATIONS

1. The best answer is b. Preferred dividends are paid before common dividends can be paid and preferred holders have a prior claim to assets in a liquidation before common. Preferred dividends are set at a fixed rate and are paid semi-annually or quarterly.
2. The best answer is b. Preferred dividends are based on a stated percentage of par value. The stated rate is 10% of \$100 par = \$10 annual dividend per preferred share. Since there are 100 shares, the annual dividend is \$1000. Remember, though, that preferred dividends are typically **paid** twice a year, so each payment will be for \$500.
3. The best answer is b. Interest received by a small corporate investor is 100% taxable. Dividends received by a small corporate investor are 30% taxable (70% is excluded from tax). The after-tax return of each choice is:

| Annual Income<br>(A)    | Taxable Portion<br>(B) | Tax Rate<br>(C) | Effective Tax<br>(B x C) = D | Tax Amount<br>(D x A) = E | After Tax<br>(A - E) |
|-------------------------|------------------------|-----------------|------------------------------|---------------------------|----------------------|
| \$100 - Corporate Bond  | 100%                   | 50%             | 50%                          | \$50                      | \$50                 |
| \$100 - Preferred Stock | 30%                    | 50%             | 15%                          | \$15                      | \$85                 |
| \$150 - Corporate Bond  | 100%                   | 50%             | 50%                          | \$75                      | \$75                 |
| \$50 - Preferred Stock  | 30%                    | 50%             | 15%                          | \$7.50                    | \$42.50              |

4. The best answer is c. Preferred stock is not redeemable - it is a negotiable security. It cannot be redeemed with the issuer - an investor who wishes to liquidate must sell the stock in the market. Preferred stock can be callable, cumulative, and convertible.

5. The best answer is d. Since this is cumulative preferred stock, all missed dividends must be paid before a common dividend can be paid. Two years ago, 4% was missed, last year 3% was missed; and this year's preferred dividend of 10% must be paid before the common dividend is paid. The total preferred dividend to be paid is 17%.

6. The best answer is b. The formula for current yield is:

$$\frac{\text{Annual Income}}{\text{Market Price}} = \frac{\$10}{\$120} = 8.33\%$$

7. The best answer is c. Preferred stock prices move inversely with interest rates. As interest rates rise, preferred stock prices fall.

8. The best answer is d. Participating preferred pays a fixed dividend rate but also participates in "extra" dividends declared by the Board of Directors. Therefore, the dividend rate is fixed as to minimum but not as to maximum.

9. The best answer is b. If interest rates fall, issuers can "call in" old high rate preferred and replace it by selling new preferred at the lower current rates. Thus, calls take place when interest rates have fallen.

10. The best answer is d. Preferred stock has no maturity - its life is indefinite. Bonds have a stated maturity date. Both preferred and bonds are fixed rate, can be callable, and make periodic payments of interest or dividends to owners.



## SECTION 3: SPECIAL SECURITIES

### 3a. WARRANTS

**Warrant Attached  
To New Stock Or  
Bond Issue**

A warrant is a long term option to buy stock at a fixed price. Warrants are typically attached to the sale of a new stock or bond issue as a "sweetener" to make the issue more attractive.

**Long-Term Option  
To Buy Stock**

For example, a new issue is being sold as a "unit" consisting of 1 common share and 1 warrant to purchase an additional common share. The common stock is valued at \$20 and the warrant allows the purchase of the additional share at \$30. The warrant expires in 5 years.

The warrant usually has a "wait" period before it can be exercised (e.g., 1 year). After the wait period, it can be exercised at the set price until expiration. It makes no sense to exercise unless the market price of the stock rises, in this case to at least \$30.

Thus, warrants have an indeterminate value at issuance. But they are worth something and allow the issuer to raise the price (if it is stock) or lower the interest rate (if it is debt) of the issue to which the warrant is attached.

**Exercise Price Set  
At Premium To  
Market Price At  
Issuance**

Warrants are almost always issued at a substantial premium to the stock's current market price and only gain additional value if the common stock price rises. For example, assume that this warrant is valued in the market at \$1. If the market price of the stock moves to \$35, the warrant will be worth at least \$5 since it allows the purchase of the stock at \$30 per share.

**Perpetual Warrant**

Warrants usually have a life of 5 years, but sometimes perpetual warrants are issued. They trade separately from the common stock on the exchange where the stock is listed.

**Index Warrant**

A derivative of the stock warrant is the "index warrant." This is a long-term option to either buy or sell an underlying index or currency. These are traded on stock exchanges, but behave like options, so they are covered in the Options Chapter of this text.

### 3b. RIGHTS

**Very Short Term**

A right is a short-term option to buy stock at a fixed price. Typically, rights are issued for 30-60 days and then expire.

Rights are issued under an offering of new common shares to existing shareholders under their pre-emptive rights. Rights offerings were covered in Section 1e. Rights trade separately from the stock on the exchange where the stock is listed.

### **3c. AMERICAN DEPOSITORY RECEIPTS (ADRs)**

**ADRs Are A Vehicle For Trading Foreign Securities In U.S.**

Foreign companies can "list" their shares for trading on stock exchanges in the U.S. For example, one can buy Sony stock or British Telecom stock. When one buys these "shares," instead of getting stock certificates, the buyer gets American Depository Receipts.

Foreign companies do not want their actual shares traded in the U.S. because the shares have to be registered in the U.S. with the Securities and Exchange Commission, and the company must follow SEC reporting rules. This is time consuming and expensive.

**Bank Holds Foreign Securities In Country Of Origin**

These companies let someone else bother with all of these requirements - usually Morgan Bank or another large bank with offices in the country where the company is headquartered. The bank will buy up blocks of the stock and place it in trust in the country of origin. The bank then issues American Depository Receipts which are backed by the securities held in trust. The ADRs are registered with the SEC and sold in the U.S. As dividend payments are received, the bank passes these on to the receipt holder. But the receipt holder does not have voting or preemptive rights. The bank votes the shares that it owns and it will sell off preemptive rights and remit the money to the receipt holder.

**Bank Then Issues Receipts In U.S. Backed By The Foreign Securities**

**No Voting Or Preemptive Rights**

An ADR can represent one share of the underlying stock, multiple shares, or fractional shares. All exchange listed ADRs are "sponsored," that is, the foreign company "sponsors" the issue to increase its worldwide ownership base. Sponsored ADRs only use one depository bank (such as Morgan), which is appointed by the issuer. Issuers that sponsor ADRs provide quarterly and annual financial reports to shareholders in English. Sponsored ADRs are often called American Depository Shares or ADSs.

**Sponsored ADRs**

**Commonly Known As American Depository Shares**

**Non-Sponsored ADRs**

Non-sponsored ADRs are assembled by banks and broker-dealers without the issuer's participation. An unsponsored program may have more than one depository bank, since the issuer does not participate in any way. Holders of non-sponsored ADRs receive annual reports only in the language of the issuer. Non-sponsored ADRs trade "over-the-counter."

The major stock exchanges have been aggressively pursuing large foreign companies to list their ADRs. As of the beginning of 2011, there were approximately 500 ADR issues listed on the NYSE and about another 300 on the NASDAQ stock market. In total, there are approximately 1200 ADR issues traded in the United States on all of the exchanges and in the "over-the-counter" market.

|   |   |
|---|---|
| <b>Dividends Declared In Foreign Currency</b>         | Also, please note, dividends on ADRs are declared by the foreign company in the local currency, and are then converted into U.S. dollars and remitted to the receipt holders by the intermediary bank. The market prices of ADRs will therefore be influenced not only by the performance of the company's stock, but also by foreign currency exchange fluctuations. |
| <b>Dividends Converted And Paid In Dollars</b>        |   |
| <b>Exchange Risk</b>                                  |   |
| <b>Foreign Taxes Withheld - Credit On U.S. Return</b> | On dividends received from ADRs, the country of origin can withhold local taxes, but such taxes can be claimed as a credit against U.S. taxes due on dividends received.  |

### 3d. EXCHANGE TRADED FUNDS (ETFs)

The Investment Company Act of 1940 defines a "management company" as an investment company. A management company has an investment adviser to manage the fund to meet the fund's stated investment objective.

Management companies can either be "open-end" or "closed-end."

|                                      |   |
|--------------------------------------|---|
| <b>Open End Management Company</b>   | An "open end" management company is a mutual fund. A mutual fund continuously issues and redeems its own shares, so it is "open" to new investment. There is no trading of mutual fund shares. The shares are bought directly from the fund and are redeemable with the fund.   |
| <b>Closed End Management Company</b> | A "closed end" management company differs in its capital structure. It has a 1-time stock issuance like any other public company; the company's books are closed to new investment; and the shares are listed and trade like any other stock. These are called publicly traded funds or exchange traded funds.  |
|                                      | Furthermore, management companies can either be actively managed or passively managed. An actively managed fund uses the investment adviser to decide which investments to buy or sell. A passively managed fund simply has the investment adviser match the fund portfolio to a recognized market index. Such funds have much lower management fees. |

Originally, the closed end fund structure was used for portfolios of illiquid securities, where the fund manager did not have the ability to easily meet large redemption requests because positions were hard to liquidate. The closed-end structure was extended to index funds in the early 1990s.

### **Exchange Traded Funds - ETFs**

ETFs represent shares of ownership in portfolios of common stock that track the performance of a specific index. ETFs started in the early 1990s with the creation of the Standard and Poor's 500 Index Fund, traded on the American Stock Exchange. Called a "SPIDER" - which stands for "Standard and Poor's Depository Receipt" - often abbreviated SPDR - this is a very successful product.

As compared to an Index Mutual Fund, ETFs offer the following advantages:

ETFs are continuously priced on the exchange based on the changes in value of the stocks held in the index and trade similar to any other common stock. A customer placing an order buys at that moment's price - in contrast, mutual funds are only priced 1 time per day. Any orders to buy a mutual fund are filled at that day's closing NAV (plus a sales charge, if applicable).

ETFs are purchased without a sales charge. However, a regular stock trading commission is charged to buy or sell ETFs.

ETFs can be purchased on margin; whereas mutual funds are generally not marginable. In addition, ETFs can be sold short, whereas mutual funds cannot be sold short.

The expenses associated with running ETFs are comparable to, or lower than, those of similar mutual funds.

ETFs are "tax-efficient" because they are not obligated to distribute capital gains to shareholders annually, as is the case with a mutual fund. As the shares appreciate, there is no annual tax bill on the appreciation. The tax becomes due when the shares are sold.

The most successful ETFs are:

### **Spiders - SPDR**

SPDRs - Standard and Poor's 500 Depository Receipts, which are often referred to as "Spiders."

|                       |   |
|-----------------------|---|
| <b>Diamonds - DIA</b> | DIAs - Dow Jones Industrial Average (30 Stocks), often referred to as "Diamonds."   |
| <b>Qubes - QQQQ</b>   | QQQQs - NASDAQ 100 Index, often referred to as "Qubes."   |
| <b>Sector SPDRs</b>   | ETFs have been extremely successful and "SPDR" has been extended into a "brand" with the introduction of the Mid-Cap SPDR, as well as Sector SPDRs. There is also a complete line of international sector index ETFs, and specialized index ETFs (such as shares based on the Russell 2000 index) known as "I-Shares" (Index Shares), issued in partnership with Barclays Bank. |
| <b>I Shares</b>       | Variants of ETFs have proliferated and the following must be known:   |

**Narrow-Based ETF:** An ETF that invests in an underlying portfolio that consists of 9 or fewer stocks.

**Broad Based ETF:** An ETF that invests in an underlying portfolio of 10 or more stocks.

**Leveraged ETF:** Because closed-end funds are capitalized like any other company, they can sell bonds and use the proceeds to make equity investments (bond debt is called leverage because it allows the issuer to magnify gains (and unfortunately, losses as well) on the underlying portfolio). For example, a 200% leveraged ETF has issued \$2 of bonds for every \$1 of net assets; and has used to proceed to make additional equity investments. The price movements of leveraged ETFs are much more volatile than traditional ETFs - great in bull markets; horrible in bear markets.

**Guild (GLD) ETF:** An ETF (part of the SPDR family) that, instead of investing in securities, invests in gold bullion. It is marketed as a more efficient means of investing in gold, since the investor does not have to deal with the logistics of buying, storing and insuring the gold. The share price directly tracks the price of gold bullion.

### 3e. EXCHANGE TRADED NOTES (ETNs)

|                              |                           |  |
|------------------------------|---------------------------|--|
| <b>Structured Derivative</b> | <b>Products- Security</b> | Structured products are securities based on, or derived from, a basket of securities, an index, or other securities, commodities or currencies. There are many types of structured products, but generally they consist of a "bond" portion, which pays interest based on the performance of |
|------------------------------|---------------------------|--|

a well known index such as the S & P 500 Index. In addition, they have a derivative component (an embedded option) that allows the holder to sell the security back to the issuer (at par) at maturity. These are often marketed as debt instruments, but that is not really the case. Structured products are created by many different banks and brokerage firms and each firm's version is somewhat different.

Structured products are "equity-linked" securities because they give a return based on an equity index. For example, the structured product may give the return of the S & P 500 index, but the maximum annual return might be capped at, say, 12%. Thus, in a year when the index "zooms up," the holder is capped to a maximum return of only 12% for that year. On the other hand, these products include a "floor" in the form of a guaranteed minimum annual return. For example, the return might be guaranteed at a minimum of 3%. If the reference index drops dramatically during the year, the investor still gets 3%.

The attraction of the product is clear - the investor gets equity returns in good years (subject to the cap); with no exposure to losses. This is done by using options collars on the index (covered in the next chapter), but such a collar comes at a cost. Furthermore, these are "buy and hold" products that typically have a 7 year life. Early redemption with the sponsor incurs a penalty (to pay for the options collar).

#### **ETN - Exchange Traded Note**

A variation on a "structured product," first introduced in 2006, was created to eliminate the liquidity risk of the security. This is the "ETN" - Exchange Traded Note. An ETN gives a return linked to a market index, has a set maturity date, and is backed by the credit rating of the issuing bank. They are listed on an exchange and trade, so an investor can "get out" at any time at the current market price.

The ETN is a debt instrument, but it does not make periodic interest payments. The value "grows" based on the performance of the underlying index, and the difference between the purchase price and the sale price (or redemption price at maturity) is taxable. A major tax benefit of the ETN is that under current IRS rules for this type of synthetic structured product, the gain is treated as a taxable capital gain, taxed at preferential rates (15% maximum instead of 35% maximum).

#### **ETN Has Tax Advantage As Compared To Other Debt Instruments**

Thus, the main advantages of an ETN as compared to a structured product are:

No Liquidity Risk; and

Tax Efficiency.

**ETN Investors Can  
Get Access To Exotic  
Investment  
Strategies**

A variety of ETNs have been created by banks to give investors access to returns tied to "more exotic" indexes. For example, ETNs have been created that give returns tied to commodity indexes and to indexes based on the performance of stocks in Third World countries (e.g., an India Index or a Brazil Index).

**ETN Has No Relation  
To An ETF**

Do not confuse an ETN with an ETF - an Exchange Traded Fund. An ETN has no underlying portfolio - the issuer is promising to give a return tied to the index, but the investments in that index may, or may not, be owned by the issuer. The ETN is really only backed by the credit rating of the issuing bank.

## SPECIAL SECURITIES SECTION EXAMINATION

Use the following information to answer the next 2 questions:

A corporation is offering a new issue consisting of 100,000 units at \$200 each. Each unit consists of 2 shares of preferred stock and a warrant to buy one half additional common share. 2 warrants allows the purchase of an additional common share at \$5.

1.

How much money does the corporation raise from this issue?

- a. \$500,000
- b. \$10,000,000
- c. \$20,000,000
- d. \$40,000,000

2.

If all the warrants are exercised, the corporation will have:

- a. 100,000 preferred shares and 100,000 common shares
- b. 200,000 preferred shares and 100,000 common shares
- c. 200,000 preferred shares and 50,000 common shares
- d. 50,000 preferred shares and 100,000 common shares

3.

The exercise price of a warrant is set at issuance at:

- a. a discount to the market price of the common stock
- b. a premium to the market price of the common stock
- c. the market price of the common stock
- d. any price designated by the issuer

4.

ADRs are used to:

- a. facilitate trading of domestic securities in foreign countries
- b. facilitate trading of foreign securities in the United States
- c. allow trading of rights on exchanges
- d. allow trading of warrants on exchanges

5.

All of the following statements are true about ADRs **EXCEPT**:

- a. ADRs trade on national stock exchanges
- b. ADR holders receive dividends
- c. ADR holders can vote for the Board of Directors
- d. ADR holders receive the cash value of pre-emptive rights

6.

An ETN offers an investor all of the following benefits **EXCEPT**:

- a. lack of liquidity risk
- b. lack of credit risk
- c. tax-efficiency
- d. access to returns of foreign investments



7.

SPDRs are based on the:

- a. Standard and Poor's 100 Index
- b. Standard and Poor's 500 Index
- c. Standard and Poor's 1000 Index
- d. Standard and Poor's 5000 Index

10.

All of the following statements are **TRUE** about ETNs **EXCEPT**:

- a. ETNs can be traded in the market like any other stock
- b. ETNs offer an investment return tied to a benchmark index
- c. ETNs are an equity security
- d. ETNs are tax-advantaged

8.

Exchange traded index funds:

- I have comparable or lower expense ratios than index mutual funds
- II can be traded anytime during exchange trading hours at net asset value
- III can be redeemed at net asset value computed at the close of the market
- IV can be traded at no commission cost to the customer

- a. I and II only
- b. III and IV only
- c. I, II, III
- d. I, II, III, IV

9.

When comparing an ETN to an ETF, which statements are **TRUE**?

- I ETNs are a type of investment company offering
- II ETFs are a type of investment company offering
- III ETNs are a debt instrument
- IV ETFs are a debt instrument

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

## SPECIAL SECURITIES EXAMINATION EXPLANATIONS

1. The best answer is c. The corporation is selling 100,000 units at \$200 each, so it is raising \$20,000,000.
2. The best answer is c. Each unit consists of 2 preferred shares x 100,000 units equals 200,000 preferred shares issued and a warrant for 1/2 common share. If the warrants are exercised, 100,000 units x 1/2 common share = 50,000 common shares issued.
3. The best answer is b. At issuance, the exercise price of a warrant is set at a premium to the stock's current market price.
4. The best answer is b. ADRs are the means by which foreign securities are traded in the United States.
5. The best answer is c. ADRs do not vote. The bank that actually owns the shares votes. The bank passes through dividends to receipt holders and sells off pre-emptive rights, sending the cash to the receipt holders. ADRs are listed on stock exchanges and trade like any other stock.
6. The best answer is b. An ETN is an Exchange Traded Note. It is a type of structured product offered by banks that gives a return tied to a benchmark index. The note is a debt of the bank, and is backed by the faith and credit of the issuing bank. Thus, if the bank's credit rating is lowered, the value of the ETN will fall as well - so it has credit risk. ETNs are listed on an exchange and trade, so they have minimal liquidity risk. Their return can be based on "exotic" indexes, such as a Brazil or India index, so they can give investors access to the returns of foreign markets. Finally, ETNs make no interest or dividend payments. Their value grows as they are held based on the growth of the benchmark index, with any gain at sale or redemption currently taxed at capital gains rates. Thus, they are tax-advantaged as compared to conventional debt instruments.
7. The best answer is b. SPDR is the acronym for the Standard and Poor's 500 Index Depository Receipt. This is an Exchange Traded Fund - and ETF.
8. The best answer is a. Exchange Traded Funds (ETFs) can be traded anytime during the day, whereas mutual funds are purchased or redeemed at that day's closing net asset value. The expense ratios for ETFs are similar to, or lower than, those for comparable index mutual funds. The purchase or sale of an ETF incurs a commission cost; and ETFs can be purchased or sold short on margin.
9. The best answer is c. An ETN is an Exchange Traded Note. It is a type of structured product offered by banks that gives a return tied to a benchmark index. The note is a debt of the bank, and is backed by the faith and credit of the issuing bank. An ETF is an Exchange Traded Fund. It is an investment company that owns an underlying portfolio of securities. The shares of the ETF are listed and trade like any other stock.
10. The best answer is c. An ETN is an Exchange Traded Note. It is a type of structured product offered by banks that gives a return tied to a benchmark index. The note is a debt of the bank, and is backed by the faith and credit of the issuing bank. They are not an equity security - they are a debt instrument. ETNs are listed on an exchange and trade, so they have minimal liquidity risk. Finally, ETNs make no interest or dividend

payments. Their value grows as they are held based on the growth of the benchmark index, with any gain at sale or redemption currently taxed at capital gains rates. Thus, they are tax-advantaged as compared to conventional debt instruments.

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## SECTION 4: SECURITIES ACTS OF 1933 AND 1934 AND RULES

### 4a. OVERVIEW

**Securities Act  
Of 1933  
Primary Market**

Federal regulation of the securities markets started after the stock market crash of 1929. Congressional investigations into the causes of the crash revealed that an overly speculative new issue market fed by hype and rumor was one cause of the "speculative bubble" that burst. To tame the new issue marketplace, the Securities Act of 1933 was passed regulating the primary market - issuance of new issues.

**Securities And  
Exchange Act  
Of 1934  
Secondary Market**

Various forms of manipulation of the trading markets were also revealed in the Congressional investigations. To eradicate manipulative activities, the Securities and Exchange Act of 1934 was passed regulating the secondary market - trading of issued securities.

### 4b. SECURITIES ACT OF 1933

The Securities Act of 1933 was passed at the end of 1933 to curb the excesses found to be present in the new issue market. It was common for new issues to be sold with little or no disclosure to investors. The Act of 1933 required that new issue purchasers be provided with a detailed prospectus before a purchase was completed. It was common for new issues to be purchased on margin. This was banned to limit speculation in new issues.

**Applies To Non-  
Exempt Issues**

The Securities Act of 1933 states that, unless a new issue security is exempt from the Act, or the security is sold in an exempt transaction, the sale must comply with the provisions of the Act of '33. The Act of 1933 requires that:

**Registration  
Statement Form S-1  
For Initial Public  
Offerings**

A registration statement - Form S-1 - must be filed with the SEC for initial public offerings before any sales related activities can take place. It is the issuer's responsibility to file the registration statement, which is primarily a copy of the proposed prospectus.

**Information In  
Registration  
Statement**

Included in the registration statement is the general character of the business; the uses of the proceeds of the offering; historical audited financial statements; biographical data on officers and directors as well as their percentage holdings; legal issues; the proposed price of the issue; underwriting spread; a copy of the proposed prospectus; and any other relevant information.

|   |   |
|---|---|
| <b>20-Day Cooling Off Period</b>                        | Once the registration statement is filed, the issue enters into the "20-day cooling off" period. During this time, the SEC reviews the filing for "full and fair disclosure." If the SEC feels that the disclosure is adequate, there is no problem. If the SEC feels that there is not sufficient disclosure, the issuer gets a "deficiency letter" from the SEC asking for more disclosure. Until disclosure is adequate, registration is not "effective."  |
| <b>"Full and Fair Disclosure"</b>                       |   |
| <b>Prohibitions During Cooling Off Period</b>           | During the "20-day cooling off" period, the issue:<br><br>cannot be sold;<br>cannot be advertised; and<br>cannot be recommended.  |
| <b>Preliminary Prospectus</b>                           | Soliciting orders to buy the issue is also prohibited. However, the underwriters are allowed to distribute a "preliminary prospectus" to interested parties. This is called a "red herring." The "red herring" is not considered to be "offering" the securities to investors, so it is allowed.  |
| <b>Allowed Activities During Cooling Off Period</b>     | During this period, lists of interested customers may be drawn, but no orders can be taken and no sales can be made. This is termed "taking indications of interest."   |
| <b>Effective Date</b>                                   | After the "20 day cooling off" period ends, and the issuer has complied with additional information requests from the SEC (if any), registration is effective. The issue can now be sold; orders to buy can be solicited, as long as the offer is made through the final prospectus that is now available. Any purchaser of the issue must get the final prospectus at or prior to the confirmation of sale.  |
| <b>Prospectus Delivered At Or Prior To Confirmation</b> | The problem with the Act for issuers is that it is time-consuming and expensive. The registration statement and prospectus are prepared by lawyers; the prospectus must contain certified financial statements prepared by accountants. The red herring and final prospectus are printed by financial printers. All of these costs are borne by the issuer, and can be very costly. The filing procedure with the SEC can take as little as 20 days; however if a deficiency letter is issued, it can take much longer. Given a choice, an issuer would avoid the whole process, and this can be done if an exemption is available. |
| <b>Exempt Issues</b>                                    | Certain securities are exempt from the requirements of the Act and certain transactions are exempt from the Act.  |
| <b>Exempt Transaction</b>                               | For example: U.S. Government issues are exempt securities. No registration or disclosure is required to offer them. As a general rule, issues of governments or private issuers covered under other laws are exempt.  |



**Section 4 - Exempt Transactions** If a common stock issue (a non-exempt security) is sold in a "private placement," registration is not required because this transaction is exempt from the Act. The following section covers exempt securities and exempt transactions included in the exam.

#### **4c. SECURITIES AND TRANSACTIONS EXEMPT FROM THE SECURITIES ACT OF 1933**

##### **Exempt Issues**

The issues which are exempt from registration under the Act of 1933 are:

Direct obligations of the U.S. Government.

Obligations of Agencies sponsored or owned by the U.S. Government (e.g., Fannie Maes, Ginnie Maes, Federal Home Loan Bank Bonds).

Municipal obligations.

Foreign government obligations.

Banker's Acceptances and Commercial Paper as long as the maturity does not exceed 270 days.

Insurance company offerings such as life insurance policies and fixed annuities, EXCEPT for variable annuities (covered under state insurance laws which predate the Act of '33).

Bank issues (covered under state banking laws which predate the Act of '33).

Common carrier issues such as railroads, trucking companies (covered under Interstate Commerce Commission - I.C.C.- laws that predate the Act of '33).

Issues of Benevolent organizations (non-profit corporations such as farmer's cooperatives).

Issues of Small Business Investment Companies (SBICs).

These are the principal exempt securities. On the exam, it is expected that you know the major exempt securities, which are Governments, Agencies and Municipal. It is not necessary to memorize the entire listing.

##### **Offering Of Non-Exempt Securities Requires Prospectus**

By examining the listing, you will notice that the securities that are non-exempt include: corporate stocks and bonds; options; investment companies; and limited

|  |  |
|--|--|
| <b>Offerings Of Non-Exempt Securities In Exempt Transactions Do Not Require Registration</b> | partnerships. Initial offerings of these issues must be sold through a prospectus.<br><br>However, if new issues of non-exempt securities are offered through an exempt transaction, no prospectus is required. For example, if a new issue of common stock (a non-exempt security) is sold in a private placement (an exempt transaction), no registration is required. |
| <b>Obtaining An Exemption Reduces Time And Cost</b>  | Obtaining an exemption from registration means that the issuer can avoid the very costly and time-consuming registration process with the SEC. If an issuer can take advantage of an exemption, it will certainly do so.   |
| <b>Exempt Transactions</b>   | The only exempt transaction included in the exam is a private placement under Regulation D.  |
| <b>Regulation D - Private Placement Exemption</b>  | Regulation D - Private Placements: If an issue is offered "privately," it is not considered to be a "public" offering and the transaction is exempt from SEC registration. The SEC sets its requirements of what it considers to be a "private" offering under Regulation D.   |
| <b>Maximum Of 35 Non-Accredited Investors</b>  | Under Regulation D, an issue can be sold to a maximum of 35 "non-accredited" investors and an unlimited number of accredited investors.  |
| <b>Unlimited Number Of Accredited Investors</b>  | Generally, an accredited investor is a wealthy investor. An accredited investor is defined under Rule 501 as a purchaser who meets one of the following tests:   |
|  | Individual with a net worth of \$1,000,000.  |
|  | Individual with annual income of \$200,000 a year for the past 2 years; or married couple with a joint income of \$300,000; and a reasonable expectation of continuing to earn that level of income in the future.   |
|  | Individual who is an officer or director of the issuer.  |
|  | Financial Institutions such as banks, insurance companies, mutual funds, with assets in excess of \$5,000,000.   |
|  | Non-profit institutional investors such as pension plans and college endowment funds with assets in excess of \$5,000,000.   |
| <b>No Dollar Limit; No Limit On Units</b>  | There is no limit on the dollar amount sold, the number of units sold, or the number of states in which the offering is made.  |

#### 4d. THE EFFECTIVE DATE

If an exemption is not available, then the new securities issue must be registered with the SEC and must complete the "20 day cooling off period." At the end of 20 days, given that there are no problems, registration is "effective." This is the first day that the issue can be sold with the prospectus; and it is also the first day that the issue can start trading in the secondary market.

##### Initial Public Offering

If this is an "IPO" - an Initial Public Offering, then the stock never traded previously in the market. When it starts trading in the market, the price might stay right around the P.O.P in the prospectus. However, it could also rise above the "Public Offering Price" (P.O.P) in the prospectus, making the issue a so-called "hot issue." If the price starts falling in the secondary market, then the issue is a so-called "sticky issue" because it can be stuck in the hands of the underwriters.

##### Add On Offering

In contrast, if this is an "Add-On Offering" - also called a secondary share offering - then the issuer already has publicly traded shares outstanding. This publicly-traded issuer is raising additional capital, say to buy out another company. Such a company has a market price already and the offering is priced on the effective date at that market price.

Let's use an example of a common stock issue that has a P.O.P of \$20 per share. The company qualifies for trading on NASDAQ, and as of the effective date, the first quote on the NASDAQ system for the stock is 28-29. Anyone who can purchase the stock at the P.O.P from the syndicate can immediately resell at the bid price of \$28 and enjoy a fine profit.

This is a **HOT** issue. Any registered representative in the syndicate handling this issue would have an idea that this issue might be hot because he or she collected indications during the cooling off period for, say, 10,000 shares and when the registration went effective, the representative was informed that he or she was allocated 500 shares to sell. To whom would the representative like to sell those shares? To him- or herself, of course! This is prohibited.

##### FINRA Prohibits Industry "Insiders" From Buying Any IPO

##### Rule 5130

FINRA does not allow industry "insiders" to buy common equity IPOs (initial public offerings) from underwriters, specifically to insure that this practice does not occur. The rule, known as Rule 5130, is actually quite restrictive, because it applies to all equity IPOs - not just to those that become "hot."

|   |   |
|---|---|
| <b>Persons Restricted From Buying IPOs</b>                          | The "restricted persons" who are prohibited from buying IPOs of common stock are broadly defined into 4 groups:   |
| <b>FINRA Member Firms, Officers, Employees And Immediate Family</b> | <ol style="list-style-type: none"> <li>1. Member firms for their own accounts, officers of member firms, associated persons, or any other employee of a member firm are restricted. Also prohibited are "agents" of broker-dealers; and immediate family members of the officers and employees of broker-dealers.</li> </ol>  |
| <b>Fiduciaries To FINRA Member Firms</b>                            | <ol style="list-style-type: none"> <li>2. Fiduciaries to member firms are restricted, such as lawyers, accountants and financial consultants who provide services to member firms.</li> </ol>   |
| <b>Portfolio Managers</b>   | <ol style="list-style-type: none"> <li>3. Portfolio managers who have authority to buy or sell securities for institutional investors are restricted.</li> </ol>  |
| <b>Passive Owners Of Broker-Dealers</b>                             | <ol style="list-style-type: none"> <li>4. Passive owners of broker-dealers that are not included in Category 1 are restricted as well.</li> </ol>   |
|   | <p>The intent of the rule is that a "bona-fide" public offering of new issues must be made; the issue cannot be placed in the hands of favored individuals who are essentially "insiders."</p>  |
| <b>Green Shoe Clause</b>  | To reduce the degree of potential price rise on "oversold" issues, many underwriting agreements contain a "Green Shoe" clause. This states that the underwriters may request up to 15% additional shares to cover overselling. (The name comes from the first underwriting to do this - The Green Shoe Company.)  |
| <b>Sticky Issue</b>   | Now consider what happens if an issue were to open in the trading market at an immediate discount to the Public Offering Price. Assume that the P.O.P. is set at \$20 per share and the opening quote on NASDAQ is 17 - 18. Anyone who buys from the syndicate takes an immediate loss of 3 points. Sale of the issue by the syndicate at the P.O.P. would become nonexistent! The issue would be "stuck" on the hands of the underwriters. |
| <b>Stabilizing Bid</b>  | To prevent this, the manager of the syndicate is allowed to "stabilize" the price of the issue in the trading market. Before the issue opens for trading, the manager will enter a "Stabilizing Bid" in the NASDAQ System, let us say at \$20. This sets a minimum price of \$20 for the issue in the trading market. Anyone who wishes to sell can receive \$20 from the manager.  |
| <b>At Or Just Below P.O.P. Never Above</b>                          | Stabilizing bids are entered at or just below the P.O.P. It is prohibited to enter a stabilizing bid above the P.O.P. because this would create an instant hot issue. The risk to   |

the manager is that he may wind up buying back the entire issue placed by the syndicate. This will occur if the syndicate members sold the issue to customers who were looking for a quick price rise, and if this didn't happen, dumped the issue. The manager wants the issue placed in the hands of long-term investors who are not looking for immediate profits.

**Penalty Bid Clause**

To influence the syndicate to sell only to long-term investors, not speculators, the manager will put a "syndicate penalty bid clause" into the syndicate agreement. This clause states that if the manager buys back too many shares (too many people "hitting the stabilizing bid") placed by any single syndicate member, that member loses his underwriter's concession on those shares.

**4e. SEC REGULATION M**

**Regulation M  
(Rules 101 - 105)**

Regulation M governs the activities of underwriters, market makers, issuers, and selling shareholders that have an interest in the outcome of a prospectus offering of securities. One of the concerns of the SEC is that, in additional issue offerings, market makers who are also syndicate members, could manipulate the price of underwritten security upwards prior to the effective date.

The SEC deals with this potential market manipulation through Regulation M. Only securities that can be readily manipulated are subject to Regulation M - that is, securities that are not actively traded or have a small number of shares outstanding. Actively traded securities are not subject to the regulation, nor are investment grade non-convertible debt, preferred stock and asset-based issues. The rules under Regulation M are:

**Rule 101 -  
Restrictions On  
Syndicate Members  
Who Are NOT  
Market Makers**

Rule 101: This rule applies only to Add-On offerings. The worry of the SEC is that members of the syndicate might attempt to "push up" the price of a secondary offering during the 20 day cooling off period, which would give the underwriters a larger spread. To stop this manipulation, Rule 101 was created.

Syndicate members who are not market makers in that stock are subject to a restricted period for secondary offerings, of either 1 business day or 5 business days prior to the effective date, where they are prohibited from purchasing, making a bid for, or inducing the purchase of, the underwritten security. Note that they can accept unsolicited orders to buy the security. The rule states that:

**Tier 1 Issue -  
Actively Traded  
No Restrictions**

If the security is actively traded (average daily trading volume of \$1,000,000 or more and public float of at least \$150,000,000), there are **no** restrictions placed on market makers trading the issue prior to the distribution. The idea here is that this issue is too big for the price to be manipulated. This is called a "Tier 1" issue.

**Tier 2 Issue -  
Moderate Trading  
1 Day Restriction**

If the security has an average daily trading volume of \$100,000 and a public float of at least \$25,000,000 the restricted period is the business day prior to the effective date. This is called a "Tier 2" issue.

**Tier 3 Issue -  
Inactive Trading  
5 Day Restriction**

Any other security not meeting these minimums is a "Tier 3" issue and is subject to a restricted period of 5 business days prior to the effective date.

### **Regulation M - Trading Restrictions On Syndicate Members That Are NOT Market Makers**

|  | <u>Average Daily<br/>Trading Volume</u> | <u>Public<br/>Float</u>       |
|--|---|-------------------------------|
| <b>5 Day<br/>Restricted<br/>Period</b> | <b>Zero</b>                             | <b>Zero</b>                   |
|  | <b>\$100,000</b>                        | <b>\$25,000,000</b>           |
| <b>1 Day<br/>Restricted<br/>Period</b> | <b>Over<br/>\$100,000</b>               | <b>Over<br/>\$25,000,000</b>  |
|  | <b>\$1,000,000</b>                      | <b>\$150,000,000</b>          |
| <b>No<br/>Restricted<br/>Period</b>    | <b>Over<br/>\$1,000,000</b>             | <b>Over<br/>\$150,000,000</b> |

Again, note that these restrictions are in place for the time window prior to the effective date and syndicate members who are not market makers are

**Rule 102 -  
Restrictions On Issuers  
And Selling Shareholders**

prohibited from buying, making a bid for, or inducing the purchase of the underwritten security.

**Rule 103 -  
Restrictions On  
Syndicate Members  
Who Are Market Makers**

Rule 102: Places similar restrictions as Rule 101, but applies to issuers and selling shareholders.

Rule 103: Syndicate members who are market makers in that security may either:

seek an excused withdrawal from making a market in that security - that is, get permission of FINRA to stop making a market during this period; or

may elect to operate as a "passive" market maker - that is, they may bid for that security at no higher than the highest current independent bid. Thus, they cannot push the price up in the market. If they elect to operate as passive market makers, any bids are identified as "PSMM" - as in passive market maker

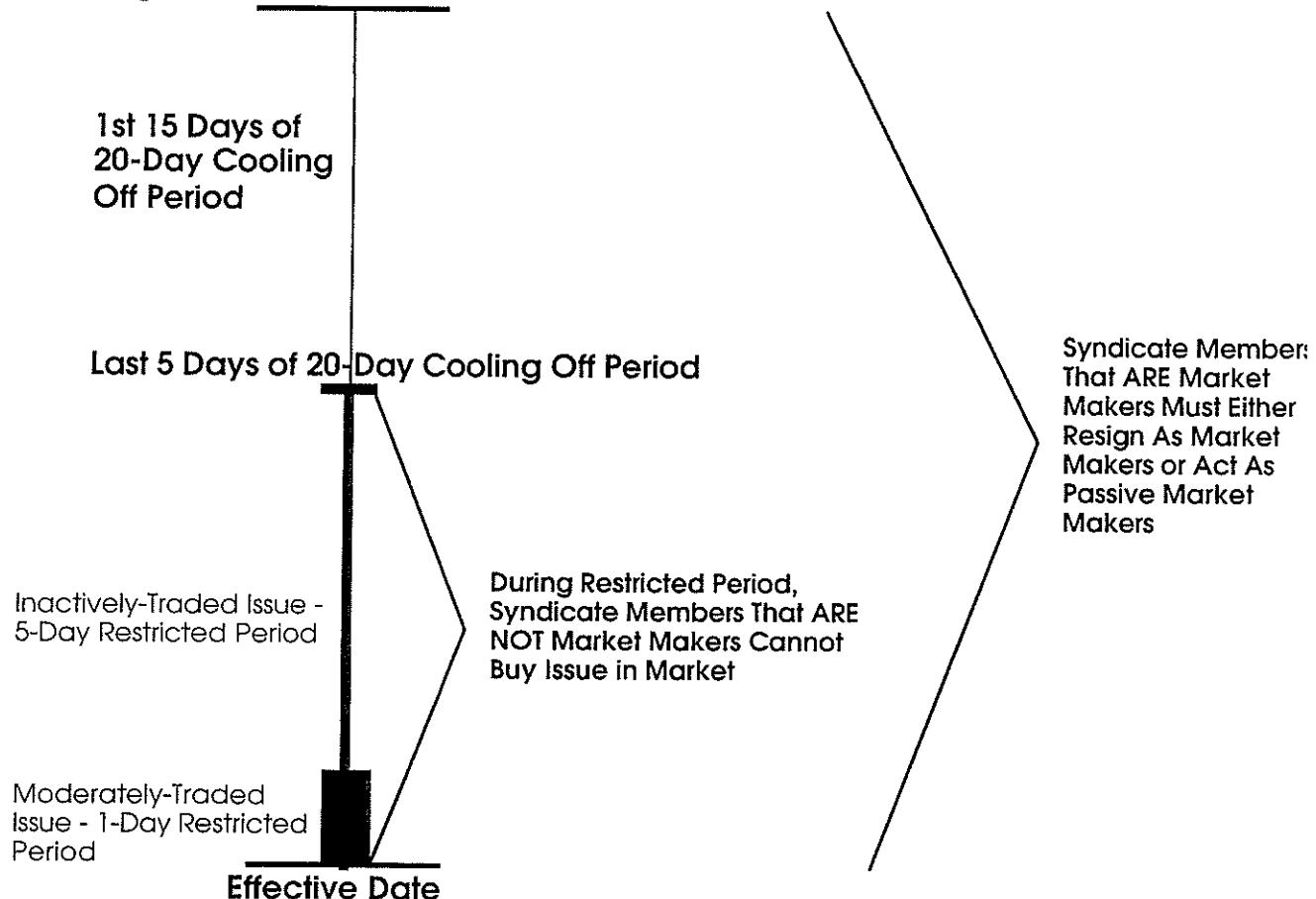
Note that again, under Rule 103, unsolicited customer orders to buy may be accepted at any price.

In addition, passive market makers are limited as to the amount of "net purchases" of that security (orders from all sources) that can be made on any day during the restricted period. The limit is 30% of that market maker's average daily trading volume (ADTV) over the preceding month or 200 shares (net purchases), whichever is greater. Once this limit is reached for the day, it must obtain an excused withdrawal from making a market from FINRA.

A chart that compares the restrictions of Rules 101 to Rule 103 is presented following.

## Regulation M "Add-On" Offering Restrictions During Underwriting Period

### Registration Statement Filed with SEC



### **Rule 104 - Stabilization Rules**

Rule 104: Details the requirements for stabilization of a new issue in the aftermarket. The SEC recognizes that stabilization in the aftermarket can be necessary to have a successful distribution of securities. If the price of the issue were to drop precipitously after a distribution, primary market sales could be seriously affected.

Rule 104 exempts stabilization from being viewed as manipulation - as long as the following are met:

#### **Notice Of Stabilization**

A "Notice of Stabilization" must appear on the inside front cover of the prospectus. This notice states that the underwriter may start stabilizing the issue and may stop stabilizing the issue at any time **and** that when stabilization stops, the price of the issue may **drop** in the aftermarket. In this manner, purchasers are placed on notice about the possible effects of stabilization activities.

**Only 1 Stabilizing Bid**

**Stabilizing Bid Is A "One-Sided" Quote**

**At Or Below The POP - Never Above**

**Never Higher Than**

**If There Is An Independent Market, Bid Can Be No Higher Than Last Reported Trade As Long As Current Ask Is The Same Or Higher**

**Otherwise, Bid No Higher Than Current Independent Bid**

**Bid Cannot Be Entered Prior To Effective Date**

**Public Orders To Buy Have Priority**

**No Stabilization For "At The Market" Offerings**

Only one stabilizing bid is allowed per market or market maker. The syndicate agreement will state that the manager is the sole firm that can effect stabilizing transactions. Stabilizing bids are entered as "one-sided quotes" - only the bid side shows with an identifier that it is a stabilizing bid (e.g., on NASDAQ, the bid is identified as a stabilizing bid).

Prior to placing a stabilizing bid, the syndicate manager must submit a request to the exchange, such as NASDAQ, for the entry of a 1-sided bid.

A stabilizing bid can only be placed at or below the Public Offering Price. A stabilizing bid can never be placed above the public offering price (since this would make an instant "hot" issue).

If a current independent market exists for the security at the time that the stabilizing bid is placed, the rules change.

The bid cannot be entered any higher than the last reported trade, as long as the current ask price is equal to, or higher than, the last reported trade.

If these conditions cannot be met, then the stabilizing bid cannot be entered at any price higher than the current independent bid.

The stabilizing bid can only be entered on the effective date of the offering, not before (for an IPO). To take effect, there must be other independent market makers placing bids aside from the stabilizing bid.

Any orders to buy from the public have priority over stabilizing orders to buy at that price or lower.

Stabilization is not allowed for "at the market" offerings. There must be an established Public Offering Price stated in the prospectus. The definition of an "at the market" offering is one where the shares are sold into an existing trading market through an exchange or a market maker at "other than a fixed price." Thus, the market price for the issue prevails.

No time limit or numerical limit is placed on stabilization activities. However, stabilization must stop when the manager disbands the syndicate.

All records of stabilization must be retained by the manager for 3 years.

**Rule 105 -  
Impedes Short Sellers  
From Pushing Down  
A Security's Price  
Prior To The Effective  
Date**

Rule 105: This rule applies when a registration statement has been filed for an equity offering and there are already shares of that company's stock outstanding. Prior to the adoption of this rule, a common trading practice was for overly aggressive independent traders to short that stock in the market - pushing the price down during the 20 day cooling off period.

The fall in the market price would force the underwriters to lower the Public Offering Price of the issue. Thus, when registration became effective, the independent trading firms could buy the issue from the underwriters at the lower P.O.P., cover their short positions, and have a nice profit. The problem is, however, that this activity is clearly manipulative.

The SEC takes a dim view of this activity, and under Rule 105, prohibits broker-dealers from purchasing shares of stock from the underwriters at the offering price to cover short positions established within 5 business days of the effective date.

**Transactions  
Exempt From  
Regulation M**

Finally, certain transactions by market participants in an add-on offering are not likely to have an impact of the price of the covered security and are exempted from the provisions of Regulation M. These are:

Odd lot trades (since these are usually accommodation orders and their small size will not impact the stock's price);

Unsolicited customer orders to buy that are not effected through another broker-dealer (since the stock is trading in the market, these unsolicited customer orders can be filled, but solicitation of customer orders to buy is prohibited); and

Exercises of options, warrants, rights or conversion privileges (since these do not go through the market, they do not affect the market price).

## SECURITIES ACTS SECTION EXAMINATION

1.

All of the following activities are prohibited during the "cooling off" period **EXCEPT**:

- a. accepting an order for the issue in registration
- b. confirming a certain amount of the issue to a customer
- c. accepting a check from a customer for part of an issue
- d. accepting an indication of interest from the customer for part of the issue

4.

A registered representative has prepared a research report about a new stock issue that is being underwritten by his firm and that is currently in registration. The registered representative wishes to send the report to customers. Which statement is true?

- a. The report can be mailed without restriction
- b. The report constitutes an "offer" under the '33 Act and cannot be sent
- c. The report can only be mailed if approved or prepared by a Supervisory Analyst
- d. The report can only be sent if accompanied or preceded by a preliminary prospectus

2.

A new issue offering to a maximum of 35 non-accredited investors that has not been registered with the SEC:

- a. is exempt under Regulation A
- b. is exempt under Regulation D
- c. is exempt under Rule 144
- d. is not exempt and must be registered

3.

If the SEC sends a deficiency letter to the issuer regarding an issue in registration:

- a. it disapproves of registering the issue
- b. disclosure is not considered to be adequate
- c. the underwriters have failed to establish the Public Offering Price
- d. due diligence has not been performed by the underwriters

5.

Under the Securities Act of 1933, a non-exempt issue must be registered if:

- a. the mails or other means of interstate commerce are used to offer the security
- b. the issue is offered in more than 2 states
- c. the dollar amount raised exceeds \$100,000 within 12 months
- d. the issue is offered to more than 10 investors within 12 months

6.

Which of the following are considered to be "accredited investors" under Regulation D?

- I A financial institution
  - II A limited partnership formed by 10 investors with capitalization of \$1,000,000
  - III An individual who consistently earns \$250,000 per year
  - IV A director of the issuer who earns \$100,000 per year
- a. I and II only
  - b. III and IV only
  - c. I, III, IV
  - d. I, II, III, IV

8.

A broker-dealer outside the underwriting group that sells short the outstanding shares of a company over-the-counter 2 business days prior to the effective date for an additional issue offering for that company. The broker-dealer:

- a. has committed a manipulative practice under the Securities and Exchange Act of 1934
- b. is prohibited from buying the common shares of that company through the underwriters at the offering
- c. can cover the short sale by purchasing common shares from selling group members at the offering
- d. must sell short on an uptick or zero-upick

9.

The SEC regulation that deals with potential manipulation in the trading market related to additional issue offerings is:

- a. Regulation A
- b. Regulation D
- c. Regulation M
- d. Regulation S

7.

Which of the following statements are true regarding stabilization?

- I Only 1 stabilizing bid is permitted
  - II A stabilizing bid can only be placed if there is an independent bid for that security
  - III Any stabilizing bid cannot be higher than the highest current independent bid for the security
- a. I only
  - b. I and III only
  - c. II and III only
  - d. I, II, III

10.

Under Regulation M, Tier 1 securities are those with a minimum:

- I daily trading volume of \$100,000
- II daily trading volume of \$1,000,000
- III market float of \$25,000,000
- IV market float of \$150,000,000

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

## SECURITIES ACTS SECTION EXAMINATION EXPLANATIONS

1. The best answer is d. During the cooling off period, an offer or sale of the issue is prohibited. Sending a preliminary prospectus or accepting an indication of interest does not constitute an "offer" under the Act of 1933. Accepting an order, confirming a certain amount of the issue, or accepting a check from a customer are all considered to be "sales" and are prohibited until registration is effective.
2. The best answer is b. Regulation D allows a "private placement" exemption if an issue is sold to a maximum of 35 "non-accredited" investors. The issue can be sold to an unlimited number of "accredited" investors under this exemption and still be considered a private placement.
3. The best answer is b. An SEC "deficiency letter" indicates that there is not adequate disclosure in the registration documents to allow investors to make an informed decision. The deficiency must be cured before the SEC will allow the registration to be effective.
4. The best answer is b. During the "cooling off" period, the only items that do not constitute an "offer" or "sale" are the sending of a preliminary prospectus and the acceptance of an indication of interest. Anything more, such as sending a research report, is considered to be an "offer," which is prohibited until the registration is effective.
5. The best answer is a. The Securities Act of 1933 requires that all non-exempt new issues must be registered, if the mails or other means of interstate commerce are used to offer the security.
6. The best answer is c. Financial institutions; individuals who have earned \$200,000 for at least the last 2 years and who expect to continue to earn that level of income; and officers and directors of the issuer are all accredited investors. Individuals who have a net worth of \$1,000,000 or more are also accredited. However, individuals cannot be "grouped" together to take advantage of the \$1,000,000 limit. The 10 purchasers that are forming the limited partnership count as 10 individual investors and are non accredited unless individually each has income of \$200,000 or a net worth of \$1,000,000.
7. The best answer is d. All of the statements are true regarding stabilizing activities - only one stabilizing bid is permitted, usually placed by the manager. A stabilizing bid cannot be placed unless other market makers are also bidding for that security. Stabilizing bids can not be placed higher than the highest current independent bid for the security - and can never exceed the Public Offering Price.
8. The best answer is b. Rule 105 of Regulation M prohibits broker-dealers from buying shares from underwriters to cover short positions in that stock established in the 5 business day time window prior to the effective date.

9. The best answer is c. Regulation M deals primarily with manipulation of securities being underwritten in the marketplace by syndicate members. Regulation A is an SEC exemption from registration for small dollar offerings. Regulation D is an SEC exemption from registration for private placements. Regulation S is an SEC exemption from registration for securities sold outside the United States.

10. The best answer is d. Rule 101 of Regulation M covers syndicate members who are not market makers in that stock that are in an underwriting group for an "add on" stock offering. The intent is to make sure that they do not try and manipulate the price of the security upwards prior to the effective date, so that a higher POP could be set. They are subject to a restricted period for secondary offerings, of either 1 business day or 5 business days prior to the effective date, where they are prohibited from purchasing, making a bid for, or inducing the purchase of, the underwritten security. If the security is very actively traded, there is no restricted period. Note that they can accept unsolicited orders to buy the security. The rule states that:

**Tier 1 Issue -** if the security is actively traded (average daily trading volume of \$1,000,000 or more and public float of at least \$150,000,000), there are **no** restrictions placed on market makers trading the issue prior to the distribution. The idea here is that this issue is too big for the price to be manipulated. This is called a "Tier 1" issue.

**Tier 2 Issue -** if the security has an average daily trading volume of \$100,000 and a public float of at least \$25,000,000 the restricted period is the business day prior to the effective date. This is called a "Tier 2" issue.

**Tier 3 Issue -** any other security not meeting these minimums is a "Tier 3" issue and is subject to a restricted period of 5 business days prior to the effective date.

## OPTIONS STRATEGIES CHAPTER (2)

|  | PAGES          |
|--|----------------|
| <b>SECTION 1: OPTIONS BASICS</b>                 | <b>1 - 12</b>  |
| 1a. DEFINITION OF AN OPTION.....                 | 1 - 2          |
| 1b. TRADING OF OPTIONS AND THE PREMIUM.....      | 2 - 3          |
| 1c. INTRINSIC VALUE - IN AND OUT THE MONEY..     | 3 - 6          |
| 1d. OPENING AND CLOSING POSITIONS.....           | 7 - 8          |
| OPTION BASICS SECTION EXAMINATION.....           | 9 - 10         |
| OPTION BASICS EXAM EXPLANATIONS.....             | 11 - 12        |
| <b>SECTION 2: SPECULATIVE OPTIONS STRATEGIES</b> | <b>13 - 36</b> |
| 2a. SPECULATIVE STRATEGIES OVERVIEW.....         | 13             |
| 2b. LONG CALL STRATEGY.....                      | 13 - 16        |
| 2c. SHORT CALL STRATEGY.....                     | 16 - 19        |
| 2d. LONG PUT STRATEGY.....                       | 19 - 22        |
| 2e. SHORT PUT STRATEGY.....                      | 22 - 25        |
| 2f. DELTA, GAMMA, VEGA.....                      | 26 - 27        |
| SPECULATIVE STRATEGIES EXAMINATION.....          | 28 - 31        |
| SPECULATIVE STRATEGIES EXPLANATIONS.....         | 32 - 36        |
| <b>SECTION 3: HEDGING STRATEGIES</b>             | <b>37 - 50</b> |
| 3a. HEDGING OVERVIEW.....                        | 37             |
| 3b. LONG PUT TO HEDGE LONG STOCK POSITION....    | 37 - 39        |
| 3c. LONG CALL TO HEDGE SHORT STOCK POSITION..    | 40 - 42        |
| HEDGING STRATEGIES EXAMINATION.....              | 43 - 45        |
| HEDGING STRATEGIES EXPLANATIONS.....             | 46 - 50        |

|   | PAGES     |
|---|-----------|
| .....   |           |
| SECTION 4: INCOME STRATEGIES                            | 51 - 68   |
| .....   |           |
| 4 a. INCOME STRATEGIES OVERVIEW.....                    | 51 - 52   |
| 4 b. WRITING CALLS AGAINST<br>LONG STOCK POSITIONS..... | 52 - 55   |
| 4 c. WRITING PUTS AGAINST<br>SHORT STOCK POSITIONS..... | 55 - 57   |
| 4 d. ROLLING POSITIONS UP AND DOWN.....                 | 58        |
| 4 e. PLACING A COLLAR ON A STOCK POSITION.....          | 59        |
| .....   |           |
| INCOME STRATEGIES EXAMINATION.....                      | 60 - 62   |
| INCOME STRATEGIES EXPLANATIONS.....                     | 63 - 68   |
| .....   |           |
| SECTION 5: STRADDLES AND<br>COMBINATIONS                | 69 - 84   |
| .....   |           |
| 5 a. OVERVIEW OF STRADDLES<br>AND COMBINATIONS.....     | 69 - 72   |
| 5 b. LONG STRADDLES.....                                | 72 - 74   |
| 5 c. SHORT STRADDLES.....                               | 74 - 76   |
| 5 d. LONG AND SHORT STRANGLES.....                      | 76 - 78   |
| 5 e. DELTA NEUTRAL STRATEGIES.....                      | 78 - 79   |
| .....   |           |
| STRADDLES SECTION EXAMINATION.....                      | 80 - 81   |
| STRADDLES EXAM EXPLANATIONS.....                        | 82 - 84   |
| .....   |           |
| SECTION 6: SPREADS                                      | 85 - 110  |
| .....   |           |
| 6 a. SPREADING OVERVIEW.....                            | 85 - 88   |
| 6 b. LONG CALL SPREAD.....                              | 88 - 89   |
| 6 c. SHORT CALL SPREAD.....                             | 89 - 91   |
| 6 d. LONG PUT SPREAD.....                               | 91 - 93   |
| 6 e. SHORT PUT SPREAD.....                              | 93 - 95   |
| 6 f. CALENDAR SPREADS.....                              | 95 - 98   |
| 6 g. BUTTERFLY SPREADS.....                             | 98 - 99   |
| 6 h. FINAL NOTES ON SPREADS.....                        | 99 - 102  |
| .....   |           |
| SPREADS SECTION EXAMINATION.....                        | 103 - 106 |
| SPREADS SECTION EXAM EXPLANATIONS.....                  | 107 - 110 |
| .....   |           |

|   | PAGES            |
|---|------------------|
| <b>SECTION 7: RATIO STRATEGIES CHARACTERISTICS</b>    | <b>111 - 120</b> |
| 7a. RATIO WRITING OF CALL CONTRACTS.....              | 111 - 112        |
| 7b. RATIO WRITING OF PUT CONTRACTS.....               | 112 - 113        |
| 7c. RATIO SPREADS.....                                | 113 - 114        |
| 7d. LONG STOCK / SHORT STRADDLE.....                  | 114 - 115        |
| RATIO STRATEGIES SECTION EXAMINATION.....             | 116 - 117        |
| RATIO STRATEGIES EXAM EXPLANATIONS.....               | 118 - 120        |
| <b>SECTION 8: SYNTHETIC POSITIONS CHARACTERISTICS</b> | <b>121 - 130</b> |
| 8a. OVERVIEW.....                                     | 121              |
| 8b. SYNTHETIC LONG CALL.....                          | 121 - 122        |
| 8c. SYNTHETIC SHORT CALL.....                         | 122 - 123        |
| 8d. SYNTHETIC LONG PUT.....                           | 123 - 124        |
| 8e. SYNTHETIC SHORT PUT.....                          | 124 - 125        |
| 8f. USES OF SYNTHETIC OPTIONS.....                    | 125 - 126        |
| 8g. SYNTHETIC STOCK POSITIONS.....                    | 126 - 127        |
| SYNTHETIC POSITIONS EXAMINATION.....                  | 128              |
| SYNTHETIC POSITIONS EXAM EXPLANATIONS...              | 129 - 130        |
| <b>SECTION 9: EQUITY OPTIONS</b>                      | <b>131 - 144</b> |
| 9a. CONTRACT SPECIFICATIONS.....                      | 131 - 135        |
| 9b. OPTIONS CLEARING CORPORATION RULES.....           | 136 - 140        |
| 9c. LONG TERM STOCK OPTIONS (LEAPS) .....             | 140 - 141        |
| EQUITY OPTIONS EXAMINATION.....                       | 142 - 143        |
| EXAM EXPLANATIONS.....                                | 144              |

|   | PAGES            |
|---|------------------|
| .....                                       |                  |
| <b>SECTION 10: INDEX OPTIONS</b>            | <b>145 - 158</b> |
| .....                                       |                  |
| 10a. OVERVIEW.....                          | 145 - 146        |
| 10b. S & P 100 INDEX CONTRACT.....          | 147 - 149        |
| 10c. OEX / SPX LEAPS.....                   | 149 - 150        |
| 10d. OTHER INDEX OPTIONS.....               | 150 - 151        |
| 10e. VIX - VOLATILITY INDEX OPTIONS.....    | 151 - 153        |
| 10f. INDEX WARRANTS.....                    | 153 - 154        |
| .....                                       |                  |
| INDEX OPTIONS EXAMINATION.....              | 155 - 156        |
| EXAM EXPLANATIONS.....                      | 157 - 158        |
| .....                                       |                  |
| .....                                       |                  |
| <b>SECTION 11: FOREIGN CURRENCY OPTIONS</b> | <b>159 - 168</b> |
| .....                                       |                  |
| 11a. OVERVIEW.....                          | 159 - 160        |
| 11b. CURRENCY OPTION CONTRACTS.....         | 160 - 163        |
| .....                                       |                  |
| FOREIGN CURRENCY OPTIONS EXAMINATION...     | 164 - 165        |
| EXAM EXPLANATIONS.....                      | 166 - 168        |
| .....                                       |                  |



## SECTION 1: OPTIONS BASICS

### 1a. DEFINITION OF AN OPTION

**Option Contract**

An option is a contract entered into between two parties. The buyer of the contract is called the option **holder**. The seller of the contract is called the option **writer**.

**Holder / Writer**

Other terminology is used as well to describe the holder and writer of a contract. The holder is said to be the buyer of the contract and is "long" the contract. The writer is said to be the seller of the contract and is "short" the contract.

**Contract Holder = Contract Buyer = Long Position**

**Contract Writer = Contract Seller = Short Position**

**Call Contract**

Two types of contracts exist. The first type of contract allows the holder **to buy** a security from the writer at a fixed price at any time during the life of the option. This type of option allows the holder to "call away" the security from the writer and hence is termed a **"call"** option. If the writer is "called," the contract obligates the writer to deliver the securities to the holder at the fixed price.

**Put Contract**

The second type of contract allows the holder **to sell** a security to the writer at a fixed price at any time during the life of the option. This type of option allows the holder to "put" the security to the writer and hence is termed a **"put"** option. If the securities are "put" to the writer, the contract obligates the writer to buy the securities at the fixed price.

**Strike Price**

The fixed price specified in the contract at which the holder can either "call away" the security or "put" the security is called the strike price or exercise price. The life of the contract is specified by the expiration date of the contract. The amount of the underlying security covered by the contract (termed the **"multiplier"**) differs depending on the underlying security.

**Expiration Date****Multiplier Depends Upon Underlying Instrument**

If the underlying instrument is stock, the contract covers 100 shares. Options are also available for other underlying instruments, including stock indexes; interest rate indexes; and foreign currencies. The multiplier for stock and interest rate indexes is 100; while for foreign currencies, the multiplier differs for each currency type.

For example, a customer buys 1 XXX Jan 120 Call.

The customer has the right to buy 100 shares of XXX stock at \$120 a share until the contract expires in January, no matter what happens to XXX's market price.

For example, a customer buys 1 XXX Jan 120 Put.

The customer has the right to sell 100 shares of XXX stock at \$120 a share until the contract expires in January, no matter what happens to XXX's market price.

#### **Premium**

In order to secure the contract, the holder will pay a "premium" to the writer. The premium is really the price of the contract. Do not confuse the premium with the strike price of the underlying security. If a customer buys 1 XXX Jan 120 Call @ \$5, he is paying a premium of \$5 per share (\$500 for the contract).

The holder of a contract has 3 choices regarding the contract - it can be exercised, it can be left to expire, or it can be traded.

#### **Contract Exercised**

If a call contract is exercised, the holder buys the underlying security at the strike price from the contract writer. Thus, the writer is obligated to sell the underlying security upon exercise.

If a put contract is exercised, the holder sells the underlying security at the strike price to the contract writer. Thus, the writer is obligated to buy the underlying security upon exercise.

#### **Contract Expires**

If the holder of a contract allows the contract to expire, he loses the premium paid. Conversely, the writer earns the premium received.

#### **Contract Traded**

If a holder trades his contract, he sells it to someone else prior to expiration. He will profit if the premium received exceeds that which he originally paid for the contract.

### **1b. TRADING OF OPTIONS AND THE PREMIUM**

#### **Trading Of Options On Exchanges**

Option contracts are traded on exchanges. The exchange where the option trades is usually different from the exchange where the underlying security trades. For example, IBM stock is listed on the New York Stock Exchange, but IBM option contracts trade on the Chicago Board Options Exchange (CBOE).

Also, please note that until mid-1999, each major option contract was only traded on 1 exchange. For example, IBM options were traded on the CBOE only; they were not traded on the AMEX or PHLX exchanges. However, in response to a Justice Department inquiry on anti-competitive practices in listing options contracts, this "exclusive" listing arrangement was abandoned. All of the options exchanges now compete and options contracts are multiple listed.

**Premium Is Market Price Of Option**

Just as the market price of IBM stock is continuously determined on the floor of the NYSE, the market price of IBM Calls and Puts is determined on the floor of the CBOE. The market price of an option is called the **"premium."** To buy a contract, the holder pays the premium. Conversely, the writer of a contract receives the premium.

**Longer "Time" Increases Premium**

The premium or "price" of a contract is influenced by a number of factors. First, the longer the contract has until expiration, the greater the chance that the underlying security's price will move in the desired direction. This will increase the option premium.

**Greater Volatility Increases Premium**

Second, the more volatile the underlying security, the greater the chance that the underlying security's price will move in the desired direction. This will also increase the option premium.

**"Intrinsic Value" Increases Premium**

Third, at the time of the trade, the contract may have "intrinsic value." If the contract has intrinsic value, this amount is included in the premium. The higher the intrinsic value, the higher the premium.

**1c. INTRINSIC VALUE - "IN THE MONEY" AND "OUT THE MONEY"**

The strike price of an option contract is set in a standardized fashion that makes the contracts easy to trade. When a new contract is issued, it would seem to make sense that the current market price of the stock would be the strike price of the contract. Doing this would make options very difficult to trade. For every point a stock rises, there would be 100 different contracts issued with prices in increments of cents. If a stock rose 5 points, there would be 500 different contracts trading. With trading spread among so many contracts, the market would become very thin for each contract and marketability risk would increase.

**Standardized Option Contracts**

Instead, options strike prices are standardized. For most stocks (those with market prices between \$25 and \$200), options may only be issued with strike prices having 5 point intervals nearest to where the stock is currently

trading. When a stock is trading at \$43, contracts can be issued having \$40 and \$45 strike prices. When the stock moves up to \$46, contracts can be issued at 45 and 50. If the price moves to \$52, contracts can be issued at 50 and 55, etc.

**Strike Price Fixed  
At Issuance**

**Premium Varies**

**"In The Money"**

**Time Premium**

**"Out the Money"**

Once the contract is issued, the strike price is fixed. As the market price of the stock now fluctuates, the premium or "price" of the contract adjusts to reflect the changing value.

Assume that a customer wants to buy 1 ABC Jan 50 Call when the market price of ABC is \$52 per share. This contract has "intrinsic value" of \$2 per share since the holder has the right to buy stock at \$50 when the stock is worth \$52. The call contract is said to be "in the money" by \$2. The \$2 of intrinsic value represents the minimum premium for the contract. Assume that the writer of the ABC Jan 50 Call is willing to sell the contract for a premium of \$5 per share. Of the total \$5 premium, \$2 represents the "in the money" amount, while the remaining \$3 is called the "time" premium. This is the amount above intrinsic value that the buyer pays for the remaining time to expiration of the contract.

Assume a customer wants to buy 1 ABC Jan 50 Call at a \$3 premium when the market price of ABC stock is \$50 per share. This contract has **no** intrinsic value (the holder can buy stock at 50 which is worth 50). The total premium of \$3 is all time value. This contract is said to be "at the money".

Assume a customer wants to buy 1 ABC Jan 50 Call at a \$1 premium when the market price is \$47 per share. This contract has no intrinsic value. As a matter of fact, this contract won't be worth very much at all since the holder has the right to buy stock at \$50 which is currently worth \$47. This contract is "out the money" by \$3. Because the contract is "out the money," the premium is quite low (\$1) and really represents the time value of the contract reduced in the market by the out the money amount. The total premium of an out the money contract is considered to be "time" premium.

For example, a customer buys 1 ABC Jan 50 Call @ 4 when the market price of ABC is \$51. How much of the premium is time value?

Answer: Since the contract is in the money by \$1 per share (the holder can buy stock for \$50 when it is worth \$51), the remaining \$3 per share is the time premium.

For example, a customer buys 1 ABC Jan 50 Call @ 2 when the market price of ABC is \$49. How much of the premium is time value?

Answer: Since the contract is out the money by \$1 per share (the holder can buy stock for \$50 when it is worth \$49), the entire premium of \$2 is time value.

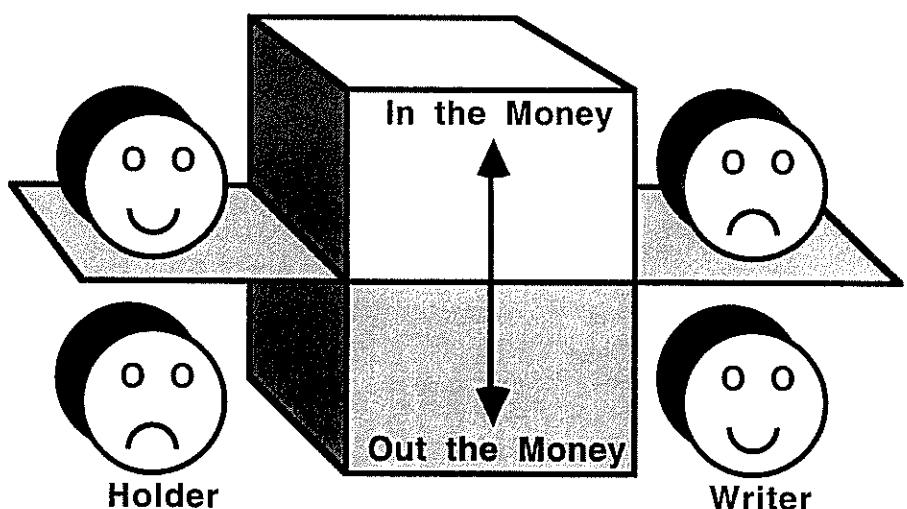
**As Contract Goes  
"In The Money" -  
Premium Increases**

As a contract moves "in the money," the premium increases in the market to reflect the increased value. As a contract moves "out the money," the premium falls in the market to reflect the decreased value.

**As Contract Goes  
"Out The Money" -  
Premium Decreases**

In the money and at the money amounts are always looked at from the holder's perspective. An in the money contract is one which can be exercised to the profit of the holder. An out the money contract is one which would not be exercised so that the writer keeps the entire premium. Thus, holders are happy when contracts go "in the money;" writers are unhappy about this. Conversely, holders are unhappy when contracts go "out the money;" writers are happy about this.

**"In" And "Out"  
Always Holder's  
Perspective**



## CALLS

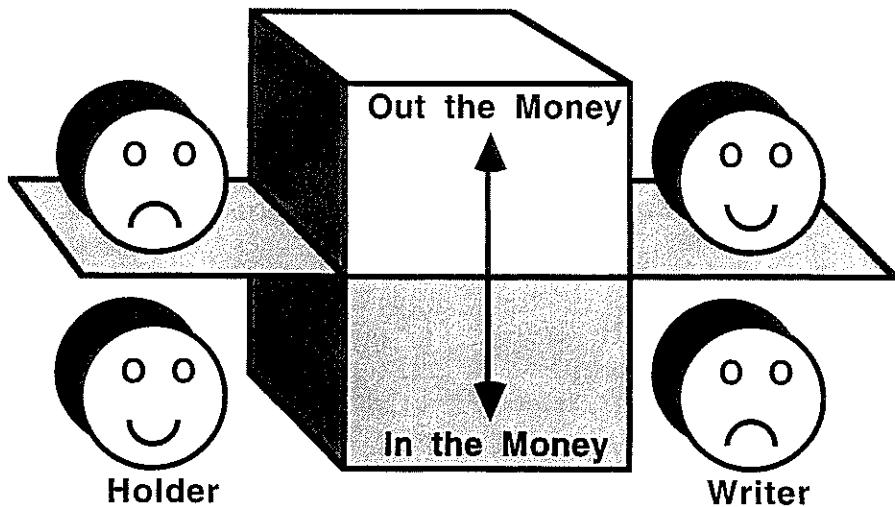
To summarize for call contracts:

Calls are "in the money" when the market price is **HIGHER** than the strike price.

Calls are "at the money" when the market price is the **SAME** as the strike price.

Calls are "out the money" when the market price is **LOWER** than the strike price.

The situation is reversed for put contracts.



## PUTS

To summarize for put contracts:

Puts are "in the money" when the market price is LOWER than the strike price.

Puts are "at the money" when the market price is the SAME as the strike price.

Puts are "out the money" when the market price is HIGHER than the strike price.

Examples of "in" and "out" for put contracts are below:

A customer buys 1 ABC Jan 50 Put @ \$5 when the market price of ABC stock is \$48. Since the holder has the right to sell stock for \$50 when it is worth \$48 in the market, the contract has intrinsic value of \$2 per share. The put is "in the money" by \$2. Since the total premium is \$5, the \$3 excess premium above intrinsic value is the time premium.

A customer buys 1 ABC Jan 50 Put @ \$3 when the market price of ABC stock is \$50. The holder can sell stock for \$50 which is worth \$50 in the market. This contract is "at the money" and has no intrinsic value. The entire premium is "time premium."

A customer buys 1 ABC Jan 50 Put @ \$1 when the market price of ABC stock is \$52. The holder can sell stock for \$50 which is currently worth \$52. This contract is "out the money" by \$2 per share. The low premium of \$1 reflects this and is all "time premium".

## Parity

Another term that must be known for options contracts is "parity." When the market premium exactly equals the

intrinsic value of the option, the contract is said to be trading at parity. For example, an ABC Jul 50 Call @ \$3 is at "parity" when the market price of ABC stock is at 53. An ABC Jul 50 Put @ \$3 is at "parity" when the market price of ABC stock is at 47.

#### 1d. OPENING AND CLOSING POSITIONS

##### Opening Purchase

We have already stated that there are two parties to an option contract, the holder and the writer. To establish the contract, the holder is said to make an "opening purchase" of the contract.

##### Closing Sale

The holder can choose to exercise the contract, resulting in a stock transaction, can let the contract expire, or can trade the contract. If the holder trades the contract to someone else, he closes his position with a "closing sale."

##### Opening Sale

The writer of that contract makes an "opening sale" of the contract. The term "opening" is used because a new short position is being created. (Please note that when any security is traded, one does not have to buy first and then sell second. One can also sell first (a "short sale") and buy back second.)

##### Closing Purchase

The writer is passive in that he can not choose to exercise the contract - that is decided by the holder. But, the writer can trade the contract to someone else. If the writer trades the contract to someone else, he closes the position with a "closing purchase."

##### Open Interest

The number of open contracts is termed the "open interest."

If both the holder and writer "open" a position at the same time, the open interest in that contract has been increased by 1 contract;

If both the holder and the writer "close" a position at the same time, the open interest in that contract has been decreased by 1 contract;

If a holder "opens" a position against a writer who is "closing;" or vice-versa;, there is no change in open interest. In essence, the person who is opening a position is assuming the existing contract of the person who is closing that position, so there is no change in the number of contracts outstanding.

As contracts get close to expiration, closing transactions increase, reducing the "open interest." At expiration, the

open interest is zero since all remaining open contracts are void.

The larger the "open interest" in a specific option, the greater the number of existing contracts available to trade. Thus, professional traders are more likely to trade contracts with a large "open interest," since their market is more liquid, than those less-liquid contracts with a small "open interest."

## OPTIONS BASICS SECTION EXAMINATION

1.

Which of the following influence the premium of a listed option?

- I Length of time until expiration of the contract
  - II Volatility of underlying security
  - III Market price of underlying security
- a. I only
  - b. II only
  - c. III only
  - d. I, II, III

2.

"Intrinsic value" is defined as the:

- a. excess of premium over the underlying security's market price
- b. excess of time premium over the "in the money" amount
- c. difference between the strike price and market price of the underlying security, if exercise is profitable to the holder
- d. maximum potential gain on a contract

3.

A customer buys 1 Swiss Franc October 80 Call @ 6 when the Franc is trading at 85. The contract is:

- a. trading at parity
- b. "in the money"
- c. "out the money"
- d. "at the money"

Use the following information to answer the next 2 questions:

A customer buys 1 XMI Feb 250 Put @ 4 when XMI closes at 247.

4.

The time value in the premium is:

- a. 1 point
- b. 2 points
- c. 3 points
- d. 4 points

5.

The intrinsic value of the contract is:

- a. 1 point
- b. 2 points
- c. 3 points
- d. 4 points

6.

To establish a short call position, an order ticket must be marked:

- a. opening purchase
- b. opening sale
- c. closing purchase
- d. closing sale

7.

To liquidate a long put position, the order ticket must be marked:

- a. opening purchase
- b. opening sale
- c. closing purchase
- d. closing sale

8.

All of the following are standardized for listed option contracts EXCEPT:

- a. strike price
- b. contract size
- c. premium
- d. expiration

9.

Which of the following will decrease "open interest"?

- I Opening Purchase
  - II Opening Sale
  - III Closing Purchase
  - IV Closing Sale
- 
- a. I and II
  - b. III and IV
  - c. I and IV
  - d. II and III

10.

Which contract will likely have the highest premium when ABC closes at \$38.

- a. ABC Jan 35 Call
- b. ABC Jan 35 Put
- c. ABC Jan 40 Call
- d. ABC Jan 30 Put

## OPTIONS BASICS SECTION EXAMINATION EXPLANATIONS

1. The best answer is d. The longer the life of the option, the higher the premium; the greater the volatility of the underlying security, the higher the premium; the higher the market price of the stock, the higher the premium on a call contract (since it goes further "in the money"). The lower the market price of the stock, the higher the premium on a put contract (since it goes further "in the money"). Therefore, all 3 choices influence the premium.
2. The best answer is c. Intrinsic value is the amount by which an option contract is "in the money". It is the difference between the market price and exercise price, if exercise is profitable to the holder.
3. The best answer is b. Calls go "in the money" when the market price rises **above** the strike price. Since the market price is 85 while the contract allows the customer to buy at a strike price of 80, the call is "in the money" by 5 points.
4. The best answer is a. Since the put contract allows the holder to sell XMI at 250 when XMI is worth 247 the contract is "in the money" by 3 points. Remember, puts go "in the money" when the market drops. Of the total 4 point premium, 3 points are "intrinsic value." The balance of the premium (1 point) is "time premium."
5. The best answer is c. See explanation to question 4.
6. The best answer is b. To establish a short option position, the order ticket must be marked "opening sale." To liquidate this position, the order ticket is marked "closing purchase."
7. The best answer is d. To establish a long option position, the order ticket is marked "opening purchase." When this order is executed, a contract has been purchased for a holder. To liquidate this position, the order ticket is marked "closing sale." When this order is executed, the contract is sold to someone else.
8. The best answer is c. Exchange traded option contracts have standardized contract sizes (e.g. 100 shares of stock), expiration dates, and strike prices. The premium or "price" of the option is determined minute by minute in the trading market.
9. The best answer is b. "Open Interest" is the number of option contracts (both calls and puts) outstanding. An opening purchase and opening sale creates a new contract and increases open interest. A closing sale and closing purchase liquidates an existing contract and decreases open interest. An opening purchase and closing sale (or vice-versa) has no effect on open interest, since this is simply a transfer of ownership of an existing contract. The greater the open interest, the greater the likely trading volume in the issue.
10. The best answer is a. The contract with the highest premium is likely to be the one that is the most "in the money." With the market price at \$38, the 35 call is "in the money" by 3 points. The 35 put is "out the money" by 3 points. The 40 call is "out the money" by 2 points. The 30 put is "out the money" by 8 points.

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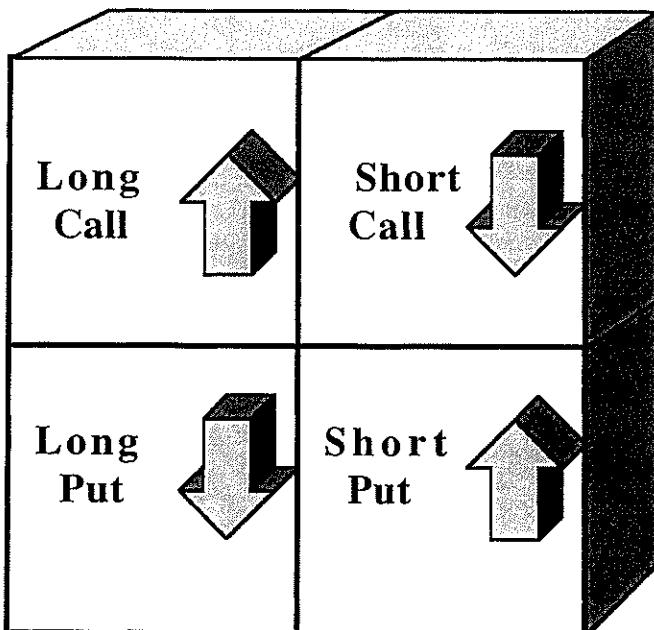
## SECTION 2: SPECULATIVE OPTIONS STRATEGIES

### 2a. SPECULATIVE STRATEGIES OVERVIEW

#### Bull And Bear Strategies

A speculative option strategy is one which attempts to profit if the market price of the underlying security rises or falls. Strategies which profit from a rising market are "bull" strategies. Strategies which profit from falling markets are "bear" strategies.

There are four speculative strategies. They are:



The purchase of a call (long call) or the sale of a put (short put) will give the speculator a profit in a rising market. These are the bull strategies.

The purchase of a put (long put) or the sale of a call (short call) will give the speculator a profit in a falling market. These are the bear strategies.

### 2b. LONG CALL STRATEGY

#### Holder Has "Right To Buy" Underlying Security

Assume that a customer buys 1 ABC Jan 50 Call @ \$5 when the market price of ABC stock is at \$51. The customer has the right to buy ABC stock at \$50 during the life of the option, and he pays a premium of \$5 per share for this right.

### Unlimited Upside Gain Potential

If the market rises, the customer can exercise the option and buy the stock for \$50. He could then sell the stock in the market for its true value. Since the stock can rise an unlimited amount, he has theoretically unlimited gain potential as the contract goes further and further "in the money."

### Call Holder Gains When Market Rises



### Maximum Loss Premium Paid

On the other hand, if the market drops below \$50, it would not make sense to exercise the option since the contract is now "out the money". The customer would let the contract expire and would lose the premium paid. This represents the maximum potential loss.

**Breakeven =  
Strike Price +  
Premium**

To breakeven, the customer has to recover the \$5 premium paid. He will do this when the market price rises to \$55. At this point, the contract is "in the money" by \$5, yielding a profit on the stock that exactly offsets the premium paid.

The best way to calculate maximum potential gain, maximum potential loss, breakeven, as well as any true gain or loss on an option contract is by setting up the problem on a "T" diagram. If this is done properly, all of these facts stand out.

For example, a customer buys 1 ABC Jul 60 Call @ \$5 when the market price of ABC is \$51. What is the maximum potential loss? What is the maximum potential gain? What is the breakeven point?

To handle this problem, we set up the "T".

| Option   | Stock |
|----------|-------|
| Buy -\$5 |       |



The customer pays a \$5 per share premium. This amount is put on the "option" side of the "T" as a negative number. If nothing else happens and the contract expires, he loses the \$5 premium for a \$500 total loss.

The next step to find both maximum potential gain and breakeven is to assume that the option has been "exercised." If this occurs, the customer buys the stock at the strike price. The "T" now shows:

| Option   | Stock                              |
|----------|------------------------------------|
| Buy -\$5 | Buy -\$60      Breakeven<br>= \$65 |

If the customer exercises, he has paid \$60 for the stock in addition to the \$5 for a total of \$65. To breakeven, he must recover the \$65 paid when he liquidates the stock position. Since the stock can rise an unlimited amount, the gain potential is unlimited as well. Assume that the customer is able to sell the stock in the market for \$75. What is his net gain or loss?

| Option   | Stock                              |
|----------|------------------------------------|
| Buy -\$5 | Buy -\$60      Breakeven<br>= \$65 |
|          | Sell +\$75                         |
| - \$5    | + \$15      Net Gain = \$10        |

For the stock, the customer makes \$15 per share profit, offset by the \$5 premium paid. The net gain is \$10 per share or \$1000 on the hundred shares covered by the call contract.

Instead of exercising, the customer could have simply traded the call contract to someone else. In doing so, he closes out his interest in the contract prior to expiration. Assume that the customer sells this contract in a closing sale transaction to

someone else for a \$9 premium. What is his net gain or loss? The "T" should show:

| Option    | Stock |
|-----------|-------|
| Buy -\$5  |       |
| Sell +\$9 |       |
|           | +\$4  |

Because the contract was never exercised, there is no transaction in the underlying security (the stock). The option was simply closed out by trading the contract, resulting in a net gain of \$4 per share or \$400 for the contract.

To summarize the characteristics of buying a call:

|                        |          |                                 |
|------------------------|----------|---------------------------------|
| <b>Long Call</b>       | <b>=</b> | <b>Bullish Market Direction</b> |
| <b>Maximum Gain</b>    | <b>=</b> | <b>Unlimited</b>                |
| <b>Maximum Loss</b>    | <b>=</b> | <b>Premium Paid</b>             |
| <b>Breakeven Point</b> | <b>=</b> | <b>Strike Price + Premium</b>   |

## 2c. SHORT CALL STRATEGY

**Writer Has Obligation To Deliver (Sell) At The Strike Price** Assume that a customer sells 1 ABC Jan 50 Call @ \$5 when the market price of ABC stock is at \$51. The customer is obligated to deliver (sell) ABC stock at \$50 during the life of the option, and he receives a premium of \$5 per share for this obligation.

**Maximum Potential Loss - Unlimited**

If the market rises, the customer will be exercised and must deliver the stock for \$50. He would then have to buy the stock in the market for its true value to be able to deliver on the sale. Since the stock can rise an unlimited amount, he has theoretically unlimited loss potential as the contract goes further and further "in the money." Because of the exposure to unlimited risk, this call writer is termed "naked" - exposed to substantial risk.

**Naked Call Writer**

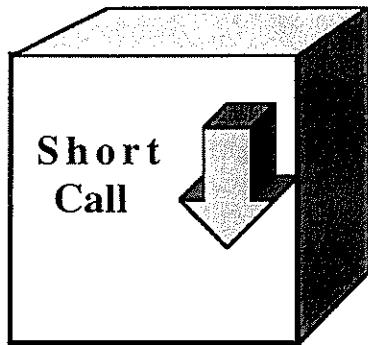
**Maximum Potential Gain = Premium Received**

On the other hand, if the market drops below \$50, it would not make sense to exercise the option since the contract is now "out the money." The contract would expire and the



writer would keep the premium received. This represents the maximum potential gain.

### Call Writer Gains When Market Falls



**Breakeven = Strike  
Price + Premium**

To breakeven, the customer has to lose the \$5 premium received. He will do this when the market price rises to \$55. At this point, the contract is "in the money" by \$5, yielding a loss on the stock that exactly offsets the premium received.

For example, a customer sells 1 ABC Jul 60 Call @ \$5 when the market price of ABC is \$51. What is the maximum potential gain? What is the maximum potential loss? What is the breakeven point?

To handle this problem, we set up the "T".

| Option    | Stock |
|-----------|-------|
| Sell +\$5 |       |

The writer receives a \$5 per share premium, so this is placed on the "option" side of the "T". If nothing else happens, meaning the contract expires, he gains the \$5 premium for a \$500 total gain.

The next step to find both maximum potential loss and breakeven is to assume that the option has been "exercised." If this occurs, the customer sells the stock at the strike price. The "T" now shows:

| Option    | Stock                               |
|-----------|-------------------------------------|
| Sell +\$5 | Sell +\$60      Breakeven<br>= \$65 |

If the writer is exercised, he has received \$60 for selling the stock in addition to the \$5 premium for a total of \$65. To breakeven, he must lose the \$65 received when he purchases the stock position for delivery on the sale. Since the stock can rise an unlimited amount, the loss potential is unlimited as well. Assume that the writer is able to buy the stock in the market for \$75. What is his net gain or loss?

| Option    | Stock                               |
|-----------|-------------------------------------|
| Sell +\$5 | Sell +\$60      Breakeven<br>= \$65 |
|           | Buy -\$75                           |
| + \$5     | - \$15      Net Loss = \$10         |

On the stock, the writer loses \$15 per share, offset by the \$5 premium received. The net loss is \$10 per share or \$1000 on the hundred shares covered by the call contract.

Instead of waiting to be exercised, the writer could have simply traded the call contract to someone else. In doing so, he closes out his interest in the contract prior to expiration. Assume that the customer buys this contract back in a closing purchase transaction from someone else for a \$9 premium. What is his net gain or loss? The "T" should show:

| Option    | Stock |
|-----------|-------|
| Sell +\$5 |       |
| Buy -\$9  |       |
|           | - \$4 |

Because the contract was never exercised, there is no transaction in the underlying security (the stock). The option was simply closed out by trading the contract, resulting in a net loss of \$4 per share or \$400 for the contract.

To summarize the characteristics of selling a call:

|                         |          |                                 |
|-------------------------|----------|---------------------------------|
| <b>Short Naked Call</b> | <b>=</b> | <b>Bearish Market Direction</b> |
| <b>Maximum Gain</b>     | <b>=</b> | <b>Premium Received</b>         |
| <b>Maximum Loss</b>     | <b>=</b> | <b>Unlimited</b>                |
| <b>Break-even Point</b> | <b>=</b> | <b>Strike Price + Premium</b>   |

## 2d. LONG PUT STRATEGY

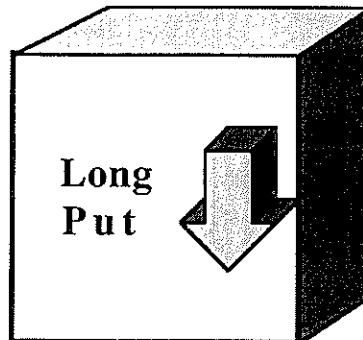
**Holder Has "Right To Sell" At The Strike Price**

Assume that a customer buys 1 ABC Jan 50 Put @ \$5 when the market price of ABC stock is at \$49. The holder has the right to sell ABC stock at \$50 during the life of the option, and he pays a premium of \$5 per share for this right.

**Potential Gain Increases As Market Falls - Maximum Is Strike Price - Premium**

If the market falls, the holder can exercise the option and sell the stock for \$50. He could then buy the stock in the market for its true value to deliver on the sale. Since the stock can fall to a value of "0", he has increasing gain as the contract goes further and further "in the money."

## Put Holder Gains When Market Falls



**Maximum Potential Loss = Premium Paid**

On the other hand, if the market rises above \$50, it would not make sense to exercise the option since the contract is now "out of the money." The customer would let the contract expire and would lose the premium paid. This represents the maximum potential loss.

**Breakeven = Strike Price - Premium**

To breakeven, the customer has to recover the \$5 premium paid. He will do this when the market price falls to \$45. At this point, the contract is "in the money" by \$5, yielding a profit on the stock that exactly offsets the premium paid.

For example, a customer buys 1 ABC Jul 60 Put @ \$5 when the market price of ABC is \$59. What is the maximum potential loss? What is the maximum potential gain? What is the breakeven point?

To handle this problem, we set up the "T".

| Option   | Stock |
|----------|-------|
| Buy -\$5 |       |

The customer pays a \$5 per share premium, so this is shown on the "option" side of the "T". If nothing else happens and the contract expires, he loses the \$5 premium for a \$500 total loss.

The next step to find both maximum potential gain and breakeven is to assume that the option has been "exercised." If this occurs, the customer sells the stock at the strike price. The "T" now shows:

| Option   | Stock                               |
|----------|-------------------------------------|
| Buy -\$5 | Sell +\$60      Breakeven<br>= \$55 |

If the customer exercises, he has received \$60 for selling the stock, offset by the premium paid of \$5, for a net price of \$55. To breakeven, he must pay the same \$55 to buy the stock position for delivery on the sale. Since the stock can fall to zero, the maximum gain occurs at this point. At a value of "0", the gain as shown on the "T" is:

| Option   | Stock                               |
|----------|-------------------------------------|
| Buy -\$5 | Sell +\$60      Breakeven<br>= \$55 |
|          | Buy -\$0                            |
| - \$5    | + \$60      Net Gain = \$55         |

The maximum gain is \$55 per share or \$5500 for the contract. This assumes the customer can buy the stock for "nothing" to deliver on the sale.

Assume that the stock has fallen to \$45 and is bought to make delivery on the sale. The customer's position now shows:

| Option   | Stock                               |
|----------|-------------------------------------|
| Buy -\$5 | Sell +\$60      Breakeven<br>= \$55 |
|          | Buy -\$45                           |
| - \$5    | + \$15      Net Gain = \$10         |

On the stock, the customer makes \$15 per share, offset by the \$5 premium paid. The net gain is \$10 per share or \$1000 on the hundred shares covered by the put contract.

Instead of exercising, the holder could have simply traded the put contract to someone else. In doing so, he closes out his interest in the contract prior to expiration. Assume that the holder sells this contract to someone else in a closing sale transaction for a \$9 premium. What is his net gain or loss? The "T" should show:

| Option    | Stock |
|-----------|-------|
| Buy -\$5  |       |
| -----     |       |
| Sell +\$9 |       |
| -----     |       |
| +\$4      |       |

Because the contract was never exercised, there is no transaction in the underlying security (the stock). The option was simply closed out by trading the contract, resulting in a net gain of \$4 per share or \$400 for the contract.

To summarize the characteristics of buying a put:

|                 |   |   |
|-----------------|---|---|
| Long Put        | = | Bearish Market Direction  |
| Maximum Gain    | = | (Occurs When Stock Price Falls to Zero) and Equals Strike Price - Premium |
| Maximum Loss    | = | Premium Paid  |
| Breakeven Point | = | Strike Price - Premium  |

## 2e. SHORT PUT STRATEGY

**Writer Has  
Obligation To Buy  
At The Strike Price**

Assume that a customer sells 1 ABC Jan 50 Put @ \$5 when the market price of ABC stock is at \$49. The customer has the obligation to buy ABC stock at \$50 during the life of the option, and he receives a premium of \$5 per share for this obligation.

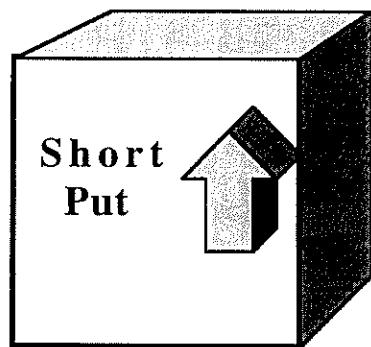
**Potential Loss Increases As Market Falls. Maximum Loss Is Strike Price - Premium**

If the market falls, the contract will be exercised and the customer will buy the stock for \$50. He could then sell the stock in the market for its true value. Since the stock can fall to a value of "0", he has increasing loss as the contract goes further and further "in the money."

**Maximum Potential Gain = Premium Received**

On the other hand, if the market rises above \$50, the contract would not be exercised since it is now "out the money." The contract would expire and the writer will earn the premium received. This represents the maximum potential gain.

### Put Writer Gains When Market Rises



**Break-even = Strike Price - Premium**

To break-even, the customer has to lose the \$5 premium received. He will do this when the market price falls to \$45. At this point, the contract is "in the money" by \$5, yielding a loss on the stock that exactly offsets the premium received.

For example, a customer sells 1 ABC Jul 60 Put @ \$5 when the market price of ABC is \$59. What is the maximum potential gain? What is the maximum potential loss? What is the break-even point?

To handle this problem, we set up the "T".

| Option    | Stock |
|-----------|-------|
| Sell +\$5 |       |

The customer receives a \$5 per share premium, so this is placed on the "option" side of the "T". If nothing else happens, the contract expires, and he earns the \$5 premium for a \$500 maximum gain.

The next step to find both maximum potential loss and breakeven is to assume that the option has been "exercised." If this occurs, the customer buys the stock at the strike price. The "T" now shows:

| Option    | Stock                             |
|-----------|-----------------------------------|
| Sell +\$5 | Buy -\$60      Breakeven<br>=\$55 |

If the customer is exercised, he pays \$60 to buy the stock, offset by the premium received of \$5. To breakeven, he must sell the stock for \$55 in the market. Since the stock can fall to zero, the maximum loss occurs at this point. At a value of "0", the loss as shown on the "T" is:

| Option    | Stock                             |
|-----------|-----------------------------------|
| Sell +\$5 | Buy -\$60      Breakeven<br>=\$55 |
|           | Sell +\$ 0                        |
| + \$5     | -\$ 60      Net Loss = \$55       |

The maximum loss is \$55 per share or \$5500 for the contract. This assumes the customer sells the stock for "nothing" in the market. Because the writer is exposed to substantial risk, he is termed a "naked" put writer.

Assume that the stock has fallen to \$45 and is sold in the market. The customer's position now shows:

| Option    | Stock                             |
|-----------|-----------------------------------|
| Sell +\$5 | Buy -\$60      Breakeven<br>=\$55 |
|           | Sell +\$45                        |
| + \$5     | -\$ 15      Net Loss = \$10       |

On the stock, the customer loses \$15 per share, offset by the \$5 premium received. The net loss is \$10 per share or \$1000 on the hundred shares covered by the put contract.

Instead of being exercised, the customer could have simply traded the put contract to someone else. In doing so, he closes out his interest in the contract prior to expiration. Assume that the customer buys in this contract in a closing purchase transaction for a \$9 premium. What is his net gain or loss? The "T" should show:

| Option    | Stock  |
|-----------|--------|
| Sell +\$5 |        |
| Buy -\$9  |        |
|           | - \$ 4 |

Because the contract was never exercised, there is no transaction in the underlying security (the stock). The option was simply closed out by trading the contract, resulting in a net loss of \$4 per share or \$400 for the contract.

To summarize the characteristics of selling a put:

|                         |          |  |
|-------------------------|----------|--|
| <b>Short Naked Put</b>  | <b>=</b> | <b>Bullish Market Direction</b>  |
| <b>Maximum Gain</b>     | <b>=</b> | <b>Premium</b>   |
| <b>Maximum Loss</b>     | <b>=</b> | <b>(Occurs When Stock Price Falls to Zero) and Equals Strike Price - Premium</b> |
| <b>Break-even Point</b> | <b>=</b> | <b>Strike Price - Premium</b>  |

## 2f. DELTA, GAMMA, VEGA

When an individual is speculating using options, he or she is hoping to profit from a favorable premium movement. The rate of change of the premium of an option contract will vary, depending on the relationship between the market price of the stock and the strike price of the contract.

### **Delta: Rate Of Premium Change As Stock Price Moves**

For example, assume that an ABC Jan 50 Call is purchased when the market price of ABC is \$30 per share for a premium of \$.05.

If the price of the stock moves to \$31, the premium is still likely to hover near "0," since the contract is so far out of the money. In this case, as the stock price is moving, the premium is not, and the option "delta" is "0".

If the price of the stock moves upwards towards \$50, the delta increases. Once the price of the stock moves past \$50, the delta will now be "+1," meaning that for every \$1 movement in stock price, the option premium will move by the same \$1. In the money call options have a delta of +1; in the money put options have a delta of -1 (for every dollar increase in stock price, the premium decreases by \$1).

Therefore, delta varies between "0" and + or - 1 for all options and measures how much the option's premium changes for each \$1 stock price movement. (In mathematics, the symbol delta is used to show value "change," and this was applied to options.)

In practical terms, owning an option with a delta of "1" will produce the same gain or loss as owning the underlying stock. Owning an options with a delta of "0" is the same as owning nothing.

### **Gamma: Rate Of Premium Change As Premium Moves**

Gamma measures the change in delta, that is how slowly or quickly delta is moving. As an "out the money" option gets close to being "at the money," the rate of premium change accelerates and the gamma is the greatest. An option that is deep "out the money" has a gamma of "0" - the premium does not move as the stock price moves, since the option is basically worthless. An option that is "in the money" also has a gamma of "0" since the premium moves in lock-step, dollar-for-dollar, with the stock's price movement.

Therefore, gamma is greatest for an option that is right at the money and it diminishes the deeper the option goes in



or out the money. In practical terms, an option with a high gamma is the one with the highest volatility, which will magnify gains or losses as prices move.

**Vega: Rate Of  
Premium Change  
As Volatility Moves**

Vega measures the change in an option's value relative to the volatility of the underlying asset. It is expressed as the amount of money per underlying share that the option's value will gain or lose as volatility rises or falls by 1%. Similar to gamma, vega is greatest for an at the money option and diminishes as the option moves farther in or out the money.

## SPECULATIVE STRATEGIES SECTION EXAMINATION

1.

Which of the following option strategies are profitable in a rising market?

I Long Call

II Long Put

III Short Call

IV Short Put

- a. I, II
- b. I, IV
- c. II, III
- d. III, IV

2.

The writer of a call on a listed stock is exercised. The writer must:

- a. deliver stock
- b. buy stock
- c. deliver cash
- d. pay cash

Use the following information to answer the next 4 questions:

In November, a customer buys 1 ABC Jan 70 Call @ \$4 when the market price of ABC is \$71.

3.

If ABC falls to \$67 and stays there through January, the customer will:

- a. gain \$400
- b. lose \$400
- c. gain \$6700
- d. lose \$6700

4.

The breakeven point for the position is:

- a. 66
- b. 67
- c. 74
- d. 75

5.

The customer's maximum potential gain is:

- a. \$400
- b. \$6600
- c. \$7400
- d. unlimited

6.

If the customer closes out the position prior to expiration by selling the call at \$10, the gain or loss is:

- a. \$400 gain
- b. \$400 loss
- c. \$600 gain
- d. \$1000 gain

Use the following information to answer the next 5 questions:

A customer sells 1 ABC Feb 50 Call @ \$7 when the market price of ABC is \$52.

7.

If the market value of ABC falls to \$48 and stays there through February, the customer will:

- a. gain \$700
- b. lose \$700
- c. gain \$4300
- d. lose \$4300



8.

The customer's breakeven point is:

- a. 43
- b. 45
- c. 57
- d. 59

A customer buys 2 ABC Jan 60 Puts @ \$4 when the market price of ABC is \$59.

9.

The customer's maximum potential loss is :

- a. \$700
- b. \$4300
- c. \$5700
- d. unlimited

10.

The stock moves to \$80 and the customer is exercised. The stock is bought in the market for delivery. The gain or loss to the writer is:

- a. \$700 gain
- b. \$700 loss
- c. \$2300 loss
- d. \$3000 loss

11.

If the stock stays at \$52 and just prior to expiration, the writer closes out the position with a closing purchase at intrinsic value, the gain or loss is:

- a. \$200 loss
- b. \$500 gain
- c. \$700 gain
- d. \$900 loss

Use the following information to answer the next 4 questions:

12.

The maximum potential loss for the customer is:

- a. \$400
- b. \$800
- c. \$11,200
- d. \$12,000

13.

The breakeven point is:

- a. 52
- b. 56
- c. 64
- d. 68

14.

ABC stock falls to \$40 and the customer buys the stock in the market and exercises the put. The gain is:

- a. \$800
- b. \$1600
- c. \$3200
- d. \$4000

15.

If ABC stock rises to \$62 and the customer closes the positions at \$1, the gain or loss is:

- a. \$300 loss
- b. \$600 loss
- c. \$700 gain
- d. \$1000 loss

Use the following information to answer the next 5 questions:

A customer sells 1 ABC Jul 40 Put at \$6 when the market price of ABC is \$38.

**16.**

ABC stock rises to \$60 and stays there through July. The customer:

- a. gains \$600
- b. loses \$600
- c. gains \$1400
- d. loses \$1400

**17.**

The customer's maximum potential gain is:

- a. \$600
- b. \$3400
- c. \$4000
- d. unlimited

**18.**

The breakeven point is:

- a. \$32
- b. \$34
- c. \$44
- d. \$46

**19.**

The market falls to \$25 and the customer is exercised. The customer then sells the stock in the market. The loss is:

- a. \$600
- b. \$900
- c. \$1500
- d. \$2500

**20.**

The maximum potential loss to the writer is:

- a. \$600
- b. \$3400
- c. \$4000
- d. unlimited

**21.**

A portfolio manager that trades options would:

- a. buy a call option to lock in a stock's price prior to an anticipated price rise
- b. sell a call option to establish a short stock position prior to an anticipated price fall
- c. buy a put option to generate extra income against an existing long stock position
- d. sell a put option to protect an existing long stock position from a market decline

**22.**

The measure of the change in premium of an option relative to the change in price of the price of the underlying asset is called:

- a. alpha
- b. beta
- c. delta
- d. gamma

**23.**

Delta will be greatest for an:

- a. in the money option
- b. at the money option
- c. out the money option
- d. option that is closest to expiration

**24.**

Gamma will be greatest for an:

- a. in the money option
- b. at the money option
- c. out the money option
- d. option that is closest to expiration



25.

To speculate on a market decline, a trader would:

- a. Buy calls and buy puts
- b. Sell calls and sell puts
- c. Buy calls and sell puts
- d. Sell calls and buy puts

## SPECULATIVE STRATEGIES SECTION EXAM EXPLANATIONS

1. The best answer is b. Buying a call and selling a put are profitable strategies in a rising market. Buying a put and selling a call are profitable in a falling market.
2. The best answer is a. If the writer of a call option on listed stocks is exercised, he must deliver 100 shares of stock, for which the holder will pay the strike price. If the writer of a put option on listed stocks is exercised, he must pay the strike price for 100 shares of stock delivered to him by the put holder.
3. The best answer is b. The holder of a call pays the premium for the contract. This is the maximum loss if the contract expires "out the money."
4. The best answer is c. The holder of a call breaks even if the market price rises by enough to recover the premium paid. On the "T", the breakeven point is:

| Option | Stock                           |
|--------|---------------------------------|
| B - 4  | B - 70 <b>Breakeven</b><br>= 74 |

The holder paid \$4 for the right to buy stock at \$70. The effective cost if he exercises is \$74. He must be able to sell the stock for \$74 to breakeven.

5. The best answer is d. The holder of a call has unlimited gain potential. He has the right to buy stock at a fixed price - and the stock can rise an unlimited amount.
6. The best answer is c. The customer bought the call (opening purchase) for a \$4 premium and then closed with a sale of the contract at \$10 for a \$600 profit (6 points).

| Option | Stock |
|--------|-------|
| B - 4  |       |
| S +10  |       |
| + 6    |       |

7. The best answer is a. If the market falls to \$48, the 50 call expires out the money and the writer keeps the \$700 premium.

8. The best answer is c. The writer received \$7 and obligated himself to deliver stock he does not own for \$50 per share. If exercised, he receives \$7 + \$50 for selling = \$57. If he buys the stock for delivery at this price, he breaks even. On the "T", the breakeven point is:

| Option | Stock                         |
|--------|-------------------------------|
| S + 7  | S + 50      Breakeven<br>= 57 |

9. The best answer is d. The writer of a naked call is obligated to deliver stock that he does **not** own. If exercised, the stock must be bought in the market for delivery. Since the market price can rise an unlimited amount, the maximum potential loss is unlimited as well.

10. The best answer is c. The writer is obligated to deliver stock at \$50 per share. He must buy the stock at \$80 in the market losing 30 points. Since \$700 (7 points) was collected in premiums, the net loss is 23 points or \$2300. This shows on the "T" as:

| Option | Stock                         |
|--------|-------------------------------|
| S + 7  | S + 50      Breakeven<br>= 57 |
|        | B - 80                        |
| + 7    | - 30      Net Loss = 23       |

11. The best answer is b. The writer established the short call position with an opening sale at \$7. He closes the position with a purchase at \$2 (intrinsic value when the call strike price is \$50 and the market price is \$52). This shows on the "T" as:

| Option | Stock |
|--------|-------|
| S + 7  |       |
| B - 2  |       |
| + 5    |       |

12. The best answer is b. The holder of a put buys the right to sell at a fixed price. If the contract expires "out the money," the maximum loss is the premium paid. \$400 was paid per contract (\$800 for 2 contracts) - \$800 is the maximum potential loss.

13. The best answer is b. The holder of the put paid a \$4 premium per share for the right to sell ABC stock at \$60. His net proceeds if he exercises are \$56 per share. To breakeven, he must buy the stock in the market at this price. This shows on the "T" as:

| Option | Stock                         |
|--------|-------------------------------|
| B - 4  | S + 60      Breakeven<br>= 56 |

14. The best answer is c. The customer buys the stock for \$40, and exercises the put to sell at \$60 for a 20 point profit. Since 4 points were paid in premiums, the net profit per contract is 16 points or \$1600. The profit on 2 contracts is \$3200. This shows on the "T" as:

| Option | Stock                         |
|--------|-------------------------------|
| B - 4  | S + 60      Breakeven<br>= 56 |
|        | B - 40                        |
| - 4    | + 20      Net Gain = 16       |

15. The best answer is b. The put was bought in an opening purchase at \$4 and sold in a closing sale at \$1 for a loss of 3 points (\$300 per contract). Since 2 contracts are involved, the net loss is \$600. This shows on the "T" as:

| Option | Stock |
|--------|-------|
| B - 4  |       |
|        | S + 1 |
| - 3    |       |

16. The best answer is a. If the market rises to \$60, the put expires "out the money" (since the strike price is \$40). The writer keeps the \$600 collected in premiums.

17. The best answer is a. The maximum gain for the writer of a naked call or put is the premium collected. This happens if the contract expires "out the money."

18. The best answer is b. The writer collected \$6 in premiums by obligating himself to buy the stock at \$40. If exercised his net outlay is \$34 for the stock. To breakeven, he must be able to sell the position for \$34. This shows on the "T" as:

| Option | Stock                         |
|--------|-------------------------------|
| S + 6  | B - 40      Breakeven<br>= 34 |

19. The best answer is b. When exercised, the writer must buy the stock for \$40. He then sells the stock at \$25 for a 15 point loss. Since 6 points was collected as premiums, the net loss is 9 points or \$900.

| Option | Stock                         |
|--------|-------------------------------|
| S + 6  | B - 40      Breakeven<br>= 34 |
|        | S + 25                        |
| + 6    | - 15      Net Loss = 9        |

20. The best answer is b. The worst case for the writer of a put is being exercised and being forced to buy worthless stock at the strike price. In this case, the put writer agrees to buy the stock at \$40, but collected \$6 of premiums, for a net outlay of \$34. If the stock is worthless, this is the maximum loss per share (\$3400 for the contract).

21. The best answer is a. The purchase of a call option gives the holder the right to buy stock at a fixed price. Choice B is incorrect because a short call will only result in a short stock position (sale of the shares) if the short call is exercised. A long put can be used to establish a short stock position prior to an anticipated market fall. A long put (right to sell at a fixed price) could be used to protect an existing stock position from a market decline. A short put (obligation to buy at a fixed price) will not protect an existing long stock position.

22. The best answer is c. Delta measures the change in price of an option relative to the change in price of the underlying asset. Delta is "0" for deep out the money options - since the option is worthless, each dollar movement in price of the underlying asset does not affect the option's value. Delta hits the maximum value of "1" when an option is "in

the money" - the option premium moves dollar-for-dollar with the movement in value of the underlying asset.

23. The best answer is a. Delta measures the change in price of an option relative to the change in price of the underlying asset. Delta is "0" for deep out the money options - since the option is worthless, each dollar movement in price of the underlying asset does not affect the option's value. Delta hits the maximum value of "1" when an option is "in the money" - the option premium moves dollar-for-dollar with the movement in value of the underlying asset.

24. The best answer is b. Gamma measure how quickly delta moves - it is the rate of change of the premium movement. The premium moves fastest, either up or down, for an option that is at the money and the market price of the underlying asset starts to move away from the strike price. The farther away the price moves, the rate of change of premium movement slows down.

25. The best answer is d. The strategies that are profitable in bull markets are long calls and short puts. The strategies that are profitable in bear markets are long puts and short calls.

## SECTION 3: HEDGING STRATEGIES

### 3a. HEDGING OVERVIEW

#### Protect A Long Stock Position By Buying A Put

Option contracts can be used to hedge a stock position taken by a customer. If a customer owns stock (has a long stock position), he will lose if the market drops. To hedge against this, he can buy some insurance by purchasing a put option on the stock. If the stock declines, he can exercise the put and sell the stock at the strike price, eliminating the risk of falling stock prices (known as "market risk").

#### Protect A Short Stock Position By Buying A Call

Conversely, if a customer has taken a short position in a security, he will lose if the market rises. The potential loss is unlimited. To hedge against this, he can buy some insurance by purchasing a call option on the stock. If the stock rises, he can exercise the call and buy the stock at the strike price (to cover the short stock position), eliminating the risk of rising stock prices.

### 3b. LONG PUT TO HEDGE LONG STOCK POSITION

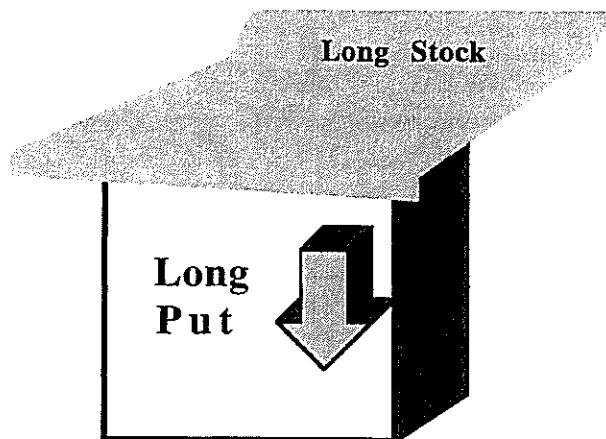
#### To Protect A Long Stock Position From A Falling Market

Assume that a customer buys 100 shares of ABC stock at \$60 per share. She believes that the stock is a good investment and wishes to hold on to the position. However, she is worried that the market may drop, dragging the stock's price down, and she wants to hedge against this possibility.

#### If Market Drops, Can Sell Stock At Strike Price

The customer buys 1 ABC Jul 60 Put @ \$5 as a hedge. If the stock drops, the customer can always exercise the put and sell the stock for \$60, no matter how far the market price falls.

#### Long Put Stops Downside Loss On Long Stock



If the stock's price rises, she lets the put expire "out the money" and sells the stock in the market at the higher price.

To calculate maximum potential gain, breakeven, and maximum potential loss for this position, again we use the "T". The customer has taken the following positions:

**Buy 100 shares of ABC stock at \$60  
Buy 1 ABC Jul 60 Put @ \$5**

The positions are entered into the "T":

| <b>Option</b> | <b>Stock</b> |
|---------------|--------------|
| Buy -\$5      | Buy -\$60    |

**Breakeven = Cost Of Stock + Premium Paid**

The customer has bought the stock and has bought the put contract. Once the top line of the "T" is completed, we also have found the breakeven point. The customer has paid a total of \$65 for both positions. To breakeven, the stock position must now be liquidated for \$65. This shows on the "T" as:

| <b>Option</b> | <b>Stock</b>                         |
|---------------|--------------------------------------|
| Buy -\$5      | Buy -\$60 <b>Breakeven</b><br>= \$65 |

**Maximum Loss = Premium Paid (Net of any difference between stock cost and strike price)**

If the market price of the stock falls, the customer is hedged. She will simply exercise the put and sell the stock at the strike price. If she does this, her loss is limited to \$500. Assume that the stock's price falls to zero in the market. The customer exercises the put. The "T" now shows:

| Option   | Stock                         |
|----------|-------------------------------|
| Buy -\$5 | Buy -\$60 Breakeven<br>= \$65 |
|          | Sell +\$60                    |
| - \$5    | + \$0 Net Loss = \$5          |

Because the customer owned the Jul 60 Put, she sold the stock position for \$60. She is not exposed to any market loss on the stock during the life of the contract. She did lose her "insurance" premium of \$500, however.

If the market price of the stock rises, the put will expire out the money. The customer will sell the stock at the higher market price. Assume that the price of the stock rises to \$75 and the customer lets the put expire and sells the stock in the market. The "T" now shows:

| Option   | Stock                         |
|----------|-------------------------------|
| Buy -\$5 | Buy -\$60 Breakeven<br>= \$65 |
|          | Sell +\$75                    |
| - \$5    | + \$15 Net Gain = \$10        |

**Maximum Potential Gain = Unlimited**

The customer makes \$15 on the stock offset by the \$5 premium paid. The net gain is \$10 per share. In a rising market, the customer's potential gain is unlimited. The put would expire worthless and the customer would sell the stock at whatever price the market dictated.

To summarize the characteristics of using a long put to hedge a long stock position:

|                            |          |   |
|----------------------------|----------|---|
| <b>Long Stock/Long Put</b> | <b>=</b> | <b>Hedge To Protect Stock In Falling Market</b>                               |
| <b>Maximum Gain</b>        | <b>=</b> | <b>Unlimited</b>  |
| <b>Maximum Loss</b>        | <b>=</b> | <b>Premium (Offset by difference between stock cost and put strike price)</b> |
| <b>Breakeven Point</b>     | <b>=</b> | <b>Stock Cost + Premium</b>   |

### 3c. LONG CALL TO HEDGE SHORT STOCK POSITION

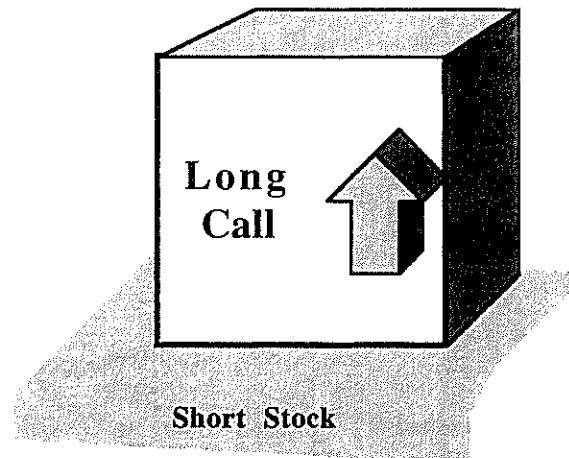
To Protect A Short Stock Position From A Rising Market

If Market Rises, Can Buy Stock At Strike Price To Cover

Assume that a customer sells short 100 shares of ABC stock at \$60 per share. She believes that the stock will fall and is speculating by taking this position. However, she is concerned that the market may rise, forcing her to cover (buy in) at a large loss and she wants to hedge against this possibility.

The customer buys 1 ABC Jul 60 Call @ \$5 as a hedge. If the stock rises, the customer can always exercise the call and buy the stock for \$60, no matter how far the market price rises.

#### Long Call Stops Upside Loss On Short Stock



If the stock's price falls, she lets the call expire "out the money" and buys the stock in the market at the lower price to cover the short stock position at a profit.

To calculate maximum potential loss, breakeven, and maximum potential gain for this position, again we use the "T". The customer has taken the following positions:

**Sell Short 100 shares of ABC stock at \$60  
Buy 1 ABC Jul 60 Call @ \$5**

The positions are entered into the "T" on the following page:

| Option   | Stock      |
|----------|------------|
| Buy -\$5 | Sell +\$60 |

**Breakeven = Sale  
Price Of Stock -  
Premium Paid**

The customer has sold short the stock and has bought the call contract. Once the top line of the "T" is completed, we also have found the breakeven point. The customer has received a net amount of \$55 for both positions. To breakeven, the stock position must now be bought in for \$55. This shows on the "T" as:

| Option   | Stock      |           |
|----------|------------|-----------|
| Buy -\$5 | Sell +\$60 | Breakeven |
| -----    |            |           |

**Maximum Loss =  
Premium (Net of any  
difference between  
the sale price of the  
stock and its cost)**

If the market price of the stock rises, the customer is hedged. She will simply exercise the call and buy the stock at the strike price to cover the short stock position. If she does this, her loss is limited to \$500. Assume that the stock's price rises to \$100 in the market. The customer exercises the call. The "T" now shows

| Option   | Stock      |                |
|----------|------------|----------------|
| Buy -\$5 | Sell +\$60 | Breakeven      |
| -----    |            |                |
|          | Buy -\$60  |                |
| -----    |            |                |
| -\$5     | +\$0       | Net Loss = \$5 |

Because the customer owned the Jul 60 Call, she bought the stock position for \$60. She is not exposed to any market loss on the stock during the life of the contract. She did lose her "insurance" premium of \$500, however.

If the market price of the stock falls, the call will expire out the money. The customer will buy the stock at the lower market price. Assume that the price of the stock falls to zero and the customer lets the call expire and buys the stock in the market. The "T" now shows:

| Option   | Stock                               |
|----------|-------------------------------------|
| Buy -\$5 | Sell +\$60      Breakeven<br>= \$55 |
|          | Buy -\$ 0                           |
| - \$ 5   | + \$60      Net Gain = \$55         |

**Maximum Gain =  
Short Sale Price -  
Premium**

The customer makes \$60 on the stock offset by the \$5 premium paid. The net gain is \$55 per share. This is the customer's maximum potential gain.

To summarize the characteristics of using a long call to hedge a short stock position:

|                              |          |  |
|------------------------------|----------|--|
| <b>Short Stock/Long Call</b> | <b>=</b> | <b>Hedge To Protect<br/>Stock In Rising<br/>Market</b>   |
| <b>Maximum Gain</b>          | <b>=</b> | <b>Short Sale Price -<br/>Premium Paid</b>   |
| <b>Maximum Loss</b>          | <b>=</b> | <b>Premium (Offset by<br/>difference between<br/>stock sale price<br/>and call strike<br/>price)</b> |
| <b>Breakeven Point</b>       | <b>=</b> | <b>Short Sale Price -<br/>Premium Paid</b>   |



## HEDGING STRATEGIES SECTION EXAMINATION

1.

Buying a put on a stock position held long is a suitable strategy when the market is expected to:

- I remain stable
- II rise sharply
- III fall sharply
- IV fluctuate sharply

- a. I only
- b. I and III
- c. III only
- d. IV only

Use the following information to answer the next 2 questions:

A customer buys 100 shares of ABC stock at \$40 and buys 1 ABC Oct 40 put @ \$4.

2.

ABC stock falls to \$36 and just prior to expiration, the customer exercises the put, delivering the stock position. The customer:

- a. broke even
- b. lost \$400
- c. gained \$400
- d. lost \$3600

3.

The breakeven point is:

- a. 36
- b. 40
- c. 44
- d. 48

Use the following information to answer the next 5 questions:

A customer buys 100 shares of XYZ at \$49 and buys 1 XYZ Jan 50 Put @ \$5

4.

The stock falls to \$32 and the customer exercises the put, delivering the long stock position. The customer's gain or loss is:

- a. \$100 gain
- b. \$400 loss
- c. \$500 loss
- d. \$5000 gain

5.

The breakeven point is:

- a. 44
- b. 45
- c. 54
- d. 55

6.

The maximum potential gain is:

- a. \$500
- b. \$4400
- c. \$5500
- d. unlimited

7.

The maximum potential loss is:

- a. \$400
- b. \$500
- c. \$4400
- d. unlimited

8.

Just prior to expiration, the stock is trading at \$49. The customer closes the option position at a premium of \$2. One week later, the stock moves to \$55 and the customer sells the stock position in the market. The net gain or loss on all transactions is:

- a. \$300 loss
- b. \$300 gain
- c. \$600 loss
- d. \$600 gain

**9.**

Which of the following option positions is used to hedge a short stock position?

- a. long call
- b. short call
- c. long put
- d. short put

**10.**

Which of the following option positions is used to hedge a long stock position?

- a. long call
- b. short call
- c. long put
- d. short put

Use the following information to answer the next 4 questions:

A customer sells short 100 shares of ABC stock at \$40 and buys 1 ABC Mar 40 Call @ \$5

**11.**

The stock rises to \$80 and the customer exercises the call. The gain or loss is:

- a. \$500 gain
- b. \$500 loss
- c. \$3500 gain
- d. \$3500 loss

**12.**

The maximum potential loss is:

- a. \$500
- b. \$3500
- c. \$4500
- d. unlimited

**13.**

The maximum potential gain is:

- a. \$500
- b. \$3500
- c. \$4500
- d. unlimited

**14.**

The breakeven point is:

- a. 35
- b. 40
- c. 45
- d. 50

Use the following information to answer the next 2 questions:

On the same day a customer buys 100 shares of ABC at \$40 and sells short 100 shares of XYZ at \$50. The customer then buys 1 ABC Jan 40 Put @ \$4 and 1 XYZ Jan 50 Call @ \$5.

**15.**

XYZ rises to \$60 and the customer exercises the call. ABC falls to \$25 and the customer exercises the put. The net gain or loss on all transactions is:

- a. \$500 loss
- b. \$900 gain
- c. \$900 loss
- d. breakeven

**16.**

The breakeven points are:

- a. ABC: 36 / XYZ: 45
- b. ABC: 44 / XYZ: 45
- c. ABC: 36 / XYZ: 55
- d. ABC: 44 / XYZ: 55



Use the following information to answer the next 2 questions:

A customer sells short 100 shares of PDQ at \$58 and buys 1 PDQ Jul 60 Call @ \$3.

**17.**

The customer's maximum potential loss is:

- a. \$200
- b. \$300
- c. \$500
- d. unlimited

**18.**

The breakeven point is:

- a. 55
- b. 57
- c. 61
- d. 64

**19.**

A customer buys 100 shares of ABC at \$30 and buys 1 ABC Jan 30 Put @ \$5.

The market drops to \$25 and just prior to expiration, the put is exercised. The customer has a:

- a. \$500 gain
- b. \$500 loss
- c. \$1000 loss
- d. breaks even

**20.**

Referring to the prior question, at which market price is the position profitable?

- a. 25
- b. 30
- c. 35
- d. 40

## HEDGING STRATEGIES SECTION EXAMINATION EXPLANATIONS

1. The best answer is c. Buying a put allows the holder to sell a security at a fixed price. Thus, it protects the owner of the underlying stock position in a falling market.
2. The best answer is b. The customer bought the stock at \$40 and sold at \$40 by exercising the put. There is no gain or loss on the stock position. However, the customer did lose the \$400 premium paid. This shows on the "T" as:

| Option | Stock  |
|--------|--------|
| B - 4  | B - 40 |
|        | S + 40 |
| - 4    | 0      |

3. The best answer is c. The customer paid \$4 for the put and \$40 for the stock, for a total of \$44. To breakeven, he must sell the stock at \$44. This shows on the "T" as:

| Option | Stock                           |
|--------|---------------------------------|
| B - 4  | B - 40 <b>Breakeven</b><br>= 44 |
|        |                                 |

4. The best answer is b. The customer bought the stock at \$49 and sold at \$50 by exercising the long put, for a 1 point gain. Since 5 points were paid in premiums, the customer lost 4 points or \$400.

| Option | Stock                   |
|--------|-------------------------|
| B - 5  | B - 49                  |
|        | S + 50                  |
| - 5    | + 1 <b>Net Loss = 4</b> |

5. The best answer is c. The customer paid \$5 for the put and \$49 for the stock, for a total outlay of \$54. To breakeven, he must be able to sell the stock at \$54. This shows on the "T" as:

| Option | Stock                         |
|--------|-------------------------------|
| B - 5  | B - 49      Breakeven<br>= 54 |

6. The best answer is d. Since the customer has a long stock position, his potential gain is unlimited. If the market moves up, he lets the put expire "out the money" and sells the stock in the market at the higher price.

7. The best answer is a. The long put gives the stock owner the right to sell at \$50. Since he bought the stock at \$49, exercising results in a 1 point stock profit. However, the premiums paid of \$5 are lost, for a net loss of 4 points or \$400 maximum.

8. The best answer is b. The put contract was purchased at \$5 and closed (sold) at \$2 for a net loss of \$3. The stock was purchased at \$49 and sold at \$55 for a net gain of \$6. The net of all transactions is a 3 point or \$300 gain. This shows on the "T" as:

| Option | Stock                         |
|--------|-------------------------------|
| B - 5  | B - 49      Breakeven<br>= 54 |
| S + 2  | S + 55                        |
| - 3    | + 6      Net Gain = 3         |

9. The best answer is a. When one has a short stock position, borrowed shares have been sold with the agreement that the customer will buy back the position at a later date. If the market rises, the loss potential is unlimited. The purchase of a call allows the stock to be bought in at a fixed price, limiting upside risk.

10. The best answer is c. Buying a put allows the owner of stock to sell at a fixed price (strike price) if the market falls. This limits downside risk on the long stock position.

11. The best answer is b. If the market rises, the customer can exercise the call and buy the stock at \$40. These shares can be used to replace the "borrowed" shares sold short at \$40. On the stock, there is no gain or loss. However, the customer loses the \$500 paid in premiums.

12. The best answer is a. The long call limits loss on the short stock position in a rising market. The stock was sold for \$40 and can be bought back at \$40 by exercising the call. The only loss to the customer is the premium paid of 5 points or \$500.

13. The best answer is b. If the stock falls, the customer gains on the short stock position. He sold the stock for \$40. If it falls to "0", he can buy the shares for "nothing" to replace the borrowed shares sold and make 40 points. He lets the call expire "out the money" losing 5 points, so the maximum potential gain is 35 points.

14. The best answer is a. The customer sold the stock at \$40 and paid \$5 for the call, receiving a net amount of \$35 per share. To breakeven, he must be able to buy the stock at \$35 per share (to cover the short stock position). This shows on the "T" as

| Option | Stock  |                   |
|--------|--------|-------------------|
| B - 5  | S + 40 | Breakeven<br>= 35 |

15. The best answer is c. When XYZ rises, the customer exercises the long call to buy XYZ at \$50. This stock is used to cover the short sale of XYZ stock at \$50. There is no gain or loss on the stock but the premiums paid of \$500 for the call are lost. When ABC falls, the customer exercises the long put to sell ABC at \$40. Since he bought the stock at \$40, he has no gain or loss on the stock. However, he does lose the \$400 paid in premiums for the put. The total loss is \$900.

16. The best answer is b. The customer paid \$4 for the ABC put and \$40 for ABC stock, for a total of \$44. This is the breakeven on ABC stock. The customer sold XYZ stock short for \$50, but paid \$5 for the XYZ call, for a net receipt of \$45. He must buy back XYZ at this price to breakeven.

17. The best answer is c. The long call allows the customer to buy in the stock position at \$60. Since the stock was sold at \$58, exercise results in a net loss of \$2 on the stock. The customer paid \$3 for the call, so the total loss is \$500. This shows on the "T" as:

| Option | Stock  |              |
|--------|--------|--------------|
| B - 3  | S + 58 |              |
|        | B - 60 |              |
| - 3    | - 2    | Net Loss = 5 |

18. The best answer is a. The customer sold the stock for \$58 and paid \$3 in premiums for the long call, for a net receipt of \$55. To breakeven, he must buy back the stock position at this price. This shows on the "T" as:

| Option | Stock                           |
|--------|---------------------------------|
| B - 3  | S + 58 <b>Breakeven</b><br>= 55 |

19. The best answer is b. The customer bought the stock at \$30 and sold it by exercising the put at \$30. He only loses the \$500 premium paid for the purchase of the put. This shows on the "T" as:

| Option | Stock                           |
|--------|---------------------------------|
| B - 5  | B - 30 <b>Breakeven</b><br>= 35 |
|        | S + 30                          |
| - 5    | 0      Net Loss = 5             |

20. The best answer is d. To breakeven, the customer must recover the \$5 paid in premiums and the \$30 paid for the stock (total of \$35). He must sell the stock in the market above \$35 to have a profit. The only choice above \$35 is d, which is \$40.

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## SECTION 4: INCOME STRATEGIES

### 4a. INCOME STRATEGIES OVERVIEW

**Sell Contracts To Earn Premiums**

**"Covered Writer"  
Has The Underlying Security Position**

**Suitable In Stable Markets**

**Long Stock/  
Short Call**

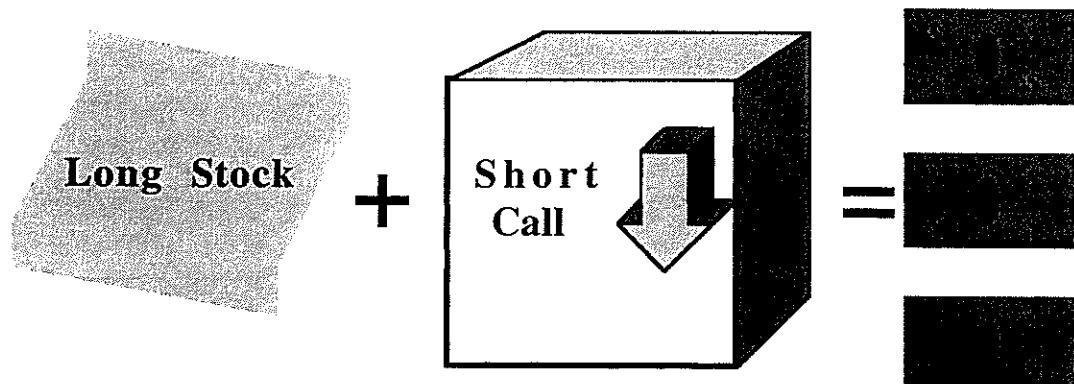
Income strategies involve selling (writing) option positions against an established stock position. The premium received from selling the option enhances the yield from the underlying security. If the option is exercised, the existing stock position is used to satisfy the exercise notice. Because the writer is not exposed to the risk of going to the market to satisfy an exercise notice, the writer is covered against market risk on the short option contracts. Hence, these are called "covered" writing strategies.

The overriding factor needed to understand income strategies is that the stock position comes first and foremost. While writing the option gives extra income from the stock position, any gain or loss is also derived from the stock position.

Income strategies are used during periods when the market is expected to be stable. They are not suitable in a rising market; nor are they suitable in a falling market.

The first income strategy is to sell a call option against a long stock position. Assume a customer owns 100 shares of ABC stock purchased at \$50 and he writes 1 ABC Jan 50 Call @ \$5. If the market stays at \$50, the call expires "at the money" and the \$5 premium is earned with no loss in value of the stock.

#### Write Calls Against Long Stock For Income



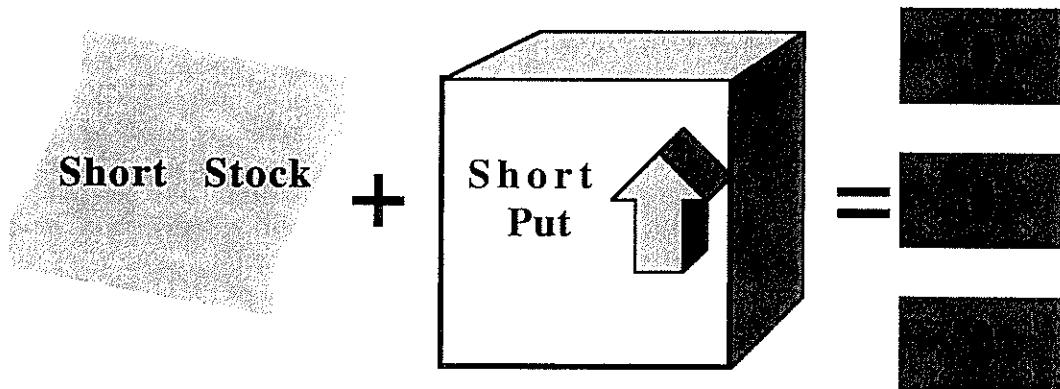
If the market rises, however, he will be exercised and will have to deliver the stock at \$50. He does not enjoy the market appreciation of the stock since he "sells" at the

same price he paid for the stock (\$50). He only earns the premium of \$5 per share. Conversely, if the market falls, the call expires and he keeps the stock position. In a falling market, he can lose all of the stock's value.

#### Short Stock/ Short Put

The second income strategy is to sell a put option against a short stock position. Assume a customer has sold short 100 shares of ABC stock at \$50 and he writes 1 ABC Jan 50 Put @ \$5. If the market stays at \$50, the put will expire "at the money" and he earns the \$5 premium with no loss from the stock position.

#### Write Puts Against Short Stock For Income



If the market falls, however, he will be exercised and will have to buy the stock at \$50. He does not enjoy the gain on the short stock position since he "buys" at the same price he sold the stock for (\$50). He only earns the premium of \$5 per share. Conversely, if the market rises, the put expires and he keeps the stock position. In a rising market, he can lose a theoretically infinite amount.

These two income strategies are now covered more completely.

#### 4b. WRITING CALLS AGAINST LONG STOCK POSITIONS

Assume that a customer buys 100 shares of XXX stock at \$70 because it is a solid corporation paying a high dividend rate (let us say \$5 per year). The customer expects that, over the long term, the stock will appreciate. But for the short term he expects the price to be stable. In order to enhance his return, he writes 1 XXX Jul 70 Call @ \$5.

The customer's position now is:

Long 100 shares of XXX stock at \$70  
Short 1 XXX Jul 70 Call @ \$5

If the stock rises, the call will be exercised and he will deliver the stock for the \$70 strike price, keeping the \$5 premium. If the stock falls, the call expires and he keeps the stock position, losing money every step of the way as the stock drops.

To find the maximum potential gain, breakeven, and maximum potential loss, we use the "T". We start off by inserting the existing positions into the "T":

| Option    | Stock     |
|-----------|-----------|
| Sell +\$5 | Buy -\$70 |

**Breakeven = Cost Of Stock - Premium Received**

The short call position and long stock position now show. The customer has paid out a net amount of \$65 for the stock. If he liquidates the stock position for this price, he breaks even. (We also know that the first line of the "T" always gives the breakeven point)

| Option    | Stock     |                     |
|-----------|-----------|---------------------|
| Sell +\$5 | Buy -\$70 | Breakeven<br>= \$65 |

If the market rises, the call will be exercised and the customer is obligated to deliver 100 shares of XXX for \$70 per share. Assume that the market rises to \$100 and the customer is exercised. The "T" shows:

| Option    | Stock      |                       |
|-----------|------------|-----------------------|
| Sell +\$5 | Buy -\$70  | Break even<br>= \$65  |
|           | Sell +\$70 |                       |
|           | + \$ 5     | + \$ 0 Net Gain = \$5 |

**Maximum Gain =  
Premium Received  
(Net of difference  
between stock cost  
and strike price)**

There is no gain on the stock. The customer agreed to sell the stock for \$70 if he was exercised. He gave up all potential gain on the stock for the \$5 premium. This represents his maximum potential gain while he has both the stock and short call positions.

On the other hand, if the market falls, the call will expire "out the money." The customer will be free to sell his stock in the market. Assume that XXX goes bankrupt and the stock falls to zero. The customer's loss is:

| Option    | Stock      |                         |
|-----------|------------|-------------------------|
| Sell +\$5 | Buy -\$70  | Break even<br>= \$65    |
|           | Sell +\$ 0 |                         |
|           | + \$ 5     | - \$ 70 Net Loss = \$65 |

**Maximum Potential  
Loss = Cost Of Stock  
- Premium Received**

The customer loses the full value of the stock net of the premium collected. The maximum loss for the customer is \$65 per share or \$6500. Obviously, this is not an appropriate strategy in a falling market. Simply sell the stock!

**Sale Of  
"Out The Money"  
Covered Calls Is  
Used In A Rising  
Market**

The prior example shows how the sale of covered calls against long stock positions is profitable in a stable market. This strategy can also be employed in a slightly different fashion, if an individual believes that the market will rise. In this case, the individual can sell "out of the money contracts" against the long stock position. If the market rises, as long as the increase in price is not too steep, the contracts will remain "out the money" and will expire, earning the premium for the writer.

For example, a customer owns 100 shares of XXX stock, valued at \$70. She believes that the market price will rise, but does not expect the price to increase beyond \$80 per share. The customer sells



1 XXX Jul 80 Call @ \$2. Note that this contract is 10 points "out the money."

If the market rises, XXX's price must increase above \$80 for the call to be exercised. If the price increases to \$79 at expiration, the call would expire and the customer earns the premium income.

**Lower Premiums Earned; Lower Risk Of Exercise**

Please note that premiums earned with this version of the strategy are lower, since the contracts are "out the money" when they are written. Conversely, the risk of exercise is also reduced, since the market price must rise sharply for the call contracts to move "in the money."

To summarize the characteristics of covered call writing:

|                              |          |   |
|------------------------------|----------|---|
| <b>Long Stock/Short Call</b> | <b>=</b> | <b>Income Strategy In A Flat Market; Income Strategy In A Rising Market If Out The Money Contracts Are Sold</b> |
| <b>Maximum Gain</b>          | <b>=</b> | <b>Premium (Offset by difference between stock purchase price and call strike price)</b>                        |
| <b>Maximum Loss</b>          | <b>=</b> | <b>(Occurs If the Market Price of the Stock Falls To Zero) and Equals the Cost Of Stock - Premium</b>           |
| <b>Break-even Point</b>      | <b>=</b> | <b>Cost Of Stock - Premium</b>  |

#### **4c. WRITING PUTS AGAINST SHORT STOCK POSITIONS**

This income strategy is not very popular for reasons that will become obvious as we work through an example. Assume that a customer believes that the price of XXX stock will decline over the longer term, and has sold short 100 shares of XXX at \$70 to profit from this expectation.

However, for the next few months, he does not expect the price to drop. To generate some income during this interim period, he sells 1 XXX Jul 70 Put @ \$5. If the price stays at \$70 over the next few months, as expected, the put will

expire and the customer can buy back the stock at \$70 to cover the short position. He earns the \$5 premium as extra income.

The customer's original position is:

**Sell Short 100 Shares of XXX at \$70  
Sell 1 XXX Jul 70 Put @ \$5**

If the stock rises, the put expires "out the money" and the customer loses all the way up on the short stock position. Conversely, if the market falls, the put is exercised and the customer must buy the stock for \$70. Since he sold the stock for \$70, his gain is limited to the premium collected.

To find the maximum potential gain, breakeven, and maximum potential loss, we again use the "T".

| Option    | Stock      |
|-----------|------------|
| Sell +\$5 | Sell +\$70 |

**Breakeven = Sale  
Price Of Stock +  
Premium**

The "T" shows the short put position as well as the short stock position. The customer has received a total of \$75. In order to breakeven, he would have to buy in the stock position at \$75. This shows on the "T" as:

| Option    | Stock      |                     |
|-----------|------------|---------------------|
| Sell +\$5 | Sell +\$70 | Breakeven<br>= \$75 |

If the market falls, the put will be exercised since it is "in the money" and the customer will be obligated to buy the stock at \$70. These shares are used to cover the short stock position. The "T" now shows:

| Option    | Stock                       |
|-----------|-----------------------------|
| Sell +\$5 | Sell +\$70 Breakeven = \$75 |
|           | Buy -\$70                   |
| +\$5      | +\$0 Net Gain = \$5         |

**Maximum Gain = Premium Received (Net of difference between stock sale price and cost)**

**Maximum Potential Loss - Unlimited On The Short Stock Position**

The customer only gains the \$5 premium. All potential profit on the short stock position was "sold off" for the premium collected by selling the put. This is the maximum potential gain while the customer has both the short put and short stock position.

If the market rises, the put will expire "out the money." The customer is left with a short stock position in a rising market. Since he has to buy back the stock to cover this position, his potential loss is unlimited. Assume that the stock rises to \$100 and the customer closes out the short stock position by buying the stock. The "T" shows:

| Option    | Stock                       |
|-----------|-----------------------------|
| Sell +\$5 | Sell +\$70 Breakeven = \$75 |
|           | Buy -\$100                  |
| +\$5      | -\$30 Net Loss = \$25       |

The loss of \$30 on the stock position is partially offset by the \$5 premium received. From this example it becomes clear why this strategy is not popular - one gets unlimited risk on the upside and the gain is limited to the premium on the downside. The put writer is covered against risk on the option, but he has unlimited risk on the stock position.

To summarize the characteristics of a covered put writer:

|                              |          |   |
|------------------------------|----------|---|
| <b>Short Stock/Short Put</b> | <b>=</b> | <b>Income Strategy In A Flat Market</b>                           |
| <b>Maximum Gain</b>          | <b>=</b> | <b>Prem. (Net of diff. between stock sale price + put strike)</b> |
| <b>Maximum Loss</b>          | <b>=</b> | <b>Unlimited</b>  |
| <b>Breakeven Point</b>       | <b>=</b> | <b>Sale Price of Stock + Premium</b>                              |

#### 4d. ROLLING POSITIONS "UP" AND "DOWN"

A popular writing strategy works as follows:

A customer buys 100 shares of ABC stock at \$45 and sells 1 ABC Jan 45 Call @ \$5. Thus, the customer has established a short covered call position.

Assume that ABC stock falls to \$40 in price, and the premium on the Jan 45 Call is now at \$1. The customer closes the short call by purchasing the Jan 45 Call @ \$1, and now sells an ABC Jan 40 Call. The 40 Call is "at the money" and will have a substantially higher premium than the 45 Call. Let's assume that the Jan 40 Call is sold at \$5.

The customer's original position was:

Buy 100 shares of ABC at \$45  
Sell 1 ABC Jan 45 Call @ \$5

The customer then does the following when the market price of ABC falls to \$40:

Buy 1 ABC Jan 45 Call @ \$1  
Sell 1 ABC Jan 40 Call @ \$5

The customer has collected a total of \$10 in premiums, from the sale of the two calls, net of the \$1 paid to close the 45 Call, for a net receipt of \$9. Thus, he has effectively reduced the cost of this stock position  $\$45 - \$9 = \$36$  per share.

##### **Rolling Down - Used For Covered Short Calls**

This strategy is known as "rolling down" a short option position as the market price declines. The idea is that as the market falls, the existing short contract moves out of the money, and the premium falls close to zero. This position is closed, and a new "at the money" call contract is sold (at the lower current market value) to earn extra premiums. If the market drops again, this position would be closed, and another "at the money" contract sold to earn premiums. Thus, in a falling market, by rolling down, premium income is enhanced and offsets any loss on the long stock position.

##### **Rolling Up - Used For Covered Short Puts**

The reverse strategy of "rolling up" is used for covered short put positions. As the market price rises, the short put position moves "out of the money." The position is closed, and a new "at the money" put is sold. In this manner, as the market rises, additional premium income is earned, offsetting any losses on the short stock position due to the rising market.

#### 4e. PLACING A COLLAR ON A STOCK POSITION

**Collar On Price  
Of A Security**

An option strategy can be used to maintain the price of a security within a desired range, known as placing a "collar" on a position. This can be achieved at minimal cost, and is popular when a security position has appreciated substantially so that near term upside future appreciation is not likely.

**Collar =  
Long Out The Money  
Put AND  
Short An Out The  
Money Call**

For example, assume that a customer has bought 100 shares of ABC stock at \$40, that is now trading at \$60. The customer does not wish to lose the gain and wishes to sell if the price of the stock falls below \$55 per share, so the customer buys 1 ABC Jan 55 Put (out of the money by 5 points) at a low premium, say \$1. The customer does not believe that the stock will appreciate much between now and January (but is long term bullish). The customer sells 1 ABC Jan 65 Call (out of the money by 5 points) and receives a low premium, say \$1. The net cost to the customer of the "collar" is "0".

If the stock falls to \$55, the put will be exercised, and the customer still has a 15 point gain on the stock (\$40 cost vs. \$55 sell). Since the cost of the "collar" is zero, this does not reduce the gain. If the stock rises above \$65 (which is not anticipated during the life of the call contract), the short call will be exercised, and the stock will be delivered at \$65 (gain of \$25 above the \$40 cost per share).

Essentially, this strategy is a combination of both a hedge (buy a put) and income strategy (sell a call) against the stock position to lock in a sales price for the stock within a desired range at minimal cost.

## INCOME STRATEGIES SECTION EXAMINATION

1.

Covered call writing is an appropriate strategy in a:

- a. declining market
- b. rising market
- c. stable market
- d. fluctuating market

2.

The sale of covered calls is used to:

- a. hedge a long stock position in a falling market
- b. protect a short stock position in a falling market
- c. generate additional income in a stable market
- d. profit if the market drops

Use the following information to answer the next 4 questions:

A customer buys 100 shares of ABC stock at \$49 and sells 1 ABC Jan 50 Call @ \$4.

3.

The market rises to \$55 and the call is exercised. The customer has a:

- a. \$100 profit
- b. \$400 profit
- c. \$500 profit
- d. \$900 profit

4.

The breakeven point is:

- a. 45
- b. 46
- c. 53
- d. 54

5.

The maximum potential loss is:

- a. \$400
- b. \$4500
- c. \$4900
- d. unlimited

6.

Prior to expiration, the customer closes the short call position at \$1. He retains the long stock position. The gain or loss on the option is:

- a. \$100 loss
- b. \$300 gain
- c. \$400 gain
- d. \$500 loss

Use the following information to answer the next 4 questions:

A customer buys 200 shares of GM at \$72 and sells 2 GM 70 Calls @ \$6.

7.

The market rises to \$80 and the calls are exercised. The customer has a:

- a. \$400 gain
- b. \$800 gain
- c. \$1200 gain
- d. \$2800 gain

8.

The breakeven point is:

- a. 58
- b. 60
- c. 64
- d. 66

9.

The maximum potential loss is:

- a. \$6400
- b. \$12,800
- c. \$13,200
- d. \$14,400

**10.**

The maximum potential gain is:

- a. \$800
- b. \$1200
- c. \$7000
- d. unlimited

**11.**

Which of the following strategies has unlimited loss potential?

- a. long stock/short call
- b. long stock/long put
- c. short stock/long call
- d. short stock/short put

**12.**

A customer sells short 100 shares of ABC at \$50 and sells 1 ABC Jan 50 put @ \$5. This position results in a profit when:

- I The market rises
- II The market falls
- III The market is stable

- a. I only
- b. II only
- c. I and III
- d. II and III

Use the following information to answer the next 4 questions:

A customer sells short 100 shares of ABC stock at \$60 and sells 1 ABC Oct 60 Put @ \$6.

**13.**

The market falls to \$30 and the put is exercised. The gain or loss is:

- a. \$600 gain
- b. \$600 loss
- c. \$2400 gain
- d. \$2400 loss

**14.**

The maximum potential loss is:

- a. \$600
- b. \$4400
- c. \$5000
- d. unlimited

**15.**

The breakeven point is:

- a. 54
- b. 60
- c. 66
- d. 70

**16.**

The maximum potential gain is:

- a. \$600
- b. \$4400
- c. \$5000
- d. unlimited

Use the following information to answer the next 4 questions:

A customer sells short 100 shares of PDQ at \$49 and sells 1 PDQ Sep 50 Put @ \$6.

**17.**

The customer will have a loss at which of the following market prices for PDQ?

- a. 42
- b. 43
- c. 55
- d. 56

**18.**

The maximum potential loss is:

- a. \$4300
- b. \$4400
- c. \$5500
- d. unlimited

19.

The breakeven point is:

- a. 43
- b. 44
- c. 55
- d. 56

20.

The maximum potential gain is:

- a. \$500
- b. \$600
- c. \$700
- d. unlimited

21.

A customer buys 100 shares of ABC stock at \$45 in a cash account and sells 1 ABC Sept 40 Call @ \$7. The call is exercised. What is the customer's percentage return on cash investment?

- a. 5%
- b. 5.26%
- c. 15%
- d. 18%

22.

A customer buys 100 shares of ABC stock at \$50 and sells 1 ABC Jan 50 Call @ \$5. Later, the 50 Call is closed, and the customer sells 1 ABC Jan 45 Call. The customer is:

- a. rolling up
- b. rolling down
- c. spreading
- d. hedging

23.

A customer owns ABC stock, purchased at \$50 per share, and believes that the market can decline to \$45 per share. The customer wishes to generate extra income from the stock position, but also wishes to protect the position from a large downside movement. The customer should:

- a. Sell an ABC 50 Call and buy an ABC 45 Put
- b. Buy an ABC 45 Put
- c. Buy an ABC 50 Call and buy an ABC 45 Put
- d. Sell an ABC 45 Call

24.

Writing "at the money" covered calls will be profitable if the:

- I Price of the underlying security remains the same
  - II Price of the underlying security rises sharply
  - III Price of the underlying security falls sharply
- a. I only
  - b. II only
  - c. I and II
  - d. II and III

25.

Writing "at the money" covered puts against short stock positions will be profitable if the:

- I Price of the underlying security remains the same
- II Price of the underlying security rises sharply
- III Price of the underlying security falls sharply

- a. I only
- b. II only
- c. I and II
- d. I and III

## INCOME STRATEGIES SECTION EXAMINATION EXPLANATIONS

1. The best answer is c. A covered call writer owns the underlying stock position. He sells the call contract to generate extra income from the stock during periods when the market is expected to be stable. If he expects the market to rise, he would not write the call against the stock position because the stock will be "called away" in a rising market. If he expects the market to fall, he would sell the stock or buy a put as a hedge.
2. The best answer is c. Covered call writing is used to generate extra income from a long stock position in a stable market.
3. The best answer is c. If the market rises to \$55, the short call is "in the money" and is exercised. The stock which was bought for \$49 must be delivered for \$50 per share (short call strike price) for a \$100 profit. The writer also earns the \$4 (\$400) premium collected. The total gain is \$500. This shows on the "T" as:

| Option | Stock                 |
|--------|-----------------------|
| S + 4  | B - 49                |
|        | S + 50                |
|        |                       |
| + 4    | + 1      Net Gain = 5 |

4. The best answer is a. The customer paid \$49 for the stock and received a \$4 premium from the sale of the call, for a net cost of \$45. To breakeven, the stock must be sold for this amount. This shows on the "T" as:

| Option | Stock                         |
|--------|-------------------------------|
| S + 4  | B - 49      BreakEven<br>= 45 |
|        |                               |
|        |                               |

5. The best answer is b. The worst case is the stock becoming worthless. The writer loses the full value of the stock (\$4900) net of the \$400 in collected premiums for a net loss of \$4500.

6. The best answer is b. The short call was opened at \$4 and closed with a purchase at \$1 for a net gain of 3 points or \$300 for the contract. This shows on the "T" as:

| Option | Stock |
|--------|-------|
| S + 4  |       |
| B - 1  |       |
| + 3    |       |

7. The best answer is b. If the call is exercised, the stock (which cost \$72 per share) must be sold at the \$70 strike price for a \$200 loss. Since \$600 was collected in premiums, the net gain per contract is \$400. The gain for 2 contracts = \$800. This shows on the "T" as:

| Option | Stock                 |
|--------|-----------------------|
| S + 6  | B - 72                |
|        | S + 70                |
| + 6    | - 2      Net Gain = 4 |

8. The best answer is d. The customer paid \$72 per share for the stock and collected \$6 per share in premiums for selling the call, resulting in a net cost of \$66 per share. To breakeven, the stock must be sold for that amount. This shows on the "T" as:

| Option | Stock                         |
|--------|-------------------------------|
| S + 6  | B - 72      Breakeven<br>= 66 |

9. The best answer is c. The worst case is that the stock becomes worthless. The customer paid \$72 per share reduced by \$6 in collected premiums for a net cost of \$66. As the market drops, the calls will expire "out the money." The customer can lose all \$66 per share X 200 shares = \$13,200.

10. The best answer is a. If the market rises, the calls are exercised. The stock (which cost \$72) must be delivered at \$70 for a loss of \$2 per share. Since \$6 was collected in premiums for selling the call, the net gain, if exercised, is 4 points or \$400 per contract x 2 contracts = \$800.

11. The best answer is d. With a long stock position, the maximum loss is the value of the stock. With a short stock position, the potential loss is unlimited. If a long call is purchased against a short stock position, the upside loss is limited. If a short put is sold against a short stock position the upside loss is still unlimited since in a rising market the short put will expire "out the money." The short stock position must be covered by purchasing the stock at the higher market price - and the price can rise an infinite amount.

12. The best answer is d. If the market remains stable, the put expires "out the money" and the customer earns the \$500 premium. The stock which was sold at \$50 can be bought for \$50, so there is no further effect on the customer.

If the market falls, the short put is exercised and the customer must buy the stock at \$50. Since he sold the stock at \$50, there is no further effect on the customer. He does earn the \$500 of premiums from the sale of the put.

If the market rises, the short put expires "out the money." The customer must cover the short sale at \$50 by purchasing the stock in the market. His loss potential is unlimited.

13. The best answer is a. If the market drops, the short put is exercised and the customer must buy the stock at \$60. He can use this stock to replace the borrowed shares sold (short) at \$60. There is no gain or loss on the stock. Since \$600 was collected in premiums for selling the put, this is the gain.

14. The best answer is d. If the market rises, the short put expires and the short stock position must be covered by making a purchase in the market. The loss potential is unlimited.

15. The best answer is c. The stock was "sold" at \$60 and \$6 was collected in premiums for selling the put, for a total of \$66 collected per share. To breakeven, the stock must be purchased at this price. This shows on the "T" as:

| Option  | Stock                             |
|---------|-----------------------------------|
| $S + 6$ | $S + 60$ <b>Breakeven</b><br>= 66 |

16. The best answer is a. If the market drops, the short put is exercised and the customer must buy the stock at \$60. Since he sold the stock at \$60, he has no gain or loss on the stock - but he does keep the \$600 of collected premiums. This is the maximum potential gain.

17. The best answer is d. A customer with a short stock / short put position loses if the market rises. The customer sold the stock at \$49 and collected \$6 in premiums, for a total of \$55. To breakeven, the stock must be bought for this amount. If the stock is bought for more than \$55, the customer loses. Therefore, a loss is experienced at \$56.

18. The best answer is d. The maximum potential loss for a customer with a short stock / short put position is unlimited. If the market rises, the put expires and the short stock position must be covered (bought in) in the market.

19. The best answer is c. The customer sold the stock at \$49 and received \$6 in premiums for selling the put, collecting \$55 in total. To breakeven, the stock must be bought at this price. This shows on the "T" as:

| Option | Stock  |                   |
|--------|--------|-------------------|
| S + 6  | S + 49 | Breakeven<br>= 55 |

20. The best answer is a. If the market falls, the short put is exercised and the stock must be bought at \$50. Since it was already "sold" at \$49, there is a loss of \$1 per share (\$100 total). But the customer collected \$600 in premiums; so the end result is a net gain of \$500. This is the maximum potential gain.

21. The best answer is b. To purchase 100 shares at \$45 in a cash account, the customer must meet the Regulation T requirement of 100% (\$4500). The sale of the call option against the stock is "covered" by the ownership of the position, so no funds need be deposited on the sale of the option. Since \$700 is received in premiums from the sale of the option, to meet the total \$4500 Reg. T requirement, the customer must deposit an additional \$3800. This is his cash investment.

If the call is exercised, the customer must deliver the shares, receiving the strike price of \$40 per share. The stock was purchased at \$45 per share, for a loss of \$500 on the stock transaction. Since \$700 was received initially as premiums, there is a net gain of \$200.

The return on cash investment is:

$$\frac{\text{Net Return}}{\text{Cash Investment}} = \frac{\$200}{\$3800} = 5.26\%$$

22. The best answer is b. This covered call writer is "buying back" the call contract as the market declines (at a low premium since the contract is now out the money) and selling a new contract at the lower strike price (earning an additional premium). This strategy is known as "rolling down" the option position. By employing this strategy, a covered call writer continues to earn premiums as the market price of the stock falls, limiting his loss on the physical stock position.

23. The best answer is a. This customer has a stock position from which he wishes to generate income - therefore the sale of a covered call is appropriate. In addition, he wishes to protect against the possibility of a sharp downward price movement giving him a loss on the stock. For this, the purchase of a put option is appropriate, allowing the customer to "put" the stock if the market price should decline sharply. The customer has placed a "collar" on the stock position.

24. The best answer is c. Writing "at the money" covered calls produces a gain equal to the premium if the market price of the underlying stock stays the same. This occurs because the call expires "at the money," earning the premium, while there is no price change in the underlying stock. If the market price rises, the call will be exercised, forcing the customer to deliver the stock at the strike price. Since the stock was purchased at this price, there is no gain or loss on the stock position. The gain is equal to the premiums received. If the market declines sharply, the call expires "out the money," and the premium is earned. However, the loss on the underlying stock position would exceed any premium received, resulting in a net loss to the customer.

25. The best answer is d. Writing "at the money" covered puts produces a gain equal to the premium if the market price of the underlying stock (which was "sold short") stays the same. This occurs because the put expires "at the money," earning the premium, while there is no price change in the underlying stock. If the market price falls, the put will be exercised, forcing the customer to buy the stock at the strike price. Since the stock was already sold at this price, there is no gain or loss on the stock position. The gain is equal to the premiums received. If the market rises sharply, the put expires "out the money," and the premium is earned. However, the loss on the underlying short stock position would exceed any premium received, resulting in a net loss to the customer.

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## SECTION 5: STRADDLES AND COMBINATIONS

### 5a. OVERVIEW OF STRADDLES AND COMBINATIONS

So far, all of the strategies that have been covered are suitable only when the market is moving in one direction (either up or down) or are suitable when the market is expected to be stable. Consider this scenario: A customer believes that the market is going to move sharply from its present point, but he also believes that the move has an equal chance of being on the upside or on the downside. What do you do? You recommend that the customer buy a straddle! By straddling the market, the customer will profit if the market moves up or if it moves down. On the other hand, if the market stays flat, he will lose.

**Long Straddle =  
Long Call/Long Put**

**Profit If Price Moves  
Either Up Or Down  
By More Than Total  
Premiums Paid**

**Short Straddle =  
Short Call/Short Put**

**Profit If Price  
Stays The Same**

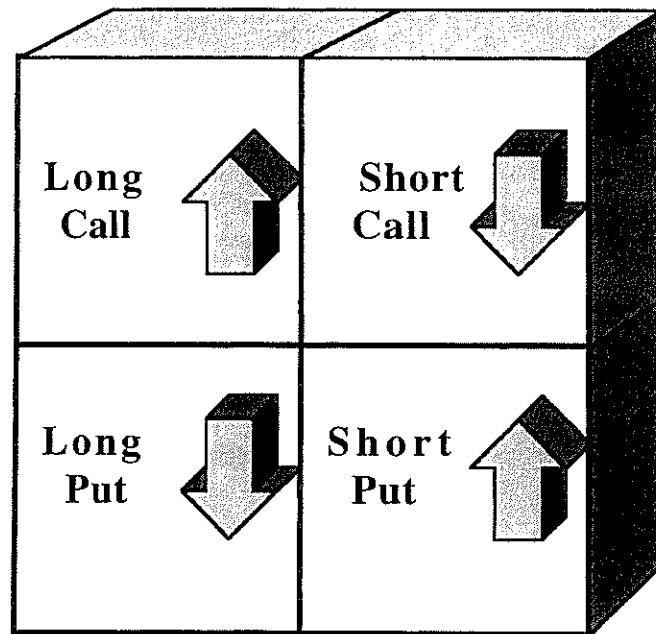
When a customer buys a straddle, he purchases a call and a put on the same stock having the same strike price and expiration. If the market moves up, he gains on the call and the put expires. If the market moves down, he gains on the put and the call expires. If the market stays the same, both the put and call expire "at the money" and he loses the double premiums paid.

Conversely, a customer can sell a straddle - selling a call and a put on the same stock having the same strike price and expiration. He does this if he absolutely believes that the market will stay flat. If this happens, both the call and the put expire "at the money" and he earns the double premiums.

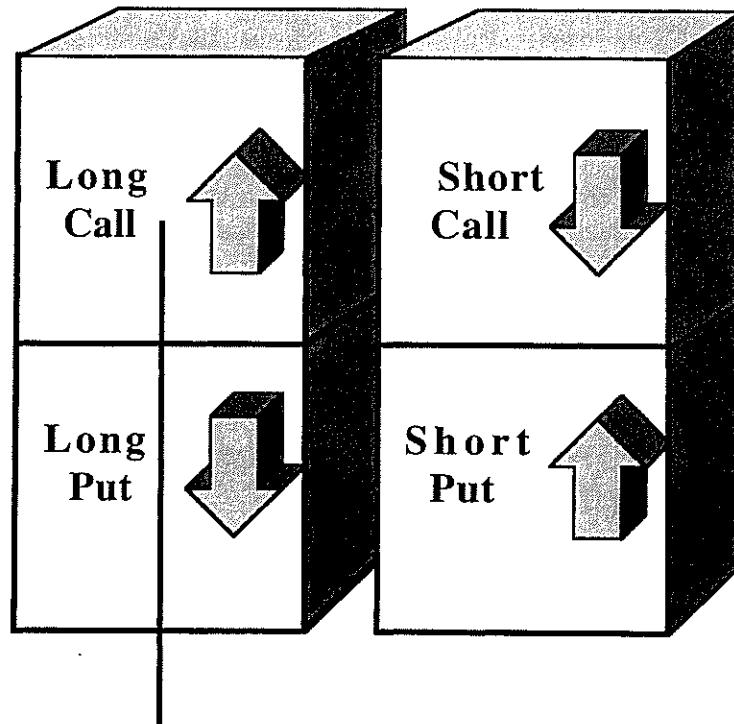
If the market rises, the call goes "in the money" and will be exercised while the put will expire "out the money." He is obligated to deliver stock that he doesn't have and has unlimited loss potential on the upside. If the market falls, the put goes "in the money" and will be exercised while the call will expire "out the money." He is obligated to buy stock that is worth less in the current market and he continues to lose as the market price of that stock drops towards zero.

By selling a straddle, the customer takes on double the risk (upside and downside) to earn a double premium. Because of the high risk of this strategy, it is not very popular.

To help remember what comprises a straddle, on the next page is the diagram of speculative options positions seen previously:

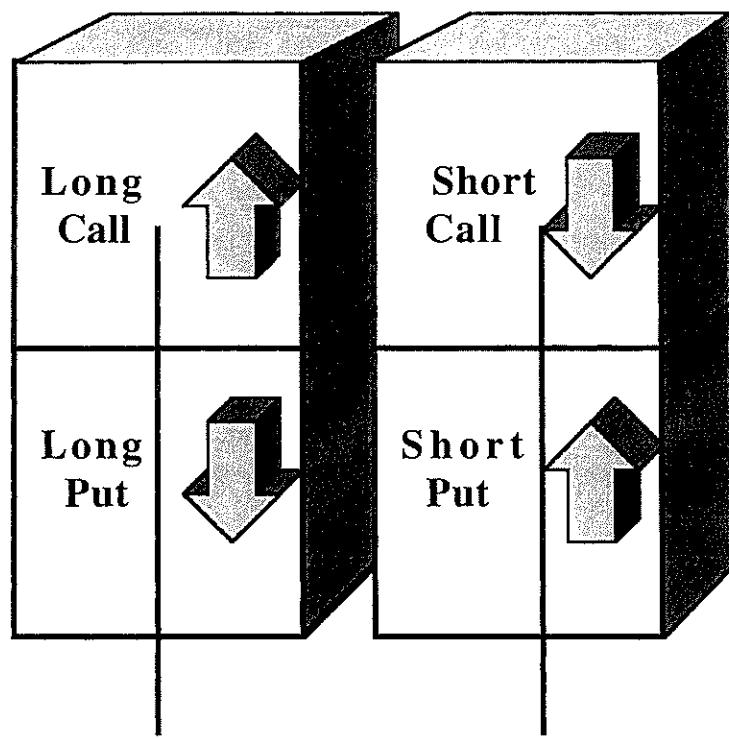


We know that buying a call gives potentially unlimited upside market gain while buying a put gives increasing gain as the market falls to zero. To profit if the market either rises **or** falls, buy both and the picture becomes:



### Long Straddle

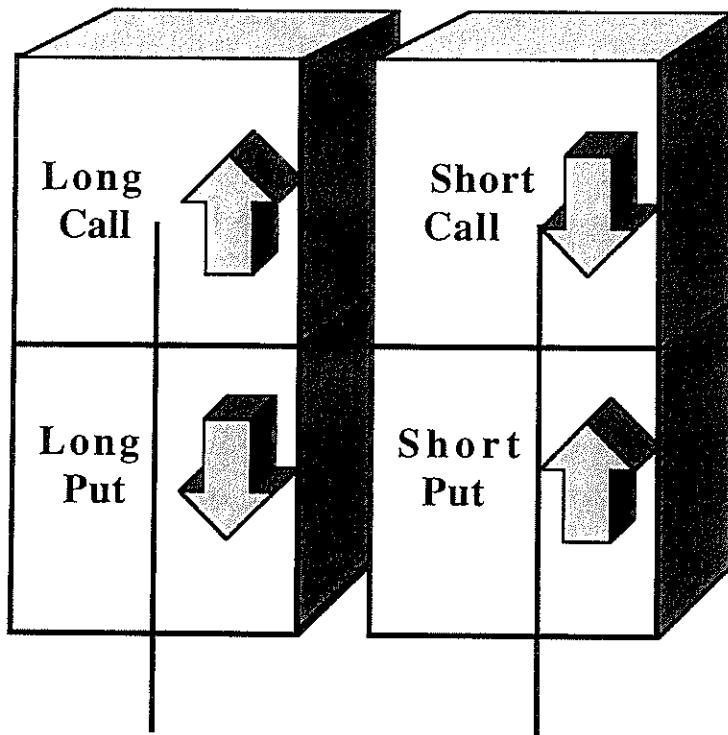
On the other hand, we know that selling a call allows the writer to earn the premium if the market stays flat or falls, while selling a put allows the writer to earn the premium if the market stays flat or rises. By selling both a call and a put, he earns double premiums if the market stays flat. If it moves, he loses on the call on the way up or loses on the put on the way down. To complete the diagram:



Long Straddle      Short Straddle

Same Strike Price  
and  
Expiration

A long straddle or short straddle requires that the security, strike price, and expiration all be the **same**. If the customer buys a call and put on the same security with either **different** strike prices and/or expirations, it is termed a long combination. If he sells a call and put on the same security with either different strike prices and/or expirations, it is termed a short combination.



### Long Combination      Short Combination

Diff. Strike Price  
and / or  
Expiration

Combinations have essentially the same characteristics as straddles and one should be able to identify them.

### 5b. LONG STRADDLES

A customer believes that the market will move sharply but is uncertain as to the direction. You recommend that he buy a straddle on ABC stock to profit from this. The customer takes the following positions:

Buy 1 ABC Jan 50 Call @ \$5  
Buy 1 ABC Jan 50 Put @ \$4

ABC Current Market Price = \$51

This is a long straddle since the security, strike price and expiration are the **same**. If the market moves up, the call is exercised and the put expires. If the market moves down, the put is exercised and the call expires.

To find the maximum potential gain, breakeven points, and maximum potential loss, we can use the "T" but it is actually simpler not to because there is a breakeven point for **both** the call side of the straddle and for the put side of the straddle. The steps to solving problems having more than one option position are:

- Step 1:** Stack the Positions one atop the other.
- Step 2:** Total the Premiums.
- Step 3:** If the customer is buying, the total premiums result in a "debit."
- Step 4:** The debit is the amount the customer pays for the long straddle and is his maximum loss.
- Step 5:** To breakeven the debit must be recovered. Add the debit to the call strike price for the upside breakeven point. Subtract the debit from the put strike price for the downside breakeven.
- Step 6:** Maximum potential gain is unlimited since the customer owns a call.

To solve this problem, first we stack the positions and total the premiums.

Buy 1 ABC Jan 50 Call @ \$5  
 Buy 1 ABC Jan 50 Put @ \$4

**\$9 Debit**

**Maximum Loss =  
 Total Premiums Paid  
 (Debit)**

The customer must pay \$9 in premiums or \$900 total for the long straddle. This is his maximum potential loss if the market stays at \$50 and both contracts expire at the money.

**Upside Breakeven =  
 Call Strike Price +  
 Debit**

If the market rises above \$50, the call will go in the money and the put expires out the money. To breakeven on the upside, the entire \$9 debit must be recovered from the long call. The upside breakeven is:

**50 + 9 = 59 Breakeven**  
 |  
 Buy 1 ABC Jan 50 Call @ \$5  
 Buy 1 ABC Jan 50 Put @ \$4  
**\$9 Debit**

**Downside Breakeven  
= Put Strike Price -  
Debit**

If the market drops below \$50, the put will go in the money and the call expires out the money. To breakeven on the downside, the entire \$9 debit must be recovered from the long put. The downside breakeven is:

$$\begin{array}{r} \text{Buy 1 ABC Jan 50 Call @ \$5} \\ \text{Buy 1 ABC Jan 50 Put @ \$4} \\ \hline & \text{\$9 Debit} \\ 50 - 9 = 41 \text{ Breakeven} \end{array}$$

**Maximum Potential  
Gain = Unlimited**

The customer's maximum potential gain is unlimited because he owns a long call option.

To summarize the characteristics of buying a straddle:

**Long Straddle -- Speculative Strategy That Is  
Both Bullish And Bearish**

**Maximum Potential Gain = Unlimited (On Call Side)**  
**Gain = Strike Price - Premium (On Put Side)**

**Maximum Pot. Loss = Combined Premiums**  
**Breakeven Points = Call Strike Price + Combined Premium**  
**= Put Strike Price - Combined Premium**

### **5c. SHORT STRADDLES**

A customer believes that the market will stay the same and is willing to assume a high level of risk. You recommend that he sell a straddle on ABC stock to profit from this. The customer takes the following position:

**Sell 1 ABC Jan 50 Call @ \\$5  
Sell 1 ABC Jan 50 Put @ \\$4**

**ABC Current Market Price = \\$51**



This is a short straddle since the security, strike price and expiration are the **same**. If the market stays at \$50, both the call and put will expire and he will earn double premiums. But if the market moves up, the call will be exercised and the put expires. He will lose on the short call position. If the market moves down, the put will be exercised and the call expires. He will lose from the short put position.

To find the maximum potential gain, breakeven points, and maximum potential loss for more than one option, we use the steps outlined previously with slight modifications:

**Step 1: Stack the Positions one atop the other.**

**Step 2: Total the Premiums.**

**Step 3: If the customer is selling, the total premiums result in a "credit."**

**Step 4: The credit is the amount the customer received for the short straddle and is his maximum potential gain.**

**Step 5: To breakeven the credit must be lost. Add the credit to the call strike price for the upside breakeven point. Subtract the credit from the put strike price for the downside breakeven.**

**Step 6: Maximum potential loss is unlimited since the customer has a naked short call position.**

To solve this problem, first we stack the positions and total the premiums.

Sell 1 ABC Jan 50 Call @ \$5  
Sell 1 ABC Jan 50 Put @ \$4

**\$9 Credit**

**Maximum Potential Gain = Combined Premiums (Credit)**

**Upside Breakeven = Call Strike Price + Credit**

The customer received \$9 in premiums or \$900 total for the short straddle. This is his maximum potential gain if the market stays at \$50 and both contracts expire at the money.

If the market rises above \$50, the call will go in the money and the put expires out the money. To breakeven on the upside, the entire \$9 credit must be lost from the short call. The upside breakeven is:

$$\begin{array}{r}
 50 + 9 = 59 \text{ Breakeven} \\
 | \\
 \text{Sell 1 ABC Jan 50 Call @ \$5} \\
 \text{Sell 1 ABC Jan 50 Put @ \$4} \\
 \hline
 \end{array}$$

\$9 Credit

**Downside Breakeven**  
**= Put Strike Price -**  
**Credit**

If the market drops below \$50, the put will go in the money and the call expires out the money. To breakeven on the downside, the entire \$9 credit must be lost from the short put. The downside breakeven is:

$$\begin{array}{r}
 \text{Sell 1 ABC Jan 50 Call @ \$5} \\
 \text{Sell 1 ABC Jan 50 Put @ \$4} \\
 \hline
 | \\
 \end{array}$$

\$9 Credit

**50 - 9 = 41 Breakeven**

**Maximum Potential Loss = Unlimited**

The customer's maximum potential loss is unlimited because he has a short call position which is naked.

To summarize the characteristics of selling a straddle:

**Short Straddle -- Speculative Strategy That Is Suitable In Flat Markets**

**Maximum Pot. Gain = Combined Premiums**

**Maximum Potential Loss = Strike Price - Premium (On Put Side)**

**Breakeven Points = Call Strike Price + Combined Premium**  
**= Put Strike Price - Combined Premium**

#### **5d. LONG AND SHORT STRANGLES**

It was mentioned previously that a straddle with either different strike prices and/or different expirations is called a "combination". A specific type of combination is known as a "strangle".

In a long strangle, a customer buys a call and buys a put on the same stock, but the strike prices are set so both contracts are "out the money" and thus, will cost less than a similar long straddle. Of course, the fact that the position costs less, also means that a greater market movement is needed for the position to become profitable.

For example, when the market price of ABC stock is at \$50, a customer could buy the following straddle:

Buy 1 ABC Jan 50 Call @ \$5  
Buy 1 ABC Jan 50 Put @ \$4

\$9 Debit

The customer pays a combined premium of \$9 and will have a profit if the market price of the stock goes above \$59; or falls below \$41.

#### Long Strangle

The customer does not want to pay \$9, so instead, he or she takes the following positions when the market price of ABC is at \$50:

Buy 1 ABC Jan 55 Call @ \$3  
Buy 1 ABC Jan 45 Put @ \$3

\$6 Debit

Both the call and the put are 5 points "out the money", so the total premium is lower (\$6 instead of \$9) than the premium for the long straddle. However, now the position is profitable if the market goes above \$61 (\$55 + \$6) as compared to \$59 for the long straddle; or if it falls below \$39 (\$45 - \$6) as compared to \$41 for the long straddle..

#### Long Strangle Has Lower Premium Than Long Straddle And Needs Greater Movement To Be Profitable

To summarize, with a long strangle, the premium paid is less than for a similar long straddle, so the maximum potential loss is lower. However, the breakeven points are farther away from the current market price, so a sharper market move is needed for the position to become profitable.

In a short strangle, a customer sells a call and sells a put on the same stock, but the strike prices are set so both contracts are "out the money" and thus, the customer will collect less than with a similar short straddle. Of course, the fact that the position results in a lower premium collection also means that there is lower risk. A greater market movement either up or down is needed for the position to become unprofitable.

For example, when the market price of ABC stock is at \$50, a customer could sell the following straddle:

Sell 1 ABC Jan 50 Call @ \$5  
Sell 1 ABC Jan 50 Put @ \$4

\$9 Credit

The customer receives a combined premium of \$9 and will have a loss if the market price of the stock goes above \$59; or falls below \$41. If the market price stays between \$41 and \$59, the position is profitable.

#### **Short Strangle**

The customer believes that there is too great a chance for the market price to move above \$59 or below \$41, so instead, he or she takes the following positions when the market price of ABC is at \$50:

Sell 1 ABC Jan 55 Call @ \$3  
Sell 1 ABC Jan 45 Put @ \$3

\$6 Credit

Both the call and the put are 5 points "out the money", so the total premium is lower (\$6 instead of \$9) than the premium collected for the short straddle. However, now the position is profitable if the market stays below \$61 (\$55 + \$6) as compared to \$59 for the short straddle; or if it stays above \$39 (\$45 - \$6) as compared to \$41 for the short straddle..

#### **Short Strangle Has Lower Profit Potential Than Short Straddle And Needs Greater Movement To Be Unprofitable**

To summarize, with a short strangle, the premium collected is less than for a similar short straddle, so the maximum potential gain is lower. However, the breakeven points are farther away from the current market price, so a sharper market move is needed for the position to become unprofitable.

### **5e. DELTA NEUTRAL STRATEGIES**

"Delta" is the measure of an option's premium movement as compared to the movement of the price of the underlying stock. It is a correlation coefficient.

A "deep in the money call" has a delta of very close to +1 = for every dollar that the market price of the stock rises, the premium will move up by the same dollar;

A "deep out the money" call has a delta of very close to 0 = for every dollar that the market price of the stock rises, the premium of the option does not move at all, since it is essentially worthless;



“At the money” call options tend to have deltas around +.5 = for every dollar that the stock price rises, the options premium moves up by \$.50.

The delta movement of put options is similar, except that the deltas are negative instead of positive.

A “delta neutral” strategy is one that profits from volatility - one is not taking a market direction. It requires 2 legs and attempts to make the strategy delta “0” - which makes the strategy relatively insensitive to small price movements. However, it is strongly profitable if the market moves sharply in either direction. For example, a long “at the money straddle” is delta neutral.

Assume that when the market price of ABC is 50, a customer:

|                              |              |
|------------------------------|--------------|
| Buys 1 ABC Jan 50 Call @ \$3 | Delta = +.50 |
| Buys 1 ABC Jan 50 Put @ \$2  | Delta = -.50 |

Initially, the strategy delta is “0” (+.5 offset by -.5).

If the market moves a bit up or a bit down, the customer loses the combined premium paid, less any small gain on the side of the straddle that is “in the money.”

If the market rises sharply, the delta of the 50 call goes towards +1, and the delta of the 50 put goes towards 0, so the strategy delta heads towards +1. The call premium keeps increasing by \$1 for each \$1 increase in the stock price.

If the market falls, the delta of the 50 put goes towards -1, and the delta of the 50 call goes towards 0, so the strategy delta heads towards -1. The put premium keeps increasing by \$1 for each \$1 decrease in the stock price.

One can also create delta neutral positions in other ways. When applying delta to stocks, the stock has a delta of +1. If one buys 2 “at the money puts” on the stock with deltas of -.5, another delta neutral position has been created. The concept of being “delta neutral” has real meaning for options market makers, because if they can remain “delta neutral,” then they will profit from their Bid-Ask spread and not be subject to losses (or gains) due to price movements in the underlying securities.

## STRADDLES AND COMBINATIONS SECTION EXAMINATION

1.

Which of the following create a straddle?

- I Long 1 ABC Jan 50 Call  
Long 1 ABC Jan 50 Put
- II Long 1 ABC Jan 50 Call  
Short 1 ABC Jan 60 Put
- III Short 1 ABC Jan 50 Call  
Short 1 ABC Jan 50 Put
- IV Short 1 ABC Jan 50 Call  
Short 1 ABC Jan 60 Put

- a. I, II
- b. I, III
- c. II, IV
- d. III, IV

2.

Which of the following has unlimited loss potential?

- I Short Naked Call
- II Short Stock/Long Call
- III Short Straddle
- IV Short Call/Long Stock

- a. I only
- b. I, III
- c. II, III
- d. I, II, III, IV

3.

A long straddle is profitable in a:

- I rising market
- II falling market
- III stable market

- a. I only
- b. II only
- c. III only
- d. I and II

Use the following information to answer the next 4 questions:

A customer buys 1 ABC Jan 50 Call @ \$4 and buys 1 ABC Jan 50 Put @ \$3 when the market price of ABC = \$51.

4.

The market rises to \$70 and the call is exercised. The stock is sold in the market. The put expires. The customer's gain is:

- a. \$700
- b. \$1300
- c. \$2000
- d. \$2700

5.

The breakeven points are:

- a. 46 and 53
- b. 47 and 54
- c. 43 and 57
- d. 45 and 55

6.

The maximum potential gain is:

- a. \$700
- b. \$4300
- c. \$5700
- d. unlimited

7.

The maximum potential loss is:

- a. \$700
- b. \$4300
- c. \$5700
- d. unlimited

Use the following information to answer the next 3 questions:

A customer sells 1 ABC Jul 30 Call @ \$1 and sells 1 ABC Jul 30 Put @ \$3 1/2 when the market price of ABC is \$29.

8.

The maximum potential gain is:

- a. \$450
- b. \$2550
- c. \$3450
- d. unlimited

9.

The maximum potential loss is:

- a. \$450
- b. \$2550
- c. \$3450
- d. unlimited

10.

The breakeven points are:

- a. 26.50 and 31.00
- b. 25.50 and 34.50
- c. 27.50 and 33.50
- d. 29.00 and 35.00

11.

A customer takes the following positions when the market price of ABC is at \$60:

Long 1 ABC Jan 65 Call  
Long 1 ABC Jan 55 Put

The customer has created a:

- a. Long Straddle
- b. Short Straddle
- c. Long Strangle
- d. Short Strangle

12.

Which of the following creates a short strangle position when the market price of ABC stock is at \$40

- a. Sell 1 ABC Jan 40 Call; Sell 1 ABC Jan 40 Put
- b. Sell 1 ABC Jan 30 Call; Sell 1 ABC Jan 50 Put
- c. Sell 1 ABC Jan 50 Call; Sell 1 ABC Jan 30 Put
- d. Sell 1 ABC Jan 30 Call; Sell 1 ABC Jan 30 Put

Use the following information to answer the next 3 questions:

A customer sells 1 ABC Jul 35 Call @ \$2 and sells 1 ABC Jul 25 Put @ \$1 when the market price of ABC is 30.

13.

The maximum potential gain is:

- a. \$300
- b. \$2200
- c. \$3800
- d. unlimited

14.

The maximum potential loss is:

- a. \$300
- b. \$2200
- c. \$3800
- d. unlimited

15.

The breakeven points are:

- a. 23 and 37
- b. 27 and 33
- c. 23 and 38
- d. 22 and 38

## STRADDLES AND COMBINATIONS EXAMINATION EXPLANATIONS

1. The best answer is b. A straddle is the purchase of a call and a put **or** the sale of a call and a put on the **same** underlying security with the **same** strike price and expiration.
2. The best answer is b. Selling a naked call obligates the writer to deliver stock he does not own - thus there is unlimited risk. A short stock position is hedged by a long call - the long call allows the purchase of the stock at a fixed price, which can then be used to cover the short stock position. A short straddle involves the sale of a call and a put - both of which are naked. A naked call writer has unlimited risk. A long stock / short call position is a covered call writer - where the maximum loss would occur if the stock became worthless.
3. The best answer is d. A long straddle is the purchase of a call **and** the purchase of a put on the same stock at the same strike price and expiration. If the market moves up, the call is profitable. If the market moves down, the put is profitable.
4. The best answer is b. The customer created a long straddle.

|                             |           |
|-----------------------------|-----------|
| Buy 1 ABC Jan 50 Call @ \$4 |           |
| Buy 1 ABC Jan 50 Put @ \$3  |           |
| <hr/>                       |           |
|                             | \$7 Debit |

If the market rises to \$70, the call is exercised while the put expires "out the money." There is a 20 point profit on the call offset by \$7 paid in premiums for a net profit of 13 points or \$1300.

5. The best answer is c. To breakeven, the \$7 Debit paid for the straddle must be recovered. This happens at  $50 + 7 = 57$  on the call side of the straddle and  $50 - 7 = 43$  on the put side of the straddle.
6. The best answer is d. Since one side of the straddle is a long call, there is unlimited upside gain potential. On the put side of the straddle, the maximum potential gain occurs if the stock drops to zero.
7. The best answer is a. If the market stays at 50, both contracts expire "at the money." The customer loses the \$700 paid in premiums. This is the maximum potential loss.
8. The best answer is a. The customer created a short straddle.

|                                 |               |
|---------------------------------|---------------|
| Sell 1 ABC Jul 30 Call @ \$1.00 |               |
| Sell 1 ABC Jul 30 Put @ \$3.50  |               |
| <hr/>                           |               |
|                                 | \$4.50 Credit |

If the market stays at 30, both contracts expire "at the money" and the writer earns the credit of \$450. This is the maximum gain.

9. The best answer is d. Since one side of a short straddle is a short naked call, if the market rises there is unlimited risk.

10. The best answer is b. To breakeven, the writer must lose the 4 1/2 point credit received for selling the straddle. If the market rises, the call side will be exercised at a loss to the writer. The call breakeven is  $30 + 4.50 = 34.50$ . If the market falls, the put side will be exercised at a loss to the writer. The put breakeven is  $30 - 4.50 = 25.50$ .

11. The best answer is c. The customer is buying an "out the money" call and is buying an "out the money" put on the same stock. This is a long strangle. The customer believes that the market will move sharply either up or down; and by selecting "out the money" contracts, the customer is paying less than for a similar long straddle position. The premium paid is lower, but the stock needs to move further up or down for the position to become profitable.

12. The best answer is c. To sell a strangle, the customer sells an "out the money" call and sells an "out the money" put on the same stock. The customer believes that the market will basically stay flat, and collects a double premium, however the premium collection is lower than for a similar short straddle. If the market does move sharply either up or down, since "out the money" contracts were selected, the stock needs to move further up or down for the position to become unprofitable as compared to a short straddle. When the market price of ABC is at \$40, the sale of an ABC Jan 50 Call (10 points "out the money"); and the sale of an ABC Jan 30 Put (10 points "out the money") creates a short strangle.

13. The best answer is a. The customer has created a short strangle when the market price of ABC is at \$30:

Sell 1 ABC Jul 35 Call @ \$2  
Sell 1 ABC Jul 25 Put @ \$1

\$3 Credit

The customer believes that the market will basically stay flat, and collects a double premium, however the premium collection is lower than for a similar short straddle. The customer collects a combined premium of \$300, and as long as the market stays between \$25 and \$35, both contracts expire and \$300 is earned. This is the maximum potential gain.

14. The best answer is d. The customer has created a short strangle. If the market does move sharply either up or down, either above \$38 on the short naked call ( $\$35 + \$3$  premium); or below \$22 on the short naked put ( $\$25 - \$3$  premium); then the customer loses. There is unlimited loss potential on the short naked call position - so this is the maximum potential loss.

15. The best answer is d. The customer has created a short strangle. If the market does move sharply either up or down, either to \$38 on the short naked call ( $\$35 + \$3$  premium); or to \$22 on the short naked put ( $\$25 - \$3$  premium); then the customer breaks even. If the market price rises above \$38 or falls below \$22, the customer loses.

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## SECTION 6: SPREADS

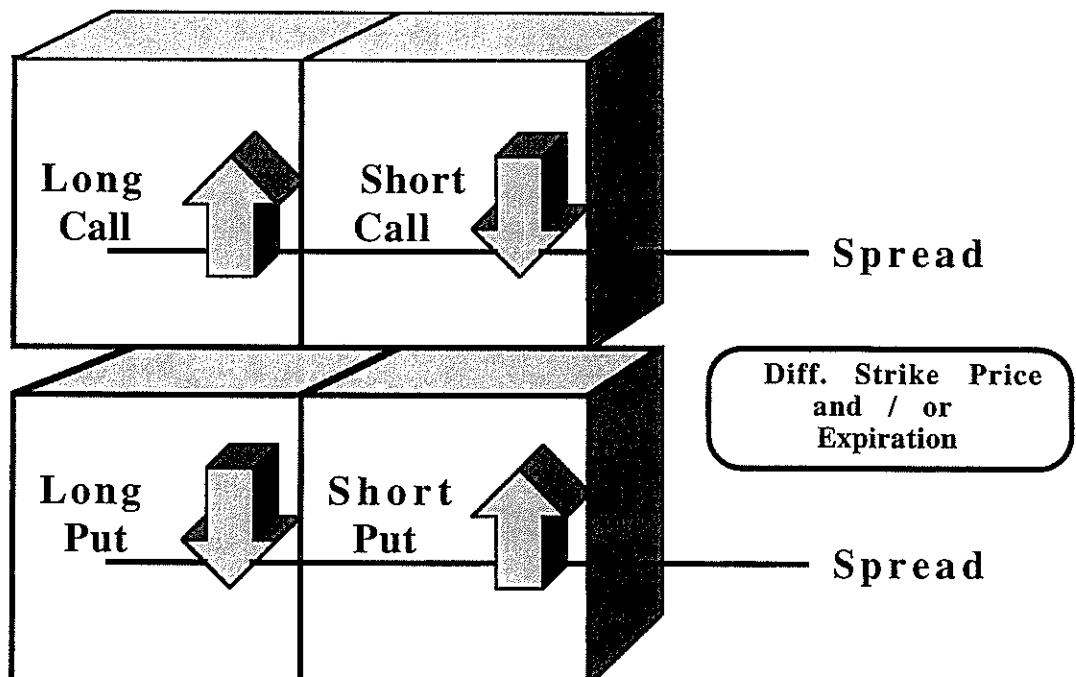
### 6a. SPREADING OVERVIEW

A spread position is:

The purchase and sale of a call or;  
The purchase and sale of a put

at different strike prices or with different expirations  
or with both the strike price and expiration being  
different.

Spread positions can be visualized using the options  
diagram as:



#### Hedged Option

The theory behind spreading is that instead of taking a "pure" one sided position on the direction of the market (such as buying a call because one is sure the market will go up), one takes a second position as a partial hedge (such as selling a call at a different strike price or expiration). By taking the second position as a partial offset, one limits potential gain and limits potential risk as well.

#### Limits Risk and Gain

In essence, spreads are hedged option positions. Hedges where the strike prices are different are called price spreads or "vertical" spreads. An example of a price spread is:

#### Price Or Vertical Spread

In essence, spreads are hedged option positions. Hedges where the strike prices are different are called price spreads or "vertical" spreads. An example of a price spread is:

**Buy 1 ABC Jan 50 Call @ \$7  
Sell 1 ABC Jan 60 Call @ \$3**

Notice how the strike prices are stacked "vertically" one above the other. There are 4 types of price spreads, which substitute for taking the pure option position.

Instead of buying a call, one can "buy a call spread." This is a **"long" call spread**, where the long call premium is higher. For example:

**Buy 1 ABC Jan 50 Call @ \$7  
Sell 1 ABC Jan 60 Call @ \$3**

**\$4 Debit**

**Long Call Spread -  
Debit Spread**

The spread is a "long spread" because it results in a net debit of \$4 (one must pay \$4 so one is a "net buyer" of the spread position). In a long call spread one buys the lower strike price (which has a higher premium) and sells the higher strike price - always!

Instead of selling a call, one can "sell a call spread." This is a **"short" call spread**, where the short call premium is higher. For example:

**Sell 1 ABC Jan 50 Call @ \$7  
Buy 1 ABC Jan 60 Call @ \$3**

**\$4 Credit**

**Short Call Spread -  
Credit Spread**

The spread is a "short spread" because it results in a net credit of \$4 (one receives \$4 so one is a "net seller" of the spread position). In a short call spread one sells the lower strike price (which has the higher premium) and buys the higher strike price - always!

Instead of buying a put, one can "buy a put spread." This is a **"long" put spread**, where the long put premium is higher. For example:

**Buy 1 ABC Jan 60 Put @ \$7  
Sell 1 ABC Jan 50 Put @ \$3**

**\$4 Debit**

**Long Put Spread -  
Debit Spread**

The spread is a "long spread" because it results in a net debit of \$4 (one must pay \$4 so one is a "net buyer" of the spread position). In a long put spread one buys the higher strike price (which has the higher premium) and sells the lower strike price - always!

Instead of selling a put, one can "sell a put spread." This is a **"short" put spread**, where the short put premium is higher. For example:

Sell 1 ABC Jan 60 Put @ \$7  
Buy 1 ABC Jan 50 Put @ \$3

**\$4 Credit**

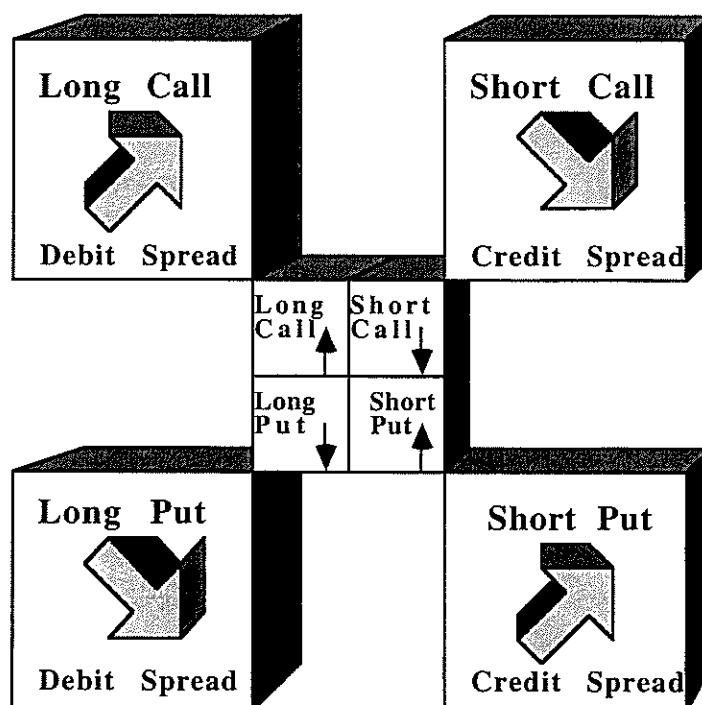
### Short Put Spread - Credit Spread

The spread is a "short spread" because it results in a net credit of \$4 (one receives \$4 so one is a "net seller" of the spread position). In a short put spread, one sells the higher strike price option (which has the higher premium) and buys the lower strike price option - always!

These 4 spread positions do not have the same gain potential as taking the pure single option position, but they also do not carry the same risk. They are used when one is not completely sure of the direction the market will take; rather one is "moderately" sure of the market direction.

Each of the 4 price spreads will be discussed separately.

The diagram to envision price spreads is:



After the sections on the 4 price ("vertical") spreads, time spreads ("horizontal" spreads) will be discussed. A time spread has different expirations, not different strike prices. A spread can also consist of contracts with both

different strike price and expirations - this is termed a "diagonal" spread.

## 6b. LONG CALL SPREAD (BULL SPREAD)

Assume that a customer believes that XXX stock will rise in the near future, but he knows that the stock is not very volatile and doesn't expect the stock to rise by more than 10 points. The customer could simply buy 1 XXX Jul 70 Call @ \$5 (assume the market price is \$71) and enjoy unlimited gain potential in return for the 5 point premium paid.

Being a cautious person, he decides to do the following:

**Buy 1 XXX Jul 70 Call @ \$5  
Sell 1 XXX Jul 80 Call @ \$1**

**(Market Price = \$71)**

If XXX does not move above \$80 per share, the short call will expire. The premium earned on the short call of \$1 reduces his money outlay from \$5 to \$4. In return for the reduced cash outlay, his gain potential is reduced. If the market rises above \$80, the short call will be exercised, requiring him to deliver 100 shares of stock at the \$80 strike price.

**Short Call Is  
Covered By Long  
Call**

The short call is covered by the long call position, because he can always exercise the long call and buy the stock at \$70 for delivery. He does not have to go to the market to get the stock. On the upside, his gain is limited to 10 points (Buy at \$70, Sell at \$80).

**Moderately Bullish**

Buying a call spread is used when one is moderately bullish. The long spread costs less than taking the simple long call position, but gives lower potential gain. If time premiums are very high, persons may choose long call spreads rather than simple long call positions. This is done as a way of reducing the premium outlay. The diagram for the long call spread is:

**Also Used When  
Time Premiums  
Are High**





Using the spread position shown on the prior page, the steps to find maximum potential loss, breakeven, and maximum potential gain are:

**Stack Positions  
From Low To  
High Strike Price**

**Step 1:** Stack the positions from low to high strike price (for call spreads) and determine if this is a net debit or net credit.

Buy 1 XXX Jul 70 Call @ \$5  
Sell 1 XXX Jul 80 Call @ \$1

\$4 Debit

**Long Call Spread**

**Step 2:** If it is a net debit, it is a long spread. Since this is a spread with calls, this is a:

Long Call Spread (Bullish)

**Deposit = Debit =  
Maximum Loss**

**Step 3:** The debit is the deposit and is the maximum potential loss if the market drops and both calls expire out the money.

Deposit = \$400 debit = Maximum Potential Loss

**Maximum Gain =  
Difference Between  
Strike Prices - Debit**

**Step 4:** If the market rises above \$70, the long call will be exercised and the customer will buy the stock at \$70. If the market continues to rise, above \$80, the short call is exercised. The maximum gain is \$10 points on the stock (the difference in the strike prices) net of \$400 paid in premiums = \$600.

Maximum Gain = Difference between strike prices net of debit = \$1000 - \$400 = \$600

**Breakeven = Long  
Strike + Debit**

**Step 5:** To breakeven, the customer must recover the \$400 (4 points) paid in premiums. He makes money from the long call (remember, this is a long call spread) so the breakeven is  $70 + 4 = 74$ .

Breakeven = Long Strike Price + Net Debit =  
70 + 4 = 74

### 6c. SHORT CALL SPREAD (BEAR SPREAD)

Assume that a customer believes that XXX stock will fall in the near future, but he knows that the stock is not very volatile and doesn't expect the stock to fall by more than 10

points. The customer could simply sell 1 XXX Jul 70 Call @ \$5 (assume the market price is \$71) and if XXX falls below \$70 and stays there, he earns \$500 of premiums. But if XXX rises, he is exposed to unlimited upside risk. He wishes to limit this risk, so he takes the following position:

**Sell 1 XXX Jul 70 Call @ \$5  
Buy 1 XXX Jul 80 Call @ \$1**

**(Market Price = \$71)**

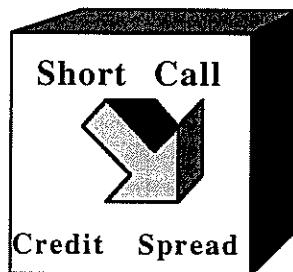
If XXX moves below \$70 and stays there, both options will expire. The premium earned on the short call of \$5 is reduced by the long call premium of \$1. In return for the reduced cash received, his loss potential is reduced. If the market rises above \$70, the short call will be exercised, requiring him to deliver 100 shares of stock at the \$70 strike price.

**Short Call Is Only Partially Covered By Long Call**

The short call is partially covered by the long call position, because he can always exercise the long call and buy the stock at \$80 for delivery. He does not have to go to the market to get the stock. On the upside, his loss is limited to 10 points (Buy at \$80, Sell at \$70), less premiums received.

**Moderately Bearish**

Selling a call spread is used when one is moderately bearish. The short spread earns less than taking the simple short call position if the contract goes out the money, but it limits potential risk. The diagram for the short call spread is:



Using the spread position created above, the steps to find maximum potential loss, breakeven, and maximum potential gain are:

**Stack Positions From Low To High Strike Price**

**Step 1: Stack the positions from low to high strike price (for call spreads) and determine if this is a net debit or net credit.**

**Sell 1 XXX Jul 70 Call @ \$5  
Buy 1 XXX Jul 80 Call @ \$1**

**\$4 Credit**

|  |  |
|--|--|
|  | Step 2: If it is a net credit, it is a short spread. Since this is a spread with calls, this is a:   |
| Short Call Spread  | Short Call Spread (Bearish)  |
|  | Step 3: The credit is the maximum potential gain if the market drops and both calls expire out the money.  |
| Maximum Gain = Credit                                    | Maximum Potential Gain = Net Credit = \$400  |
|  | Step 4: If the market rises above \$70, the short call will be exercised and the customer must deliver the stock at \$70. If the market continues to rise, above \$80, the long call is exercised to get the stock for delivery. The maximum loss is \$10 points on the stock (the difference in the strike prices) net of \$400 received in premiums = \$600. Since \$600 is the most that can be lost, this is the deposit amount for the short spread position. |
| Maximum Loss = Difference Between Strike Prices - Credit | Maximum Loss = Difference between strike prices net of credit = \$1000 - \$400 = \$600 = Deposit   |
|  | Step 5: To breakeven, the customer must lose the \$400 (4 points) received in premiums. He loses money from the short call (remember, this is a short call spread) so the breakeven is $70 + 4 = 74$ .   |
| Breakeven = Short Strike + Credit                        | Breakeven = Short Strike Price + Net Credit = $70 + 4 = 74$  |

#### 6d. LONG PUT SPREAD (BEAR SPREAD)

Assume that a customer believes that XXX stock will fall in the near future, but he knows that the stock is not very volatile and doesn't expect the stock to fall by more than 10 points. The customer could simply buy 1 XXX Jul 80 Put @ \$5 (assume the market price is \$79) and enjoy increasing gain if stock drops in return for the 5 point premium paid.

Being a cautious person, he decides to do the following:

Buy 1 XXX Jul 80 Put @ \$5  
Sell 1 XXX Jul 70 Put @ \$1

(Market Price = \$79)

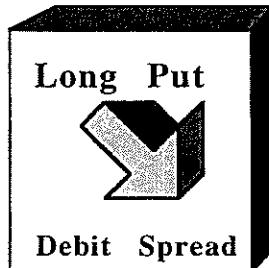
If XXX does not move below \$70 per share, the short put will expire. The premium earned on the short put of \$1 reduces his money outlay from \$5 to \$4. In return for the reduced cash outlay, his gain potential is reduced. If the market falls below \$70, the short put will be exercised, requiring him to buy 100 shares of stock at the \$70 strike price.

#### **Short Put Is Covered By Long Put**

The short put is covered by the long put position, because he can always exercise the long put and sell the stock at \$80. He does not have to go to the market to get the stock. On the downside, his gain is limited to 10 points (Buy at \$70, Sell at \$80).

#### **Moderately Bearish**

Buying a put spread is used when one is moderately bearish. The long spread costs less than taking the simple long put position, but gives lower potential gain. The diagram for the long put spread is:



Using the spread position created above, the steps to find maximum potential loss, breakeven, and maximum potential gain are:

#### **Stack Positions From High To Low Strike Price**

**Step 1:** Stack the positions from high to low strike price (for put spreads) and determine if this is a net debit or net credit.

Buy 1 XXX Jul 80 Put @ \$5  
Sell 1 XXX Jul 70 Put @ \$1

\$4 Debit

**Step 2:** If it is a net debit, it is a long spread. Since this is a spread with puts, this is a:

#### **Long Put Spread**

Long Put Spread (Bearish)

**Step 3:** The debit is the deposit and is the maximum potential loss if the market rises and both puts expire out the money.

#### **Maximum Loss = Debit**

Deposit = \$400 debit = Maximum Potential Loss

**Step 4:** If the market falls below \$80, the long put will be exercised and the customer will sell the stock at \$80. If the market continues to fall, below \$70, the short put is exercised, and the customer buys the stock for \$70. The maximum gain is \$10 points on the stock (the difference in the strike prices) net of \$400 paid in premiums = \$600.

**Maximum Gain =  
Difference Between  
Strike Prices - Debit**

Maximum Gain = Difference between strike prices net of debit = \$1000 - \$400 = \$600

**Step 5:** To breakeven, the customer must recover the \$400 (4 points) paid in premiums. He makes money from the long put (remember, this is a long put spread) so the breakeven is  $80 - 4 = 76$ .

**Breakeven = Long  
Strike - Debit**

Breakeven = Long Strike Price - Net Debit =  
 $80 - 4 = 76$

#### **6e. SHORT PUT SPREAD (BULL SPREAD)**

Assume that a customer believes that XXX stock will rise in the near future, but he knows that the stock is not very volatile and doesn't expect the stock to rise by more than 10 points. The customer could simply sell 1 XXX Jul 80 Put @ \$5 (assume the market price is 79) and if XXX rises above \$80 and stays there, he earns \$500 of premiums. But if XXX falls, he is exposed to increasing downside risk as the market drops. To limit this risk, he takes the following positions:

**Sell 1 XXX Jul 80 Put @ \$5  
Buy 1 XXX Jul 70 Put @ \$1**

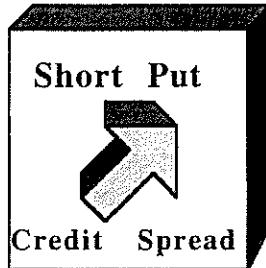
**(Market Price = \$79)**

If XXX moves above \$80 and stays there, both options will expire. The premium earned on the short put of \$5 is reduced by the long put premium of \$1. In return for the reduced cash received, his loss potential is reduced. If the market falls below \$80, the short put will be exercised, requiring him to buy 100 shares of stock at the \$80 strike price.

**Short Put Is Only  
Partially Covered  
By Long Put**

The short put is partially covered by the long put position, because he can always exercise the long put and sell the stock at \$70. He does not have to go to the market to sell the stock. On the downside, his loss is limited to 10 points (Buy at \$80, Sell at \$70).

**Moderately Bullish** Selling a put spread is used when one is somewhat bullish:



The short spread earns less than taking the simple short put position if the contract goes out the money, but limits potential risk.

Using the spread position created above, the steps to find maximum potential loss, breakeven, and maximum potential gain are:

**Stack Positions  
From High To  
Low Strike Price**

**Step 1:** Stack the positions from high to low strike price (for put spreads) and determine if this is a net debit or net credit.

Sell 1 XXX Jul 80 Put @ \$5  
Buy 1 XXX Jul 70 Put @ \$1

\$4 Credit

**Short Put Spread**

**Step 2:** If it is a net credit, it is a short spread. Since this is a spread with puts, this is a:

Short Put Spread (Bullish)

**Maximum Gain = Credit**

Maximum Potential Gain = Net Credit = \$400

**Step 4:** If the market falls below \$80, the short put will be exercised and the customer must buy the stock at \$80. If the market continues to fall, below \$70, the long put is exercised and the stock is sold for \$70. The maximum loss is \$10 points on the stock (the difference in the strike prices) net of \$400 received in premiums = \$600. Since \$600 is the most that can be lost, this is the deposit amount for the short spread position.

**Maximum Loss =  
Difference Between  
Strike Prices - Credit**

Maximum Loss = Difference between strike  
prices net of credit =  $\$1000 - \$400 = \$600$  = Deposit

**Step 5: To breakeven, the customer must lose  
the \$400 (4 points) received in premiums.  
He loses money from the short put  
(remember, this is a short put spread) so  
the breakeven is  $80 - 4 = 76$**

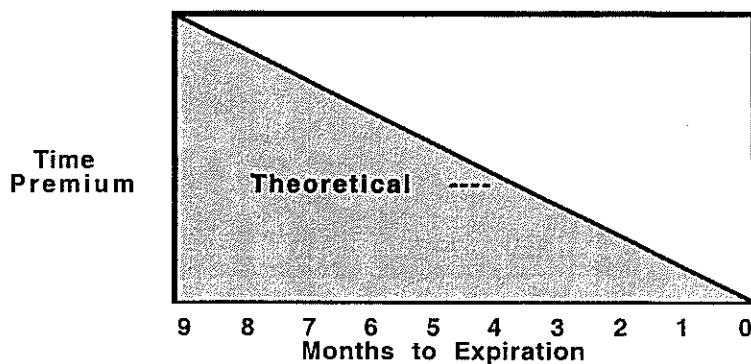
**Breakeven = Short  
Strike Price - Credit**

Breakeven = Short Strike Price - Net Credit =  
 $80 - 4 = 76$

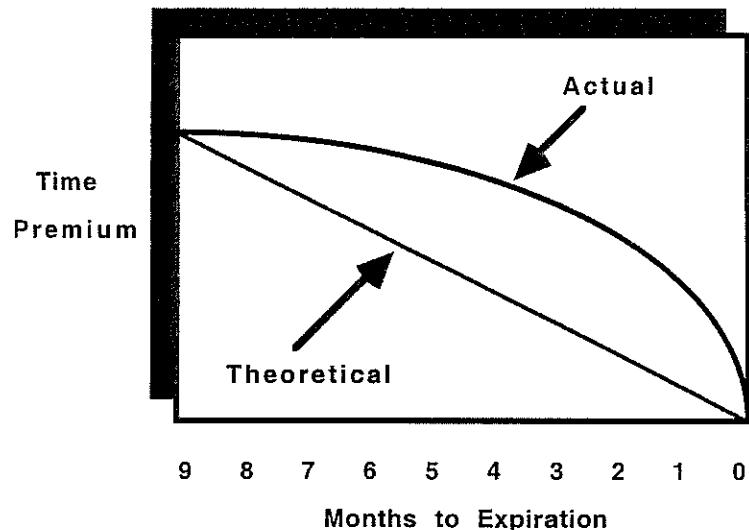
## 6f. CALENDAR SPREADS (HORIZONTAL)

The strategy behind a calendar spread is completely different from that for price spreads. In a price spread, the customer is taking a direction in the market (either up or down). A calendar spread tries to take advantage of human nature to make a profit!

To explain calendar spreads, we will use a stock (XXX) as the underlying security. Options on stock have a maximum "technical" life (this is fully explained in the next chapter) of 9 months. Assume that the market price of XXX is \$70 and we are looking at XXX 70 Call Contracts. These contracts are "at the money," so the entire premium is time value - there is no intrinsic value. Since time erodes at an even rate, as we get closer to expiration, the premium should fall evenly. A time value graph is below:



But, people tend to be shortsighted. In reality, the time premium is overvalued until the option is about to expire. Then, as it is realized that the option will soon be worthless, the time premium falls off rapidly, as shown following:



Here's how one can profit from this phenomenon. Assume that it is now December and XXX stock is trading at 70. The calls currently available are:

| <u>Expiration</u> | <u>Jan</u> | <u>Apr</u> | <u>Jul</u> |
|-------------------|------------|------------|------------|
| XXX 70 Call       | 4          | 6          | 8          |

Since it is now December, the Jan Call has 1 month to expiration, the Apr has 4 months and the Jul has 7 months. If XXX stays at \$70, we know that people will soon push down the value of the Jan Call since it is close to expiration. However, the Apr and Jul will not fall as rapidly because they have more time left.

If one is brave, one could simply:

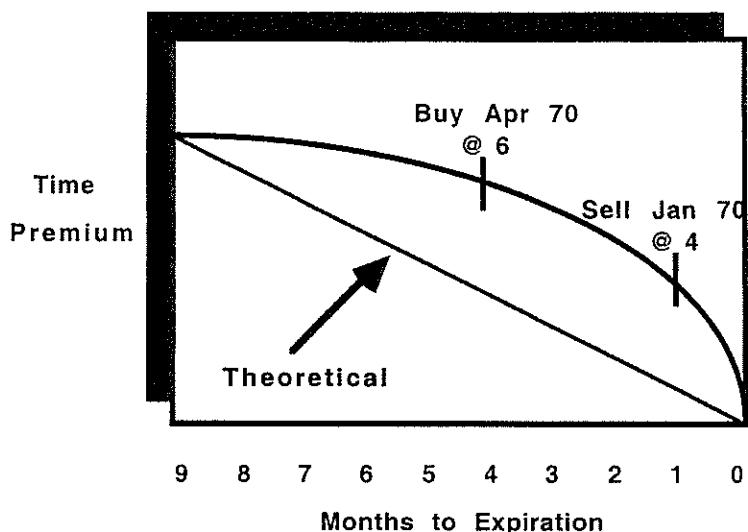
**Sell 1 XXX Jan 70 Call @ \$4  
(Market Price = \$70)**

**Calendar Spread -  
Same Strike/  
Different Expiration**

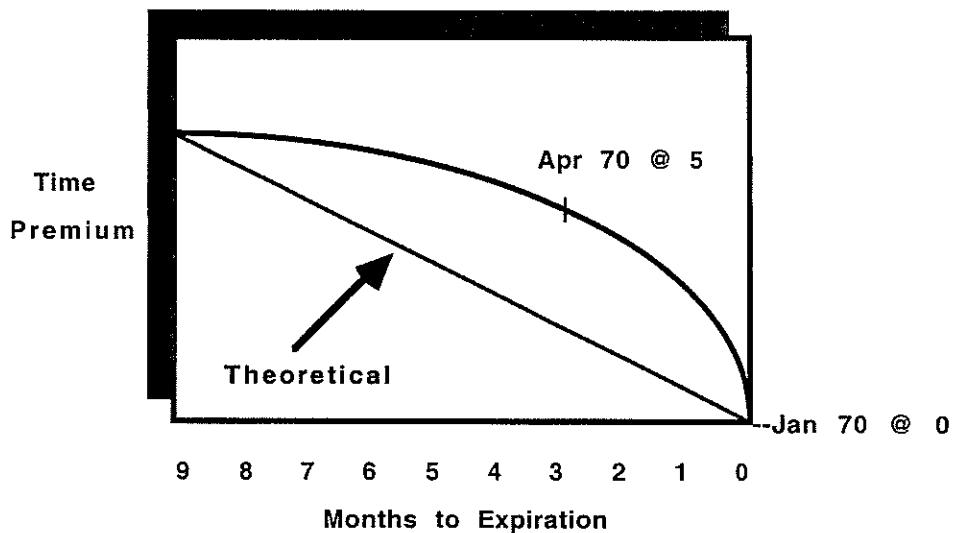
If XXX stays at \$70, we know that the call will lose value rapidly and can be held to expiration for a \$4 profit or bought back in the market for a low premium before expiration. But what happens if XXX rises? There is unlimited loss potential. To hedge against this one would:

**Sell 1 XXX Jan 70 Call @ \$4  
Buy 1 XXX Apr 70 Call @ \$6  
\_\_\_\_\_  
\$2 Debit  
(Market Price = \$70)**

If the short Jan 70 call is exercised, one can always turn around and buy the stock at \$70 through the long Apr 70 call. The long call covers the short call. This is charted as:



Assume it is 4 weeks later and the stock is still at \$70. The Jan call is almost expired and is trading for "0". The Apr call still has 3 months to expiration and is trading at \$5. The graph now shows:



The spread was established by:

Sell 1 XXX Jan 70 Call @ \$4  
 Buy 1 XXX Apr 70 Call @ \$6  
 \$2 Debit

The spread is now closed out by reversing the trades at the current premiums:

Buy 1 XXX Jan 70 Call @ \$0  
 Sell 1 XXX Apr 70 Call @ \$5  
 \$5 Credit

Also Called "Time"  
Or "Horizontal"  
Spreads

### Diagonal Spread

Since the spread was established by paying \$2 and closed by receiving \$5, there is a \$3 or \$300 profit.

These spreads are called time spreads or calendar spreads or "horizontal" spreads. Be able to identify and have a basic understanding of time spreads.

A final note - a spread where both the price (vertical) and time (horizontal) are different is called a diagonal spread (combining a horizontal and vertical gives a diagonal).

## 6g. BUTTERFLY SPREADS

## Butterfly Spreads Used For Income In A Flat Market

A "butterfly spread" is a combination of a bull and bear spread, and is used when the market is expected to stay flat.

Assume that ABC stock is trading at \$60, and the stock is expected to stay around that price. A customer could take the following positions:

Buy 1 ABC Jan 50 Call @ \$12  
Sell 1 ABC Jan 60 Call @ \$ 6

**\$6 Debit**

Sell 1 ABC Jan 60 Call @ \$ 6  
Buy 1 ABC Jan 70 Call @ \$ 2

\$4 Credit

The customer has bought a call spread and has sold a call spread. These positions can be summarized as:

## Butterfly Spread

Buy 1 ABC Jan 50 Call @ \$12

Sell 2 ABC Jan 60 Calls @ \$ 6 each

Buy 1 ABC Jan 70 Call @ \$ 2

**\$2 Net Debit**

Note that since these are call spreads, to analyze the positions, they are stacked from low to high strike prices. If these were puts, the stacking order would be reversed - high to low strike prices.

## Maximum Loss Is The Debit

The customer must pay \$200 for this debit spread. As with any debit position, this is both the maximum loss potential on the position and the deposit required to establish the position.



**Maximum Gain  
Occurs At Central  
Strike Price**

If the market stays at the current value of \$60 until expiration, the long 50 call will be exercised and the 2 short calls expire at the money. The customer will gain 10 points on the long call (Buy at \$50, Sell at \$60), offset by the \$2 paid in net premiums, for a net profit of \$800.

If the market begins to rise above \$60, both the long 50 call and the 2 short calls will be exercised. For example, if the market is at \$64, the customer will gain 10 points on the long spread (Buy at \$50, Sell at \$60), but will lose 4 points on the naked short call (deliver at \$60, buy at \$64). Since 2 points was paid in premiums, the net gain is  $10 - 6 = \$400$ .

**Upside Breakeven  
Is Difference In  
Strike Prices Net Of  
Debit Added To Lower  
Strike**

The upside breakeven point occurs at \$68. If the market is at \$68, the customer will gain 10 points on the long spread (Buy at \$50, Sell at \$60), but will lose 8 points on the naked short call (Deliver at \$60, Buy at \$68). Since 2 points was paid in premiums, the net position is  $10 - 10 = \text{Breakeven}$ . If the market rises, above \$70, all positions will be exercised. The customer would buy 100 shares of stock at \$50, and 100 shares at \$70, delivering the 200 shares at \$60 for no gain or loss on the stock. However, the customer is still out the \$200 debit. This is the maximum potential loss.

If the market drops below \$60, only the long 50 call will be exercised. For example, if the market drops to \$55, the 60 calls and 70 call expire out the money. On the long 50 call, the customer has a 5 point profit, net of \$2 debit = \$3 point net profit.

**Downside Breakeven  
Is Difference In  
Strike Prices Net Of  
Debit Subtracted  
From Higher Strike**

The downside breakeven occurs at 52. At this price, both the 60 and 70 calls expire out the money and the customer has a 2 point gain on the long 50 call that exactly offsets the \$2 debit paid.

If the market falls below \$50, all contracts expire "out the money," and the customer loses the \$2 debit.

## 6h. FINAL NOTE ON SPREADS

**Most Spreads Are  
Closed By Trading  
Out The Positions**

We know that a spread is established either with a debit ("buying a long spread") or a credit ("selling a short spread"). Instead of exercising or waiting for positions to expire, most spreads are closed by trading out the positions as in the "time spread" example done in Section 6f.

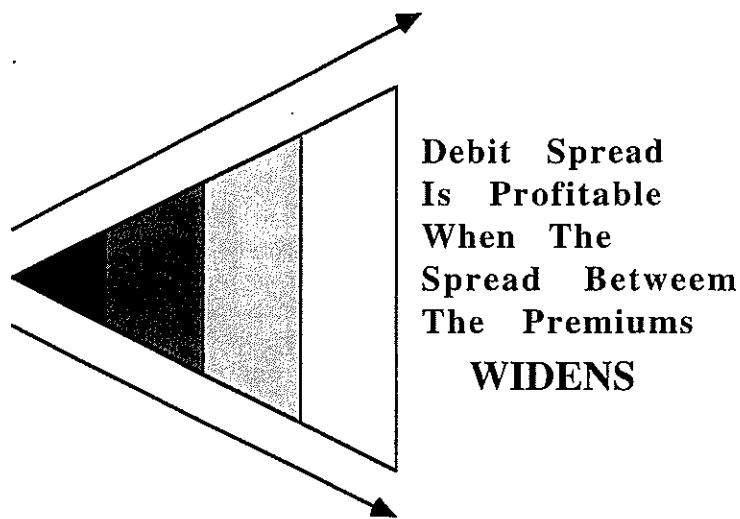
**Exercise Generally  
Does Not Occur Due  
To High Commission  
Costs**

Most spreads are "closed out," rather than having both sides exercised, because of the high commission costs involved with actually buying and selling the underlying stock positions. By trading out the positions, the commissions are much lower.

If one "buys" a spread (creating a debit), the closing transaction is **always** a "sale," meaning a credit to the account. In the time spread example, the spread was created at a \$2 debit and closed at \$5 credit, for a \$3 profit.

### Debit Spread Is Profitable If Spread Between Premiums Widens

For a debit spread to be profitable, it must be closed at a larger credit. Hence, for a debit spread to be profitable, the spread between the premiums must **widen**. In our example, the spread between the premiums widened from \$2 to \$5, resulting in a \$3 profit.



For example, assume that a customer establishes the following long call spread on ABC stock, when ABC's market price is \$52 per share.

Buy 1 ABC Jan 50 Call @ \$6  
Sell 1 ABC Jan 60 Call @ \$2

**Market Price = \$52**  
**\$4 Debit**

This customer expects that the market price will rise. Now assume that ABC's market price rises to \$59 the very next day. If this occurs, the 50 Call is now 9 points "in the money" and the premium will have increased in the market to at least \$9 per share (the "in the money" amount). The 60 Call is still 1 point "out the money" and its premium will not have increased as much. Assume that the new premiums are:

ABC Jan 50 Call @ \$12  
ABC Jan 60 Call @ \$3

**Market Price = \$59**

Instead of exercising the "in the money" long call, the customer "closes" the positions as follows:

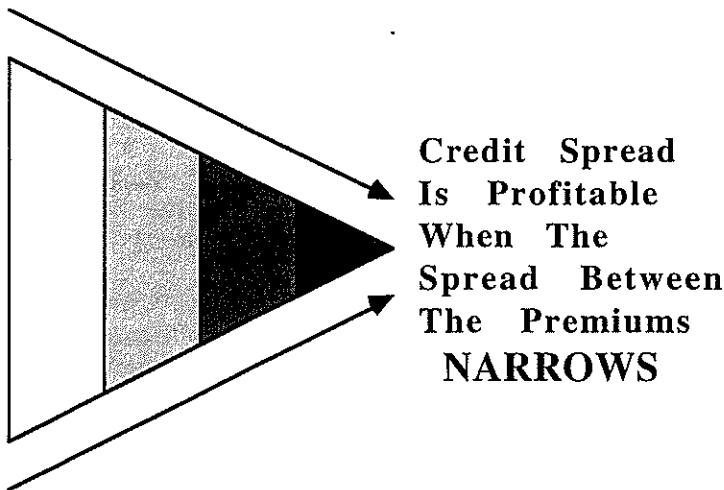
**Sell 1 ABC Jan 50 Call @ \$12  
Buy 1 ABC Jan 60 Call @ \$ 3**

**\$ 9 Credit**

The customer has a net profit of 5 points or \$500, because the positions were established at a \$4 debit and closed at a \$9 credit. This customer profited on this debit spread because the spread between the premiums widened by 5 points.

**Credit Spread Is Profitable If Spread Between Premiums Narrows**

Conversely, if one "sells" a spread (creating a credit), the closing transaction is **always** a "purchase", meaning a debit to the account. For a credit spread to be profitable, the original credit must be larger than the closing debit. Hence, the spread between the premiums must **narrow**.



For example, assume that a customer establishes the following short call spread on ABC stock, when ABC's market price is \$58 per share.

**Sell 1 ABC Jan 50 Call @ \$10  
Buy 1 ABC Jan 60 Call @ \$ 2**

**\$ 8 Credit**

**Market Price = \$58**

This customer expects that the market price will fall. Now assume that ABC's market price falls to \$51 the very next day. If this occurs, the 50 Call is now only 1 point "in the money" (from 8 points "in the money" the preceding day) and the premium will have decreased sharply in the

market. The 60 Call is now 9 points "out the money" and its premium will also decline by a bit. Assume that the new premiums are:

ABC Jan 50 Call @ \$ 3  
ABC Jan 60 Call @ \$ 1

**Market Price = \$51**

The customer "closes" the positions as follows:

Buy 1 ABC Jan 50 Call @ \$ 3  
Sell 1 ABC Jan 60 Call @ \$ 1

**\$ 2 Debit**

The customer has a net profit of 6 points or \$600, because the positions were established at an \$8 credit and closed at a \$2 debit. This customer profited on this credit spread because the spread between the premiums narrowed by 6 points.

To summarize this discussion, a way of thinking about this is that one always wants to pay less (debit) than what one sells for (credit). One wants little debits and large credits!

If one starts with a debit, one knows that the position will always be closed with a credit, which one wants to be larger (widen).

If one starts with a credit, one knows that the position will always be closed with a debit, which one wants to be smaller (narrow).



## SPREADS

### SECTION EXAMINATION

1.

Which of the following are vertical spreads?

I Long 1 ABC Jan 50 Call  
Short 1 ABC Jan 50 Call

II Long 1 ABC Jan 50 Call  
Short 1 ABC Jan 60 Call

III Long 1 ABC Jan 50 Call  
Short 1 ABC Apr 50 Call

IV Long 1 ABC Jan 50 Call  
Short 1 ABC Apr 60 Call

- a. I only
- b. II only
- c. I and III
- d. II and IV

2.

Which position is profitable in a rising market?

- a. bear put spread
- b. bull call spread
- c. short straddle
- d. short naked call

3.

Which has the greatest gain potential?

- a. long call
- b. long call spread
- c. long put
- d. long put spread

Use the following information to answer the next 4 questions:

On the same day a customer buys 1 ABC Feb 70 Call @ \$4 and sells 1 ABC Feb 80 Call @ \$1 when the market price of ABC is \$70.50.

4.

The maximum potential loss is:

- a. \$300
- b. \$400
- c. \$7400
- d. \$7700

5.

The breakeven point is:

- a. 73
- b. 74
- c. 76
- d. 77

6.

The maximum potential gain is:

- a. \$300
- b. \$400
- c. \$700
- d. unlimited

7.

The position will be profitable if:

- I Both contracts expire
- II Both contracts are exercised
- III The spread widens
- IV The spread narrows

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

Use the following information to answer the next 4 questions:

On the same day a customer buys 1 ABC Jan 50 Call @ \$2 and sells 1 ABC Jan 35 Call @ \$8 when the market price of ABC is \$41.

8.

The maximum potential gain is:

- a. \$600
- b. \$800
- c. \$4800
- d. unlimited

9.

The maximum potential loss is:

- a. \$600
- b. \$800
- c. \$900
- d. unlimited

10.

The breakeven point is:

- a. 37
- b. 41
- c. 44
- d. 48

11.

The position will be profitable if:

- I Both contracts expire
- II Both contracts are exercised
- III The spread widens
- IV The spread narrows

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

12.

Which positions are profitable in falling markets:

- I Long put spread
- II Short put spread
- III Short straddle
- IV Short stock

- a. I only
- b. I, IV
- c. II, III, IV
- d. I, II, III, IV

Use the following information to answer the next 4 questions:

A customer buys 1 ABC Jan 50 Put @ \$7 and sells 1 ABC Jan 40 Put @ \$1 when the market price of ABC is \$47.

13.

The maximum potential loss is:

- a. \$600
- b. \$700
- c. \$3900
- d. \$4300

14.

The breakeven point is:

- a. 43
- b. 44
- c. 47
- d. 49

15.

The maximum potential gain is:

- a. \$100
- b. \$400
- c. \$600
- d. \$1000

16.

The position will be profitable if:

- I Both contracts expire
- II Both contracts are exercised
- III The spread widens
- IV The spread narrows

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

17.

Which strategies are profitable in a rising market?

- I Short Put Spread
- II Short Stock / Long Call
- III Short Naked Call
- IV Short Call Spread

- a. I only
- b. I, II
- c. III, IV
- d. None of the above



Use the following information to answer the next 4 questions:

A customer buys 1 ABC Jan 70 Put @ \$5 and sells 1 ABC Jan 90 Put @ \$19 when the market price of ABC is \$75.

22.

A customer buys 1 ABC Apr 50 Call and sells 1 ABC Jan 60 Call. This is a:

- a. horizontal spread
- b. vertical spread
- c. diagonal spread
- d. butterfly spread

18.

The maximum potential gain is:

- a. \$1400
- b. \$1900
- c. \$7100
- d. \$8000

19.

The breakeven point is:

- a. 71
- b. 76
- c. 85
- d. 89

20.

The maximum potential loss is:

- a. \$600
- b. \$1400
- c. \$1900
- d. \$2000

21.

The position will be profitable if:

- I Both contracts expire
- II Both contracts are exercised
- III The spread widens
- IV The spread narrows

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

23.

To create a debit calendar spread:

- a. buy the near expiration/sell the far expiration
- b. buy the far expiration/sell the near expiration
- c. buy the near expiration/buy the far expiration
- d. sell the near expiration/sell the far expiration

24.

A customer buys 1 ABC Jan 50 Call and sells 1 ABC Oct 50 Call. This is a:

- a. calendar debit spread
- b. calendar credit spread
- c. vertical debit spread
- d. vertical credit spread

25.

Referring to the previous question, assume that the ABC Jan 50 Call was opened at \$6 and the ABC Oct 50 call was opened at \$2. Later, the positions were closed - the ABC Jan 50 Call was closed at \$3 and the ABC Oct 50 Call was closed at \$1. The net profit or loss is:

- a. \$200 profit
- b. \$200 loss
- c. \$400 profit
- d. \$400 loss

**26.**

A customer buys 10 ABC Feb 50 Calls @ \$4, sells 20 ABC Feb 55 Calls @ \$2.50, and buys 10 ABC Feb 60 Calls @ \$2. This is a:

- a. bull call spread
- b. bear call spread
- c. butterfly call spread
- d. ratio spread

Use the following information to answer the next 2 questions:

On the same day, a customer establishes the following positions:

Sell 1 XXX Jan 70 Call @ 2.75  
Sell 1 XXX Jan 60 Put @ 1.00  
Buy 1 XXX Jan 75 Call @ 1.25  
Buy 1 XXX Jan 65 Put @ 2.50

**29.**

What is the maximum potential gain on these positions?

- a. \$25
- b. \$225
- c. \$500
- d. Unlimited

**27.**

A customer buys 10 ABC Feb 50 Calls @ \$4, sells 20 ABC Feb 55 Calls @ \$2.50, and buys 10 ABC Feb 60 Calls @ \$2. The customer will have a profit at all of the following prices EXCEPT:

- a. 50
- b. 52
- c. 55
- d. 57

**30.**

What is the deposit required to establish these positions?

- a. 0
- b. \$225
- c. \$475
- d. \$500

**28.**

A customer buys 10 ABC Feb 50 Calls @ \$4, sells 20 ABC Feb 55 Calls @ \$2.50, and buys 10 ABC Feb 60 Calls @ \$1.

Which statement is true?

- a. This position has unlimited risk
- b. This position has no risk
- c. The position is established at a net debit
- d. The position is established at a net credit

## SPREADS SECTION EXAMINATION EXPLANATIONS

1. The best answer is b. A vertical spread is the purchase and sale of a call; or the purchase and sale of a put; at **different** strike prices. A horizontal spread is the purchase and sale of a call; or the purchase and sale of a put; at **different** expirations. A diagonal spread is the purchase and sale of a call; or the purchase and sale of a put; with both **different** expirations and **different** strike prices.
  2. The best answer is b. A bull call spread is profitable in a rising market. A bear put spread is profitable in a falling market, as is a short naked call. A short straddle is profitable in a flat market.
  3. The best answer is a. A long call has unlimited gain potential in a rising market. A long call spread has limited upside gain potential but costs less than a simple long call position. Long puts and long put spreads are profitable in a falling market. Since there is a limit to how far the market can fall, the gain potential is limited.
  4. The best answer is a. The customer has created a long call spread.

Buy 1 ABC Feb 70 Call @ \$ 4  
Sell 1 ABC Feb 80 Call @ \$ 1

\$ 3 Debit

The debit of \$300 is the maximum potential loss occurring if both contracts expire.

5. The best answer is a. The purchaser of a long call spread profits from the long call position. (The short call establishes a limit on the profit potential.) To recover the \$3 Debit, the market price must rise to \$73 (\$70 Long Strike + \$3 Debit).
  6. The best answer is c. If the market rises, the long call is exercised and the stock is bought at \$70. If it continues to rise, the short call is exercised and the stock is sold at \$80 for a 10 point profit. Since 3 points were paid in premiums, the maximum potential gain is \$700.
  7. The best answer is c. If both contracts are exercised, the long spread results in a \$700 profit (see prior explanation). If both expire, the long spread results in a \$300 loss (the debit). To be profitable, this long spread must be closed out at a larger credit - so the spread between the premiums must widen.
  8. The best answer is a. The customer has created a short call spread.

Sell 1 ABC Jan 35 Call @ \$8  
Buy 1 ABC Jan 50 Call @ \$2

\$6 Credit

The credit of \$600 is the maximum potential gain, occurring if both contracts expire.

9. The best answer is c. If the market rises, the short call will be exercised, requiring the customer to deliver the stock for \$35 a share. The customer can always exercise the long call to buy the stock at \$50, for a 15 point loss. Since 6 points were collected in premiums, the net loss is 9 points or \$900.

10. The best answer is b. To breakeven, the customer must lose the \$600 (6 points) collected in premiums. Any loss comes from the short call position (remember this is a short call spread) so breakeven occurs at  $35 + 6 = 41$ .

11. The best answer is b. Since this is a credit spread, if both positions expire, the customer keeps the credit. If both positions are exercised, he loses the difference between the strike prices minus the credit. To be profitable, a credit spread must be closed out at a smaller debit. Thus, the spread between the premiums must narrow.

12. The best answer is b. Long put spreads, like simply buying a put, are profitable if the market falls. Short put spreads, like simply selling a put, are profitable if the market rises. Short straddles are profitable if the market stays flat. Short stock positions are profitable when the market falls.

13. The best answer is a. The customer has created a long put spread at a 6 point debit. The debit is the maximum loss amount in any debit spread.

Buy 1 ABC Jan 50 Put @ \$7  
Sell 1 ABC Jan 40 Put @ \$1

14. The best answer is b. To breakeven, the customer must recover the \$600 (6 points) paid in premiums. Any gain comes from the long put position (remember this is a long put spread), therefore the breakeven point is  $50 - 6 = 44$ .

15. The best answer is b. The customer profits in a long put spread as the market drops. In a falling market, he will exercise the long put and sell the stock for \$50. As the market continues to drop, the short put will be exercised and he is obligated to buy the stock at \$40 for a gain of 10 points. Since \$6 was paid in premiums, the maximum potential gain is 4 points or \$400.

16. The best answer is c. If both puts are exercised, the customer makes \$400. (see explanation 15). If both expire, the debit of \$600 is lost. Since this is a debit spread, it must be closed out with a credit. To be profitable, the closing credit must be larger, so the spread between the premiums must widen.

17. The best answer is a. In a rising market, both sides of a short put spread will expire and the customer earns the credit. Short stock/long call is used to limit loss in a rising market. A short naked call exposes the writer to unlimited loss in a rising market. A short call spread, similar to a short naked call, gives "limited" loss in a rising market.

18. The best answer is a. If the market rises, both puts will expire "out the money" and the writer will keep the net credit of \$1400. This is a short put spread.

Buy 1 ABC Jan 70 Put @ \$5  
Sell 1 ABC Jan 90 Put @ \$19

\$14 Credit

19. The best answer is b. To breakeven, the writer must lose the \$1400 credit (14 points) collected in premiums. Since this is a short put spread, any loss occurs from the short put position. Breakeven is at the short strike price of  $90 - 14 = 76$ .

20. The best answer is a. If the market drops, both puts are exercised and the customer will buy the stock at \$90 and can then "put it" at 70 for a 20 point loss. Since 14 points were collected in premiums, the maximum loss is 6 points or \$600.

21. The best answer is b. If the market drops, both puts are exercised and the customer loses \$600 (see explanation 20). If the market rises, both puts expire and the customer earns \$1400. Since this is a credit spread, it must be closed at a debit. To be profitable, the debit must be smaller, so the spread must **narrow**.

22. The best answer is c. A diagonal spread is the purchase and sale of a call or put with different strike prices and expirations, e.g.:

Buy 1 ABC Apr 50 Call  
Sell 1 ABC Jan 60 Call

23. The best answer is b. In a calendar spread, the expiration months are different but the strike prices are the same. The nearer expiration will be **cheaper** than the farther expiration since it has less "time." To create a debit spread, the more expensive option must be bought (the far expiration) and the cheaper option must be sold (the near expiration).

24. The best answer is a. Since Oct expires before Jan, it will be cheaper. The customer is selling the Oct 50 Call (cheaper) and buying the more expensive Jan 50 Call, so this is a debit spread.

25. The best answer is b.

|       |   |                |   |
|-------|---|----------------|---|
| Open: | Buy 1 ABC Jan 50 Call @ \$6<br>Sell 1 ABC Oct 50 Call @ \$2 | Close:         | Buy 1 ABC Oct 50 Call @ \$1<br>Sell 1 ABC Jan 50 Call @ \$3 |
|       |   | <hr/> \$4 Deb. | <hr/> \$2 Cred.   |

The net loss is \$200 since the spread between the premiums narrowed from 4 to 2. Remember, debit spreads are only profitable if the spread between the premiums widens.

26. The best answer is c. The customer's positions are:

Buy 10 ABC Feb 50 Calls @ 4.00  
Sell 20 ABC Feb 55 Calls @ 2.50  
Buy 10 ABC Feb 60 Calls @ 2.00

This is a "butterfly spread," which is a combination of a bull and bear spread on the same stock. This spread is established at a net debit of \$1 (\$4 + \$2 paid; \$5 received from the "double sale"). The debit is the maximum potential loss. If the market stays at \$55, the 55 calls expire "at the money," and the 60 calls expire "out the money." There is a 5 point profit on each of the 10 long 50 calls =  $\$500 \times 10 = \$5,000$  profit net of the \$1000 debit = \$4,000 profit. If the market drops from 55 to 51, the customer "breaks even." At this price, the 55 and 60 calls expire. There is a 1 point profit on the long 50 calls, offset by

the 1 debit = Breakeven. If the market drops below 51, there is a net loss - with the maximum loss being 1 point.

If the market rises above \$55, the customer gains 5 points on the long call spreads (buy at \$50, deliver at \$55), and begins to lose on the short call spreads. If the market rises to \$57, the customer has a 2 point profit. At this price, the customer gains 5 points on the long call spreads, and the remaining short 55 calls will be exercised (the 60 calls expire out the money). If the stock is purchased at \$57 for delivery, there is a loss of 2 points. 5 points gained on the long call spread, net of 2 points lost on the short call spread, net of \$1 debit paid for the spread equals a 2 point profit. At \$59, the customer breaks even; above \$59 the customer has a loss, with the maximum loss being 1 point.

27. The best answer is a. See previous explanation.

28. The best answer is b. This is a butterfly spread. To purchase the 10 ABC 50 Calls, a debit of  $\$4 \times 100 \text{ shares per contract} \times 10 \text{ contracts} = \$4,000$  must be paid. To sell the 20 ABC 55 Calls @ \$2.50, a credit of  $\$2.50 \times 100 \text{ shares per contract} \times 20 \text{ contracts} = \$5,000$  is received. Finally to buy the 10 ABC 60 Calls @ \$1, a debit of  $\$1 \times 100 \text{ shares per contract} \times 10 \text{ contracts} = \$1,000$  must be paid. The net money amount is \$4000 paid and \$1000 paid, net of \$5,000 received = 0. Neither a debit nor a credit is created from this position. If the market falls below \$50, all positions expire "out the money" and nothing is lost. If the market rises above \$50, the long 50 calls can be exercised at a profit. Above \$55, the short calls will be exercised, and the gain on the 10 long calls is limited to 5 points each. The 10 naked short 55 calls require the delivery of the stock, which must be purchased in the market. However, since there are 10 long 60 calls, \$60 is the maximum price at which the stock will be purchased. Thus, there will be a 5 point loss on 10 of the short calls and a 5 point gain on the other 10 short calls = 0 gain or loss. Thus, this position has no risk.

29. The best answer is c. The customer has established the following spread positions:

Buy 1 XXX Jan 75 Call @ 1.25  
Sell 1 XXX Jan 70 Call @ 2.75

----  
1.50 Credit = Short Call Spread (Bearish)

Buy 1 XXX Jan 65 Put @ 2.50  
Sell 1 XXX Jan 60 Put @ 1.00

----  
1.50 Debit = Long Put Spread (Bearish)

To profit on the positions, since they are bearish, the market must drop. If the market drops sharply, the calls expire "out the money," giving a profit of \$150 on the short call spread. If the market drops sharply, both puts go "in the money" and will be exercised. The customer must buy XXX at \$60 and can deliver at \$65, for a 5 point profit. Since \$1.50 was paid in premiums, the net profit is \$3.50. The total profit is  $\$1.50 + \$3.50 = \$5$  or \$500.

30. The best answer is d. Referring to the positions in the previous question, the deposit for the long put spread equals the debit of \$1.50 = \$150. This is the maximum potential loss. The deposit for the short call spread equals the difference in the strike prices (5 points), net of the credit received (1 1/2 point credit), for a deposit of  $3 \frac{1}{2} \text{ points} = \$350$ . The total deposit is  $\$150 + \$350 = \$500$ . This represents the maximum potential loss on the positions.

## SECTION 7: RATIO STRATEGIES

### 7a. RATIO WRITING OF CALL CONTRACTS

To generate "extra" income, instead of selling call contracts against an equal underlying position, a greater number of calls can be sold. This is termed a "ratio write." For example, consider the following positions:

**Buy 100 shares of ABC stock at \$50  
Sell 2 ABC Jan 50 Calls @ \$5**

**Selling More Call Contracts Than Long Position**

This customer is selling 2 call contracts against 100 shares of stock. Thus, he is writing calls against the stock at a 2:1 ratio. In essence, he has created 1 covered call and 1 short naked call. These are shown below:

**Buy 100 shares of ABC stock at \$50  
Sell 1 ABC Jan 50 Call @ \$5**

**Sell 1 ABC Jan 50 Call @ \$5**

**Neutral Market Strategy**

Similar to simple covered call writing strategies, the customer is hoping that the market price of ABC stays at \$50. If the price stays the same, both short calls expire "at the money" and the customer earns \$10 in collected premiums (\$5 per call contract). Effectively, this reduces the customer's cost of the long stock position to \$40.

**Declining Market  
Break-even = Cost Of Stock - ALL Collected Premiums (On A Per Share Basis)**

If the market price falls, both calls expire "out the money." The customer keeps the premiums, but begins to lose on the long stock position. Since \$10 was collected in premiums, the acquisition cost of the stock has been reduced to \$40. If the market continues to fall, the customer keeps losing on the long stock position, losing a maximum of \$4000 if the stock becomes worthless.

**Rising Market  
Break-even = Strike Price + ALL Collected Premiums (On A Per Share Basis)**

If the market price rises, both calls go "in the money" and will be exercised. The customer bought 100 shares of stock at \$50, and must deliver those shares at \$50, for no further gain or loss on that position. He is left with 1 short naked call. Since he collected \$10 in premiums from selling both short calls, he can afford to lose this amount as the market rises and still will "breakeven." Therefore, if the market rises to \$60, he again will breakeven. Above \$60, the customer continues to lose on the short naked call - and has unlimited risk potential on this position.

**Maximum Potential Loss = Unlimited**

If a customer wishes to further increase income from a stock position, he could write calls at a 3:1 ratio or a 4:1 ratio. As the ratio increases, the size of the short naked call

position increases, substantially increasing upside risk potential.

To summarize, ratio call writing generates extra income, but also entails a much higher risk level than simple covered call writing.

## 7b. RATIO WRITING OF PUT CONTRACTS

To generate "extra" income, instead of selling put contracts against an equal underlying short stock position, a greater number of puts can be sold. This is termed a "ratio write." For example, consider the following positions:

**Sell Short 100 shares of ABC stock at \$50  
Sell 2 ABC Jan 50 Puts @ \$5**

**Selling More Put Contracts Than Short Position**

This customer is selling 2 put contracts against 100 shares of stock sold short. Thus, he is writing puts against the stock at a 2:1 ratio. In essence, he has created 1 covered put and 1 short naked put. These are shown below:

**Sell Short 100 shares of ABC stock at \$50  
Sell 1 ABC Jan 50 Put @ \$5**

**Sell 1 ABC Jan 50 Put @ \$5**

**Neutral Market Strategy**

Similar to simple covered put writing strategies, the customer is hoping that the market price of ABC stays at \$50. If the price stays the same, both short puts expire "at the money" and the customer earns \$10 in collected premiums (\$5 per put contract). Effectively, this increases the customer's sale proceeds from the short sale from \$50 per share to \$60 per share.

**Rising Market  
Breakeven = Sale Of Stock + ALL Collected Premiums**

If the market price rises, both puts expire "out the money." The customer keeps the premiums, but begins to lose on the short stock position. Since \$10 was collected in premiums, the sale proceeds generated from shorting the stock has been increased to \$60. If the market continues to rise, the customer keeps losing on the short stock position, with unlimited upside loss potential.

**Maximum Potential Loss = Unlimited**

If the market price falls, both puts go "in the money" and will be exercised. The customer sold 100 shares of stock gain or loss on that position. He is left with 1 short naked put. Since he collected \$10 in premiums from selling both short puts, he can afford to lose this amount as the market falls and still will "breakeven." Therefore, if the market falls to \$40, he again will breakeven. Below \$40, the



customer continues to lose on the short naked put - with the maximum loss occurring if the stock becomes worthless, and the customer is forced to buy "worthless" stock at \$40 per share effective cost (\$50 cost through exercise of short put - \$10 collected premiums).

**Greater The "Ratio";  
Greater The Risk**

If a customer wishes to further increase income from a short stock position, he could write puts at a 3:1 ratio or a 4:1 ratio. As the ratio increases, the size of the short naked put position increases, substantially increasing downside risk potential.

To summarize, ratio put writing generates extra income, but also entails a much higher risk level than simple covered put writing.

### 7c. RATIO SPREADS

A "ratio spread" follows similar logic to a ratio call or put write. Generally, extra short positions are written against the long position to generate extra income (which also increases risk). Below is an example of a ratio call spread:

Buy 1 ABC Jan 50 Call @ \$7  
Sell 3 ABC Jan 60 Calls @ \$2

(Market Price ABC Stock = \$55)

This customer is writing calls against the long call position at a 3:1 ratio, and is therefore collecting 3 times the premium income that would be generated from the sale of 1 call. To analyze this position, "split" the positions into the "covered" and "naked" positions - as shown below:

Buy 1 ABC Jan 50 Call @ \$7  
Sell 1 ABC Jan 60 Call @ \$2

\$5 Debit

Sell 2 ABC Jan 60 Calls @ \$2

\$4 Credit

**Maximum Downside  
Loss = Net Debit**

Effectively, the customer has created a "Long Call Spread" and 2 short naked calls. From all positions, a net debit of \$1 is created. Since there is a net debit created, if the market drops below \$50, all positions will expire "out the money" and the customer will lose \$100. This is a much smaller loss than if the customer had simply taken the "Long Call Spread" position without selling the extra calls.

**Lower Breakeven =  
Long Strike +  
Net Debit**

As the market rises above \$50, the customer gains on the long call. (Nothing happens on the short calls until the market rises above \$60.) To breakeven, the customer must recover the \$1 debit - so the **first breakeven** point is  $\$50 + \$1 = \$51$ .

**Maximum Profit  
Occurs If Market  
Is At Higher Strike  
Price**

If the market continues to rise to \$60, the customer will experience his maximum potential gain (since above \$60, he begins to lose on the 2 short naked calls). At \$60, he gains 10 points on the long call spread (Buy stock at \$50; Sell at \$60), while the short naked calls expire "at the money." Since he paid a net debit of \$1 for all positions, his profit is \$900.

**Upside Breakeven =  
Short Strike +  
Maximum Gain Per  
Share**

Above \$60, the customer begins to lose on the 2 short call positions. Since he has a net profit of \$900 that is "locked" at \$60 or above from all of the positions, he can afford to lose this amount on the 2 naked short calls and still will breakeven. Per contract, he can afford to lose \$450, or  $4 \frac{1}{2}$  points. Thus, the upside breakeven point is  $\$60 + 4 \frac{1}{2} = \$64 \frac{1}{2}$ . This is the **second breakeven** point.

**Unlimited Upside  
Loss Potential**

If the market continues to rise above  $\$64 \frac{1}{2}$ , the customer will lose on the 2 short naked calls and has unlimited upside loss potential.

To summarize, ratio spreading involves the sale of "extra" calls against a long call spread position. The "extra" premium income generated reduces potential loss in a declining market. Conversely, in a rising market, the customer is exposed to unlimited loss potential on the short naked call positions that were established to generate that extra income.

#### **7d. LONG STOCK/SHORT STRADDLE**

Another means of generating "extra" income from a stock position in a neutral market is to buy the stock and sell an "at the money" straddle against the stock position. If the market does not move, both sides of the straddle expire "at the money," and the customer retains doubled premiums (effectively reducing the stock's cost). For example, assume a customer takes the following positions:

**Long 100 Shares of ABC Stock @ \$50**

**Short 1 ABC Jan 50 Call @ \$4  
Short 1 ABC Jan 50 Put @ \$3**

**$\frac{1}{2}$  Credit**

If the market stays exactly at \$50, both options expire and the customer retains the \$7 credit. Since he paid \$50 per share for the stock, the net cost of the stock is \$43.

**Upside Gain =  
Credit Received**

If the market rises, the short call goes "in the money" and will be exercised. The customer's stock, purchased at \$50, will be delivered for \$50, at no gain or loss. The short put "expires" out the money. The net result is the customer earns the credit of \$7 = \$700 maximum upside gain potential.

**Downside Breakeven  
= Cost Of Stock Less  
Credit Received  
(Per Share Basis)**

If the market drops, the customer gets "nailed." The short call will expire "out the money." The short put will be exercised, forcing the customer to buy another 100 shares of the stock at \$50. Since the customer collected \$700 in credits, and will own 200 shares of stock if the market drops below \$50, he can afford to lose \$350 per 100 shares (3 1/2 per share) and still breakeven. Thus, the downside breakeven is  $50 - 3 \frac{1}{2} = 46 \frac{1}{2}$ .

**Maximum Loss =  
Stock Becomes  
Worthless**

If the market continues to drop, the customer loses on both the original stock position and the stock acquired through the exercise of the short put. He can lose a maximum of  $46 \frac{1}{2}$  per share on 200 shares = \$9300. This is the same as buying 200 shares at \$50 (\$10,000 of stock), less the credit of \$700.

**Covered Straddle**

For the exam, note that this strategy is termed a "covered straddle," but in reality this is **not** a covered strategy. Only the short call is covered; the short put is not covered.

## RATIO STRATEGIES SECTION EXAMINATION

Use the following information to answer the next 3 questions:

A customer buys 100 shares of ABC stock at \$48 and sells 2 ABC Jan 50 Calls @ \$2 on the same day.

1.  
The customer's maximum potential gain is:

- a. \$400
- b. \$600
- c. \$800
- d. Unlimited

2.  
The customer's maximum potential loss is:

- a. \$400
- b. \$4400
- c. \$4800
- d. unlimited

3.  
The breakeven points are:

|     |      |
|-----|------|
| I   | \$44 |
| II  | \$46 |
| III | \$54 |
| IV  | \$56 |

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

Use the following information to answer the next 4 questions:

On the same day a customer buys 5 ABC Jan 60 Calls @ \$5 and sells 10 ABC Jan 70 Calls @ \$2 when the market price of ABC is \$60.50.

4.  
The maximum potential loss is:

- a. \$300
- b. \$500
- c. \$4500
- d. Unlimited

5.  
The maximum potential gain is:

- a. \$500
- b. \$4500
- c. \$7000
- d. Unlimited

6.  
The breakeven points are:

|     |      |
|-----|------|
| I   | \$61 |
| II  | \$62 |
| III | \$73 |
| IV  | \$79 |

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

7.  
The position will be profitable if:

- I Both contracts expire
  - II The market stays at \$50 until expiration
  - III The market stays at \$60 until expiration
  - IV The market stays at \$70 until expiration
- 
- a. I and II
  - b. III and IV
  - c. II and III
  - d. IV only

Use the following information to answer the next 3 questions:

On the same day a customer buys 100 shares of ABC stock at \$30 and sells 1 ABC Jan 30 Call @ \$2 and sells 1 ABC Jan 30 Put @ \$3.

8.

The maximum potential gain is:

- a. \$500
- b. \$2500
- c. \$5500
- d. Unlimited

9.

The maximum potential loss is:

- a. \$500
- b. \$2500
- c. \$5500
- d. Unlimited

10.

The breakeven point is:

- a. 25.00
- b. 27.50
- c. 32.00
- d. 35.00

## RATIO STRATEGIES SECTION EXAMINATION EXPLANATIONS

1. The best answer is b. The customer has bought 100 shares of stock at \$48 and has sold 2 Jan 50 Calls @ \$2. The best way to visualize the positions is as follows:

Long 100 shares of ABC @ \$48  
Sell 1 ABC Jan 50 Call @ \$2

Sell 1 ABC Jan 50 Call @ \$2

The customer's maximum gain occurs if the market goes to \$50 and stays there. In this case, the short naked call expires "at the money" as does the short covered call. The customer is free to sell the stock at the market price of \$50, for a 2 point gain on the stock, in addition to the \$4 points collected in premiums. Thus, the maximum gain is \$600.

Below \$50, both short calls expire; however, the customer will begin to lose on the stock position. Above \$50, both calls are exercised, and since 1 call is naked, the customer will begin to lose on that position, with potentially unlimited loss.

2. The best answer is d. Since the customer effectively has 1 covered call and 1 naked short call, he can lose an unlimited amount in a rising market on the short naked position.

3. The best answer is b. If the market drops below \$50, both calls expire, and the customer earns the \$4 collected in premiums. This is an offset to the cost of the stock of \$48, for a net cost of \$44. Thus, the customer will breakeven if the stock drops to \$44. Below this, the customer loses on the stock position, with a maximum downside loss of \$4400...

If the market rises above \$50, both calls will be exercised. On the covered call, the customer will gain 2 points on the stock, in addition to earning 2 points in premiums, for a gain of 4 points. On the naked call, the customer has collected premiums of 2 points. Thus, as the market rises above \$50, the customer can afford to lose \$600 (\$400 +\$200), and still breakeven. He will breakeven on the upside at  $50 + 6 = 56$ . Above this price, he will lose money, with potentially unlimited loss.

4. The best answer is d. This is a very difficult question sequence. The customer is taking the following positions:

Buy 5 ABC Jan 60 Calls @ \$5  
Sell 10 ABC Jan 70 Calls @ \$2

To recast these positions:

Buy 5 ABC Jan 60 Calls @ \$5  
Sell 5 ABC Jan 70 Calls @ \$2

Sell 5 ABC Jan 70 Calls @ \$2

\$3 Debit x 5

\$2 Credit x 5

The customer is creating 5 "long call spreads" and has 5 naked calls. In effect, he is writing 2 times number of short calls needed to create the spread - therefore he is "writing at a 2:1 ratio." This is termed a ratio spread. Long call spreads are used when a

customer is moderately bullish, and wishes to reduce the cost of the long position by selling an equal number of "out the money" calls. This limits upside gain potential, but also reduces the cost of the positions. By writing twice the number of calls, the customer further reduces the cost of the positions, but also assumes unlimited upside risk on the 5 naked calls that are left.

5. The best answer is b. The maximum potential profit must occur at \$70 per share. At this price, the customer would profit on the long call spreads, without losing anything on the 5 short calls - which would expire "at the money." At a \$70 price, each long call spread results in a profit of 10 points (Buy the stock at \$60 by exercising the long call and sell it at \$70 in the market), net of \$3 paid (net debit) in premiums per spread = \$700 profit per spread x 5 spreads = \$3,500 profit. The short naked 70 calls expire resulting in a \$200 profit per contract (\$2 credit) x 5 contracts = \$1000. The total profit is \$3,500 + \$1,000 = \$4,500.

6. The best answer is b. If the market stays at \$60 or lower, the short calls will expire "out the money." To breakeven from the long call positions, the customer must recover the \$3 debit paid per spread. Since he also collected \$2 credit for each of the 5 naked short calls, he is really out of pocket only \$1 per long call. Thus, to breakeven on the 5 long calls, the customer must recover 1 point =  $60 + 1 = \$61$  breakeven.

If the market rises above \$70, the customer will have made \$700 profit on each of the 5 long call spreads, plus has collected \$2 in premium for each of the naked short calls, for a total \$900 (9 point) profit. As the market rises above \$50, the customer will start to lose on the remaining 5 naked calls. He can afford to lose 9 points and still breakeven. Thus, the second breakeven point is  $70 + 9 = 79$ .

7. The best answer is d. At \$60 or lower, all positions expire "out the money." Since the positions were established at a true net debit of \$500 (\$1,500 debit from 5 spreads, net of \$1000 credit from 5 short naked calls), this amount will be lost. To be profitable, the market must rise above \$61 (see prior explanation), but must not go above \$79.

8. The best answer is a. The customer has created a long stock/short straddle position. This is shown below:

Buy 100 Shares of ABC at \$30

Sell 1 ABC Jan 30 Call @ \$ 3  
Sell 1 ABC Jan 30 Put @ \$ 2

\$ 5 Credit

The credit of \$500 is the maximum potential gain occurring if both contracts expire "at the money."

If the market rises above \$30, the short call is exercised, while the short put expires "out the money." The stock that was purchased at \$30 is delivered for \$30 - there is no further gain or loss on this position. Thus, in a rising market, the maximum gain is \$500.

If the market falls below \$30, the short put is exercised (requiring the customer to buy **another** 100 shares at \$30), while the short call expires "out the money" As the market falls, the customer now owns 200 shares purchased at \$30. Since \$500 was collected in premiums, he can afford to lose 2.5 points per share and will still breakeven Thus, the

breakeven occurs at  $30 - 2.50 = 27.50$ . If the market continues to drop to zero, the customer will lose the full value of the 200 shares purchased at \$30, net of \$500 collected in premiums, for a net loss of \$5500 (27.50 per share).

9. The best answer is c. See explanation #8.

10 The best answer is b. See explanation #8.

## SECTION 8: SYNTHETIC POSITIONS

### 8a. SYNTHETICS OVERVIEW

#### Synthetic Or "Equivalent" Positions

Why take a regular option position when you can use a synthetic instead? Synthetic option positions are "equivalent" positions used by professional traders for two reasons. The first is that the net cost of the synthetic position may be less than the cost of the actual option. The second is that traders can reverse positions in the market with synthetic positions in a way that reduces commission costs.

Synthetic option positions always involve taking a stock position along with a different option position. These are explained next, and must be memorized for the examination.

### 8b. SYNTHETIC LONG CALL

We will create our own synthetic long call position. Assume that the market price of ABC stock is at \$50 and a customer is:

**Long 1 ABC Jan 50 Call @ \$5**

The characteristics of this position are:

Unlimited Gain Potential;  
Loss Is Limited to the Premium;  
Breakeven Is at \$55.

To create a "synthetic" long call, we must match these characteristics exactly with a stock position and another option position. To obtain the characteristic of unlimited upside gain potential, we must buy the stock.

**Long 100 shares of ABC at \$50**

However, while we have matched the upside characteristic, we have not matched the downside. If the market drops, \$5000 could be lost on the long stock, while the long call would only lose \$500. We must find the appropriate option position to limit downside loss. The option position that will limit downside loss on long stock is the purchase of a put. Assume that the following long put position is added:

**Synthetic Long Call**

**Long 100 shares of ABC at \$50**  
**Long 1 ABC Jan 50 Put @ \$5**

If the market drops, the long put will be exercised, and there will be no loss on the long stock position. The net loss is the premium paid of \$5 for the put (\$500). For this position, the breakeven point is  $\$50 + \$5 = \$55$ .

The characteristics of the combined position exactly match those of the long call. Thus, being long stock/long put is the synthetic equivalent of a long call position.

### **Synthetic Long Call = Long Stock / Long Put**

#### **8c. SYNTHETIC SHORT CALL**

We will create our own synthetic short call position. Assume that the market price of ABC stock is at \$50 and a customer is:

##### **Short 1 ABC Jan 50 Call @ \$5**

The characteristics of this position are:

Unlimited Loss Potential;  
Gain Is Limited to the Premium;  
Breakeven Is at \$55.

To create a "synthetic" short call, we must match these characteristics exactly with a stock position and another option position. To obtain the characteristic of unlimited upside loss potential, we must short the stock.

##### **Short 100 shares of ABC at \$50**

However, while we have matched the upside characteristic, we have not matched the downside. If the market drops, \$5000 will be gained on the short stock, while the short call only gains \$500. We must find the appropriate option position to limit downside gain. The option position that will limit downside gain on short stock is the sale of a put option. Assume that the following short put position is added:

##### **Synthetic Short Call**

##### **Short 100 shares of ABC at \$50** **Short 1 ABC Jan 50 Put @ \$5**

If the market drops, the short put will be exercised, and there will be no gain or loss on the stock position (the stock that was sold for \$50 will be purchased at \$50 from the exercise of the short put). The net gain is the premium received of \$5 for the put (\$500).

For this position, the breakeven point is  $\$50 + \$5 = \$55$ . At  $\$55$ , the short put expires "out the money" and the  $\$5$  premium received from that contract exactly offsets the loss on the short stock position.

The characteristics of the combined position exactly match those of the short call. Thus, being short stock/short put is the synthetic equivalent of a short call position.

### **Synthetic Short Call = Short Stock / Short Put**

#### **8d. SYNTHETIC LONG PUT**

We will create our own synthetic long put position. Assume that the market price of ABC stock is at  $\$50$  and a customer is:

**Long 1 ABC Jan 50 Put @ \$5**

The characteristics of this position are:

Maximum Gain Occurs When The Stock Is Worthless;  
Loss Is Limited to the Premium;  
Breakeven Is at  $\$45$ .

To create a "synthetic" long put, we must match these characteristics exactly with a stock position and another option position. To obtain the characteristic of increasing gain as the market drops, we must short the stock.

**Short 100 shares of ABC at \$50**

However, while we have matched the downside characteristic, we have not matched the upside. If the market rises, the short stock position has unlimited loss potential, while the long put only loses the  $\$500$  premium. We must find the appropriate option position to limit upside loss. The option position that will limit upside loss on short stock is the purchase of a call option. Assume that the following long call position is added:

**Synthetic Long Put**

**Short 100 shares of ABC at \$50**  
**Long 1 ABC Jan 50 Call @ \$5**

If the market rises, the long call will be exercised, and there will be no gain or loss on the stock position (the stock that was sold for  $\$50$  will be purchased at  $\$50$  from the exercise of the long call). The net loss is the premium paid of  $\$5$  for the call ( $\$500$ ).

For this position, the breakeven point is  $\$50 - \$5 = \$45$ . At  $\$45$ , the long call expires "out the money" and the  $\$5$  premium paid for that contract exactly offsets the gain on the short stock position.

The characteristics of the combined position exactly match those of the long put. Thus, being short stock/long call is the synthetic equivalent of a long put position.

### **Synthetic Long Put = Short Stock / Long Call**

#### **8e. SYNTHETIC SHORT PUT**

We will create our own synthetic short put position. Assume that the market price of ABC stock is at  $\$50$  and a customer is:

**Short 1 ABC Jan 50 Put @ \$5**

The characteristics of this position are:

Maximum Loss Occurs if the Stock Is Worthless;  
Gain Is Limited to the Premium;  
Breakeven Is at  $\$45$ .

To create a "synthetic" short put, we must match these characteristics exactly with a stock position and another option position. To obtain the characteristic of maximum loss if the stock is worthless, we must buy the stock.

**Long 100 shares of ABC at  $\$50$**

However, while we have matched the downside characteristic, we have not matched the upside. If the market rises, there is unlimited gain potential on the long stock, while the short put only gains  $\$500$ . We must find the appropriate option position to limit upside gain. The option position that will limit upside gain on long stock is the sale of a call option. Assume that the following short call position is added:

**Synthetic Short Put**

**Long 100 shares of ABC at  $\$50$**   
**Short 1 ABC Jan 50 Call @ \$5**

If the market rises, the short call will be exercised, and there will be no gain on the long stock position. The net gain is the premium received of  $\$5$  for the call ( $\$500$ ).

For this position, the breakeven point is  $\$50 - \$5 = \$45$ . At  $\$45$ , the short call expires "out the money" and the  $\$5$  per



share received in premiums reduces the cost of the stock to \$45 per share.

The characteristics of the combined position exactly match those of the short put. Thus, being long stock/short call is the synthetic equivalent of a short put position.

**Synthetic Short Put = Long Stock / Short Call**

#### 8f. USES OF SYNTHETIC OPTIONS

A memory device for learning the 4 synthetic options positions is:

**Synthetic Calls are:**

**"LLL": Long Call = Long Stock and Long Put**

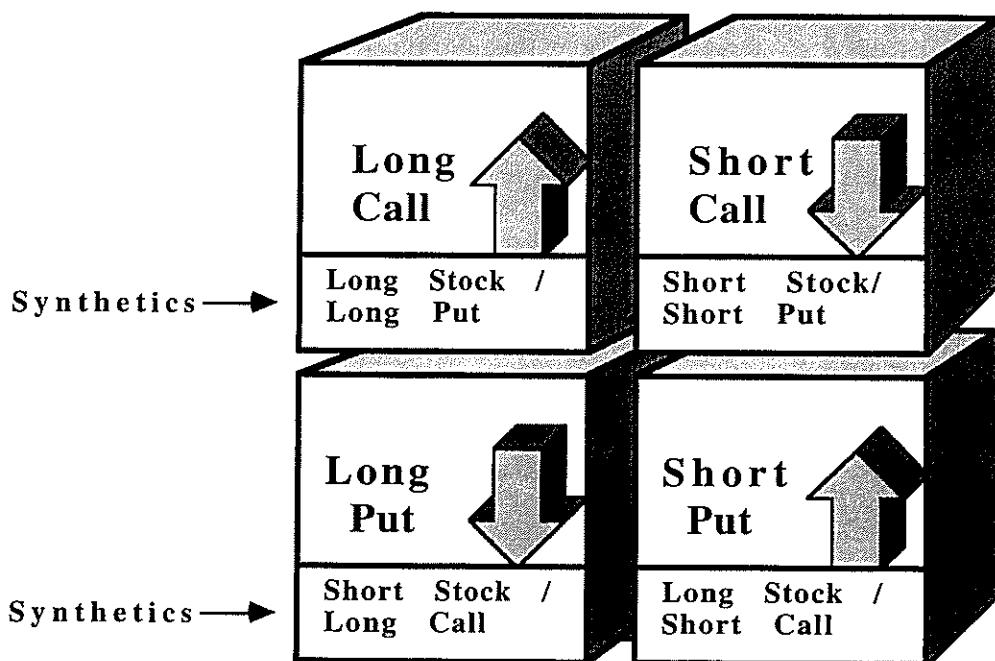
**"SSS": Short Call = Short Stock and Short Put**

**Synthetic Puts are:**

**"LSL": Long Put = Short Stock and Long Call**

**"SLS": Short Put = Long Stock and Short Call**

Notice that to create the synthetic, the opposite option position is always taken. Synthetics can be pictured as:



Imagine that a trader is long 100 call contracts, and he believes that the market is peaking and is about to fall. To reposition himself for the market decline, he would have to sell his 100 long calls and buy another 100 long puts, incurring 2 commissions to reverse market directions.

Since he already has the long call position, he can simply short the underlying stock and create a synthetic long put (combined position of short stock/long call). He is now positioned to profit in a declining market, since the synthetic exactly mimics a long put. In the process, he has only incurred 1 commission, not 2.

Thus, traders employ synthetic options to mimic the actual option position at lower transaction costs.

## 8g. SYNTHETIC STOCK POSITIONS

### **Synthetic Or "Equivalent" Positions**

### **Synthetic Long Stock Position**

Instead of combining a stock position and an option position to create a synthetic option, we can also combine two options positions to create a synthetic or equivalent stock position.

For example, assume that a customer buys 100 shares of ABC stock at \$50. If we wish to create a synthetic equivalent, we would:

**Buy 1 ABC Jan 50 Call @ \$5  
Sell 1 ABC Jan 50 Put @ \$5**

If the market rises, the customer has unlimited gain potential on the long call, while the short put expires "out the money."

If the market stays exactly at \$50, both contracts expire "at the money," and the customer has no gain or loss.

If the market drops, the customer loses on the short put, while the long call expires "out the money." He incurs the maximum loss on the short put if the stock becomes worthless.

To summarize, the synthetic equivalent of long stock is:

**Long Call / Short Put = Synthetic Long Stock**

Notice that to create the synthetic long stock position (a bullish strategy), we used both option positions that are bullish. This is an easy way to remember which option positions create a synthetic stock position.

### Synthetic Short Stock Position

For example, assume that a customer shorts 100 shares of ABC stock at \$50. If we wish to create a synthetic equivalent, we would:

**Sell 1 ABC Jan 50 Call @ \$5  
Long 1 ABC Jan 50 Put @ \$5**

If the market rises, the customer has unlimited loss potential on the short call, while the long put expires "out the money."

If the market stays exactly at \$50, both contracts expire "at the money," and the customer has no gain or loss.

If the market drops, the customer gains on the long put, while the short call expires "out the money." He incurs the maximum gain on the long put if the stock becomes worthless.

To summarize, the synthetic equivalent of short stock is:

**Short Call / Long Put = Synthetic Short Stock**

Notice that to create the synthetic short stock position (a bearish strategy), we used both option positions that are bearish. This is an easy way to remember which option positions create a synthetic stock position.

## SYNTHETIC POSITIONS SECTION EXAMINATION

1.

Which of the following positions creates a synthetic long call?

- a. Long stock / Long put
- b. Long stock / Short call
- c. Short stock / Long call
- d. Short stock / Short put

2.

Which of the following positions creates a synthetic short call?

- a. Long stock / Long put
- b. Long stock / Short call
- c. Short stock / Long call
- d. Short stock / Short put

3.

Which of the following positions creates a synthetic long put?

- a. Long stock / Long put
- b. Long stock / Short call
- c. Short stock / Long call
- d. Short stock / Short put

4.

Which of the following positions creates a synthetic short put?

- a. Long stock / Long put
- b. Long stock / Short call
- c. Short stock / Long call
- d. Short stock / Short put

5.

Which of the following positions creates a synthetic long stock position?

- a. Short call / Long put
- b. Long call / Short put
- c. Short stock / Long call
- d. Short stock / Short put

## SYNTHETIC POSITIONS SECTION EXAMINATION EXPLANATIONS

1. The best answer is a. A long call has the characteristics of unlimited upside gain potential, but loss is limited to the premium paid if the market declines. To mimic the characteristic of unlimited upside gain, the stock must be purchased. To limit loss on the stock position in a falling market, a put must be purchased. Thus, being long stock/long put is the synthetic equivalent of a long call ("LLL").
2. The best answer is d. A short call has the characteristics of unlimited upside loss potential, but gain is limited to the premium received if the market declines. To mimic the characteristic of unlimited upside loss, the stock must be sold short. To limit gain on the stock position in a falling market, a put must be sold. (If the market declines, the put will be exercised, requiring the customer to buy the stock that was already sold.) Thus, being short stock/short put is the synthetic equivalent of a short call ("SSS").
3. The best answer is c. A long put has the characteristics of increasing downside gain potential, but loss is limited to the premium paid if the market rises. To mimic the characteristic of increasing downside gain, the stock must be sold short. To limit loss on the stock position in a rising market, a call must be bought. (If the market rises, the call will be exercised, and the customer will buy the stock that was already sold.) Thus, being short stock/long call is the synthetic equivalent of a long put ("LSL").
4. The best answer is b. A short put has the characteristics of increasing downside loss potential, but gain is limited to the premium received if the market rises. To mimic the characteristic of increasing downside loss, the stock must be purchased. To limit gain on the stock position in a rising market, a call must be sold. (If the market rises, the call will be exercised, and the customer must deliver the stock that was already purchased). Thus, being long stock/short call is the synthetic equivalent of a short put ("SLS").
5. The best answer is b. To create a synthetic long stock position with options, we must mimic the characteristics of unlimited upside gain potential and loss potential equal to the value of the stock position. To do this, purchase a call (unlimited upside gain potential) and sell a put (increasing loss as the market falls). Also notice that these are the 2 bullish option strategies; and that a long stock position is bullish.

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## SECTION 9: EQUITY (STOCK) OPTIONS

### 9a. CONTRACT SPECIFICATIONS

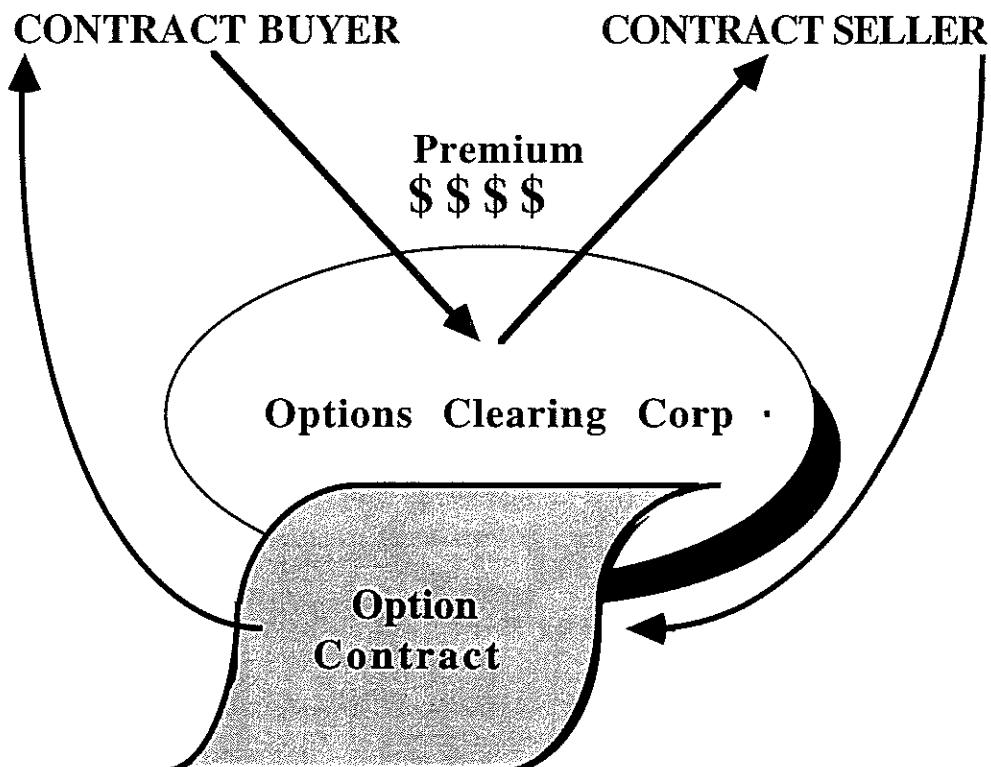
The majority stock options are traded on the Chicago Board Options Exchange. Trading of options contracts on listed equity securities takes place on the following exchanges:

Chicago Board Options Exchange (CBOE)  
 American Stock Exchange (AMEX)  
 Pacific Stock (ARCA) Exchange  
 Philadelphia Stock Exchange (PHLX)  
 International Securities Exchange (ISE)

The largest options market is the CBOE. The AMEX is also quite large. The Pacific (ARCA) and PHLX are smaller options markets. Also note that NYSE Euronext now owns the AMEX and Pacific (ARCA) options exchanges and runs them as separate subsidiaries; while NASDAQ OMX now owns the PHLX Exchange and also runs it separately.

Options Clearing Corporation

Contracts traded on the options exchanges are standardized under rules set by the Options Clearing Corporation (O.C.C.), a subsidiary of the CBOE. The O.C.C. issues the contracts, guarantees the contracts, and acts as clearing house for all listed options trades.



**O.C.C. Contract Specifications**

O.C.C. rules are designed to make options easier to trade. Because of the standardization procedure, the only item left to the market is to determine the premium. Options are not traded on all equity securities, only larger capitalization issues that are actively traded - mostly New York Stock Exchange and NASDAQ Global Market traded equity issues.

**Contract Size:** Every contract on an equity option covers 100 shares.

**Strike Price**

New contracts are issued at prices that are based on the existing market price. For most stocks, the interval is set at 2 1/2 points. Therefore, if a stock is at \$21, contracts cannot be issued at a \$21 strike price, but they could be issued at strike prices of \$17.50, \$20.00, \$22.50, etc.

For each stock trading at \$20 or less, strike prices can be issued up to 100% higher or lower. For stocks over \$20, the range is +/- 50%. So if a stock is trading at, say, \$50, options can now be issued with strike prices ranging from \$25 to \$75.

**Premium Increments:**

Premiums are quoted in "pennies," in minimum increments of 5 cents for contracts trading below \$3; and 10 cents for contracts trading at \$3 or more.

However, in 2007 the CBOE and the other options exchanges have been rolling out a "penny pilot program" that permits trading of the more active contracts in "penny" (\$.01) increments. This is being expanded through 2010.

**Expiration Date:**

Contracts expire on the Saturday following the third Friday of each month. The actual time of expiration is 11:59 PM Eastern Standard Time.

**Expiration:** Once a contract is issued, it trades until its expiration date. For each equity security, an option contract can always be issued for the current trading month ("spot") and for the "next month." For example, if it is now May 1, contracts can be issued for May ("spot") and June ("next month").

**Spot**

**Next Month**

In addition, each equity security is assigned to an expiration "cycle." There are 3 cycles:

|                        |            |            |             |            |
|------------------------|------------|------------|-------------|------------|
| <b>Cycle 1----&gt;</b> | <b>Jan</b> | <b>Apr</b> | <b>Jul</b>  | <b>Oct</b> |
| <b>Cycle 2----&gt;</b> | <b>Feb</b> | <b>May</b> | <b>Aug</b>  | <b>Nov</b> |
| <b>Cycle 3----&gt;</b> | <b>Mar</b> | <b>Jun</b> | <b>Sept</b> | <b>Dec</b> |

For example, Mobil is on Cycle 2 - the only Mobil contracts that can be issued, other than "spot" and "next" month, are Feb, May, Aug, and Nov.

For example, General Electric is assigned to Cycle 3. The only GE contracts that can be issued, other than "spot" and "next" month, are for Mar, Jun, Sept, and Dec.

**Next 2  
Expiration  
Months**

Aside from the "spot" and "next month" contracts, all of the regular expiration dates within each cycle **do not** trade at the same time. Based upon the current date, only the **next two** available expiration months within the cycle trade.

Based upon a current date of May 1st, the GE (Cycle 3) contracts that are permitted to trade are:

|                  |   |
|------------------|---|
| <b>May</b>       | <b>(spot);</b>  |
| <b>June</b>      | <b>(next month);</b>  |
| <b>September</b> | <b>(the first upcoming regular cycle month in Cycle 3);</b> |
| <b>December</b>  | <b>(the next upcoming regular cycle month in Cycle 3).</b>  |

Once the May contracts expire, say on May 20th, the contracts that would be trading for GE are:

|                  |   |
|------------------|---|
| <b>June</b>      | <b>(spot);</b>  |
| <b>July</b>      | <b>(next month);</b>  |
| <b>September</b> | <b>(the first upcoming regular cycle month in Cycle 3);</b> |
| <b>December</b>  | <b>(the next upcoming regular cycle month in Cycle 3).</b>  |

Once the June GE contracts expire, say on June 20th, the contracts that will be trading for GE are:

July (spot);  
August (next month);  
September (the first upcoming regular cycle month in Cycle 3);  
December (the next upcoming regular cycle month in Cycle 3).

Once the July GE contracts expire, the contracts that will be trading for GE are:

August (spot);  
September (next month);  
December (the first upcoming regular cycle month in Cycle 3);  
March (the next upcoming regular cycle month in Cycle 3).

**Actual  
Maximum  
Contract  
Life -  
8 Months**

Note that the March contracts may start trading as soon as the July contracts expired. This occurs 8 months from the July expiration date. Thus, the actual maximum life of an equity options contract is 8 months.

**Technical  
Maximum  
Contract  
Life -  
9 Months**

However, the Options Exchanges are permitted to issue contracts with a given expiration month that is 9 months in the future. As an example, for a Cycle 1 company, once January contracts expire, October contracts can be opened. Though this is not the current practice, it must be known for the examination.

**Trading  
Hours:**

Normal trading hours for listed equity options are 9:30 AM - 4:00 PM Eastern Standard Time (EST).

**Opening  
Rotation:**

At the start of trading each day, an "opening rotation" is conducted, where each options series is traded briefly by itself. The purpose of the opening rotation is to establish a single opening price for each contract trading in that market. After completing the rotation, regular trading is started.



**Trading  
Cut Off:**

The last day to trade equity options is on the Friday prior to expiration (expiration occurs on the Saturday following the third Friday of the month). The last time to trade on this day is 4:00 PM EST.

**Closing  
Rotation:**

On the last trading day for contracts that are about to expire, the CBOE, after the close of regular trading (after 4:00 PM) conducts a "closing rotation." Each options series is traded by itself, for a brief time period, during this closing rotation. This allows final last minute closing trades of any contracts that are about to expire to be conducted systematically.

**Exercise  
Cut Off:**

The last day to exercise equity options is on the Friday prior to expiration (expiration occurs on the Saturday following the third Friday of the month). The last time to exercise on this day is 5:30 PM Eastern Standard Time. Note that the OCC automatically exercises any contracts that are \$.01 in the money at expiration

**Automatic  
Exercise**

**CEA -  
Contrary  
Exercise  
Advice**

A special form called a "CEA" - Contrary-Exercise Advice - must be used to stop the automatic exercise or to change the parameters of the automatic exercise. This instructs the OCC of the customer's "contrary intention." These are accepted for up to 2 hours after the 5:30 PM exercise cut-off (so they are accepted until 7:30 PM ET on the third Friday).

**American  
Style Option:**

Note that equity options are so-called "American style" options that are exercisable any time until expiration. This contrasts to so-called "European-style" options that are only exercisable at expiration (not before).

Regarding the cut-off times, please remember that the Options Clearing Corporation is based in Chicago (it started as part of the CBOE), and operates on Central Time. To translate these times into Central Time, **subtract** 1 hour.

## 9b. OPTIONS CLEARING CORPORATION RULES

### Options Clearing Corporation

The Options Clearing Corporation (O.C.C.) has a number of rules by which customers and registered representatives must abide.

### Options Disclosure Document - Given To Customer No Later Than Time Account Is Approved For Options Trading

Before opening an options account, the O.C.C. requires that the customer receive an "Options Disclosure Document" published by the O.C.C. The date it is furnished to the customer is entered on the New Account Form. The actual rule for delivery states that it must be delivered to customers no later than the time that the account is approved for options trading, and this must be known for the exam.

### Options Clearing Corporation Prospectus Provided To Customers Upon Request

A more detailed version of the Options Disclosure Document is the Options Clearing Corporation Prospectus. This document give extremely detailed information about the functions of the O.C.C. and options trading. This document must be provided to any customer that so requests.

These documents detail the characteristics and risks of standardized options, and the rules under which the exchanges and O.C.C. operate. Some of the more important rules are:

**Settlement of Options Trades:** Trades of options are settled regular way **next business day**.

**Maintenance of Records:** The O.C.C. keeps the record of who has long option positions and short option positions in the name of the brokerage firm. The list is updated daily as of the settlements for that day. If a customer decides to exercise, he notifies his brokerage firm, who notifies the O.C.C.

**Assignment of Exercise Notices:** When the O.C.C. receives an exercise notice from a brokerage firm, it selects a short contract to be exercised on a **random order** basis.

When the brokerage firm that has the short position receives that notice from the O.C.C., it is permitted to select the particular customer to be exercised on either a **"first-in, first-out" or random order** basis. Once a firm has chosen a method, it cannot change it without a valid reason, and must give the CBOE notice of the change and receive approval for the change.

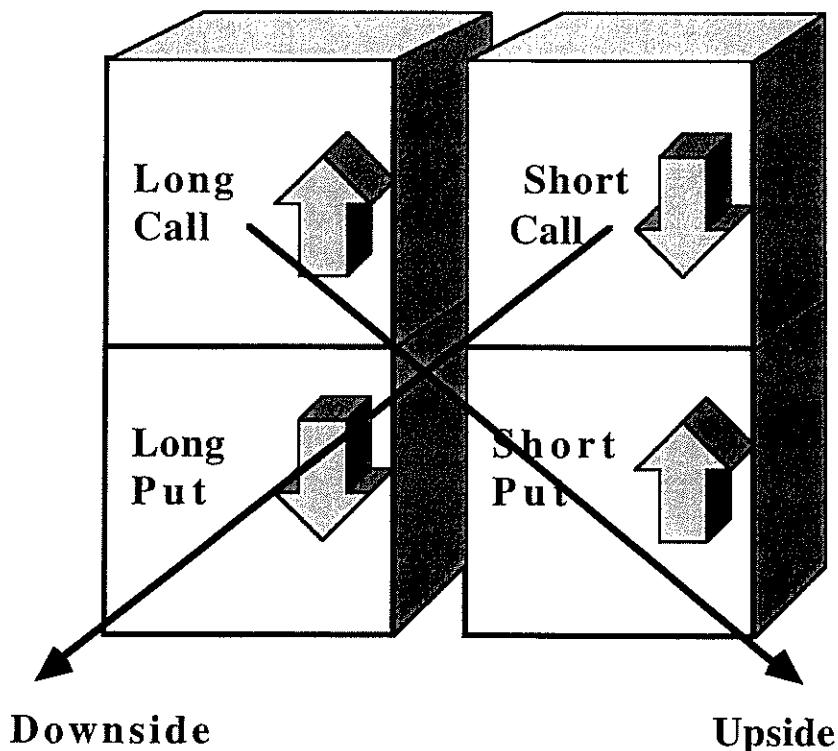
**Settlement When Exercised:** All assignments of exercise notices are based upon positions held at the close of business the previous day. If an exercise



occurs, this results in a regular way stock trade in the underlying security. Thus, if a call writer is exercised, the stock must be delivered 3 business days after exercise date. If a put writer is exercised, he or she must pay the strike price to buy the stock 3 business days after exercise date.

**Position Limits:** A person who accumulates a large number of contracts has "control" over 100 times that number of shares of stock. The O.C.C. limits the number of positions that any individual can take (or group of individuals "acting in concert"). The limit varies depending on the trading volume of the underlying stock - the higher the trading - the higher the limit.

This limit is applied to each "side" of the market, with the Exhibit below showing that:



The "upside" of the market consists of:

Long Calls and Short Puts;

The "downside" of the market consists of:

Long Puts and Short Calls.

For example, with a 75,000 contract position limit:

75,000 long calls and 75,000 long puts  
do not exceed the limit and are acceptable;

75,000 long calls and 75,000 short puts  
**EXCEED** the limit and are **NOT** acceptable.

### Position Limits

The actual position limits depend on the trading volume of the underlying security - there are 5 tiers based on trading volume. The more actively traded issues have higher option contract position limits than less actively traded ones. Also note that the actual position limit figures are not tested.

### Report To CBOE Of Customer Options Positions Of 200 Or More Contracts In One Class

In addition, the CBOE requires that member firms report, no later than the close of business on the following business day, any customer who has an aggregate long or short position of 200 contracts or more in any one class of option.

**Exercise Limits:** In addition to position limits, there are limits on the number of contracts that can be exercised within any **5 business day** (1 working week) period. Exercise limits also vary depending on the trading volume of the underlying stock, but you do not have to know the specific limits.

### No Adjustment For Cash Dividends

**Adjustments to Contracts:** Option contracts are **not** adjusted for cash dividends. When a stock goes ex-dividend, the strike prices are left alone.

### 2:1 Or 4:1 Splits Number of Contracts Up / Strike Reduced

Contracts are adjusted for stock splits that are either 2:1 or 4:1. The strike price is reduced and the number of contracts is increased.

For example, ABC stock splits 2:1.

**Before:** 1 ABC Jan 60 Call  
**After:** 2 ABC Jan 30 Calls

### Fractional Split No Change To Contract But "Deliverable" Is Adjusted

For fractional splits and stock dividends, there is no change to the terms of the contract as it is traded. Instead, if there is an exercise, the "deliverable" is adjusted.

For example, ABC stock "pays" a 20% stock dividend.

**Before:** 1 ABC Jan 60 Call  
**After:** 1 ABC Jan 60 Call

### Strike Price And Multiplier Are Unchanged

The contract remains with a strike price of 60 and a multiplier of 100. If there is an exercise of the contract, then the delivery amount and price are "fixed" to reflect the value of the stock dividend or fractional stock split.

**Adjustment  
To Deliverable**

For the 20% stock dividend, the adjusted deliverable will be:

$$100 \times 1.2 = 120 \text{ shares at } \$60/1.2 = \$50$$

Note that after the deliverable adjustment, the aggregate exercise value of the contract does not change. Before, the contract covered 100 shares at \$60 = \$6,000 of stock. After, the contract covers 120 shares at \$50 = \$6,000 of stock.

Also note that because the contract strike is not adjusted, but the actual market price is adjusted on "ex" date, it might appear that these unadjusted contracts are "in" or "out" of the money when they really are not. For these contracts, simply comparing the strike price to the market price will not work to determine whether the contract is "in" or "out" of the money.

**Reverse Stock Split  
Contract Is  
Unchanged**

Finally, note that for reverse stock splits as well, there is no adjustment to the contract - only the deliverable is adjusted if there is an exercise.

For example, ABC stock splits 1:3

**Before:** 1 ABC Jan 20 Call  
**After:** 1 ABC Jan 20 Call

If there is an exercise, the deliverable becomes:

$100/3 = 33.33$  shares at  $\$20 \times 3 = \$60$ . (Note: In this case, the fractional .33 share amount value would be paid in cash and only 33 shares delivered.)

**Covered Writing Positions:** Writers of naked options assume large risk positions and are required to make large margin deposits to the Options Clearing Corporation to protect the brokerage firm. A "covered" writer is covered against this risk and hence does not have to put up margin on the short option position. The following positions cover the sale of options by a customer:

**"Covered Call Writing Positions"  
Short Call (Unlimited Upside Risk)**

1. Long the underlying stock (or equivalent security such as a convertible or warrant) (a "covered call writer")
2. Long a call at the same strike price or lower that expires in the same month or after the short call  
(creating a "debit" or long call spread)

Please note that being "long a call" with a nearer expiration will **not** cover a short call. This makes sense, because the long call might expire, and the remaining short call is "naked" for the time left until expiration.

3. **Long an escrow receipt for the stock**  
(the stock is held in a bank vault - not with the broker)
4. **Bank guarantee letter**  
(the bank will pay if the customer can't upon exercise)

**"Covered Put Writing Positions"**  
**Short Put (Increasing Risk as Market Falls)**

1. **Short the underlying stock position**  
(creating a "covered put writer")
2. **Long a put at the same strike price or higher that expires in the same month or after the short put**  
(creating a "debit" or long put spread)

Please note that being "long a put" with a nearer expiration will **not** cover a short put. This makes sense, because the long put might expire, and the remaining short put is "naked" for the time remaining until expiration.

3. **Bank guarantee letter / cash escrow receipt**

Since the writer of a put is obligated to buy the stock if exercised, having cash equal to the strike (purchase) price on deposit covers a short put.

**9c. LONG TERM STOCK OPTIONS (LEAPs)**

The CBOE and other exchanges introduced a new equity options product in late 1990, in an effort to increase investor interest in stock options trading. The new contracts are "long term" equity options, with a longer life than the 9 month maximum for regular stock options.

**LEAPs**

So-called "LEAPs" - Long-term Equity AnticiPation options are issued after the May expiration with an expiration approximately 30 months later. For example, after the May 2011 expiration, for Cycle 1 companies, LEAPs will be issued

for January 2014. After the May 2012 expiration, LEAPs will be issued for January 2015, etc.

This means that for any given company at any time, there will be 4 near term options and 2 or 3 LEAPS available.

Assume that a company is assigned to Cycle 1 and it is now April 1st, 2011. The contracts that will be trading will be:

|                  |                                 |
|------------------|---------------------------------|
| April '11        | (this month)                    |
| May '11          | (next month)                    |
| July '11         | (1st upcoming month in Cycle 1) |
| October '11      | (2nd upcoming month in Cycle 1) |
| January '12 LEAP |                                 |
| January '13 LEAP |                                 |

Now assume that it is right after the May '11 expiration. The contracts that will be trading for this Cycle 1 company are:

|                  |  |
|------------------|--|
| June '11         | (this month)   |
| July '11         | (next month)   |
| October '11      | (1st upcoming month in Cycle 1)  |
| January '12      | (2nd upcoming month in Cycle 1 -<br>the January '12 LEAP has converted<br>to a regular option because its<br>maturity is now under 9 months) |
| January '13 LEAP |  |
| January '14 LEAP |  |

LEAPs allow investors to position themselves for market movements that are expected over a longer period of time. LEAPs trade alongside the regular stock options, and have much higher time premiums since their expiration is much longer. LEAPs have proven to be a successful new product, and trading volumes are growing.

## **EQUITY OPTIONS CHARACTERISTICS SECTION EXAMINATION**

**1.**

The last time to trade an equity option that is about to expire is:

- a. 4:00 PM EST; 3:00 CST; on the third Friday of the month
- b. 4:00 PM EST; 3:00 CST; on the Saturday following the third Friday of the month
- c. 5:30 PM EST; 4:30 CST; on the third Friday of the month
- d. 5:30 PM EST; 4:30 CST; on the Saturday following the third Friday of the month

**2.**

In determining whether there has been a violation of position limits, long calls will be aggregated with:

- I Long Puts
  - II Short Calls
  - III Short Puts
- 
- a. I only
  - b. II only
  - c. III only
  - d. I, II, III

**3.**

If an equity put holder exercises a contract, the holder must:

- a. deliver cash in 1 business day
- b. deliver stock in 1 business day
- c. deliver cash in 3 business days
- d. deliver stock in 3 business days

**4.**

The O.C.C. assigns exercise notices to writers on a:

- a. first-in; first-out basis
- b. last-in; first-out basis
- c. random order basis
- d. method of reasonable fairness

**5.**

The maximum life on an equity LEAP contract approximately is:

- a. 12 months
- b. 24 months
- c. 30 months
- d. 38 months

**6.**

A customer's short put is considered to be "covered" by a:

- I Long put with the same strike price or higher with the same expiration or later
  - II Bank guarantee letter
  - III Short stock position in the underlying security
- 
- a. I only
  - b. I and II
  - c. II and III
  - d. I, II, III

**7.**

Options strike prices are adjusted on "ex" date for:

- a. cash dividends
- b. stock dividends
- c. 2:1 stock splits
- d. 3:2 stock splits



Use the following information to answer the next 2 questions:

ABC corporation is trading in the market for \$51. The corporation declares a 25% stock dividend.

8.

After the ex date, the holder of 1 ABC Jan 50 Call will have:

- a. 1 ABC Jan 50 Call
- b. 1.25 ABC Jan 50 Calls
- c. 1 ABC Jan 40 Call
- d. 1.25 ABC Jan 40 Calls

9.

If there is an exercise, the number of shares that will delivered will be:

- a. 80
- b. 100
- c. 120
- d. 125

10.

Which of the following are "classes" of options?

- I ABC Calls
- II ABC Puts
- III ABC Jan 50 Calls
- IV ABC Jan 50 Puts

- a. I and II
- b. I and III
- c. II and III
- d. III and IV

## EQUITY OPTIONS SECTION EXAMINATION EXPLANATIONS

1. The best answer is a. The last time to trade an equity option contract that is about to expire is 4:00 PM Eastern Standard Time (3:00 PM Central Time) on the third Friday of the expiration month. The contract can be exercised until 5:30 PM EST on that day. Any expiring contracts that have not been closed by trading or exercise on that third Friday will expire at 11:59 PM EST on the Saturday following the third Friday of the expiration month.
  2. The best answer is c. Long calls and short puts constitute the "up" side of the market. Long puts and short calls constitute the "down" side of the market. Position limits are applied to each "side" of the market.
  3. The best answer is d. If the holder of an equity put exercises, he is selling the stock at the strike price. Settlement is 3 business days after exercise date - this is a regular way stock trade.
  4. The best answer is c. If an option contract is exercised by a holder, a writer is selected by the Options Clearing Corporation to perform on the contract on a random order basis.
  5. The best answer is c. The maximum life on an equity LEAP (Long Term Equity AnticipaPtion option) contract is about 30 months. New contracts are issued after the May expiration of each year, with these contracts expiring 30 months later (January).
  6. The best answer is d. A customer's short put is "covered" by a short stock position in the same security. If the put is exercised, the customer is obligated to buy stock that he has previously sold short. Therefore, he would have the physical shares to replace the borrowed stock that was sold, and would not incur a loss upon exercise. A long put with the same strike price or higher (thus creating a long put spread) or a bank guarantee letter (where the bank assumes responsibility for loss upon exercise) also cover the sale of a put.
  7. The best answer is c. Options are not adjusted on ex date for cash dividends, nor are they adjusted for stock dividends or fractional splits. Because there is no adjustment of the strike price or multiplier for stock dividends or fractional splits, if there is an exercise, the "deliverable" will be adjusted. Listed option contract strike prices are only adjusted for 2:1 or 4:1 stock splits, with the number of contracts being increased proportionately.
  8. The best answer is a. This is a stock dividend, where there is no adjustment to the contract on ex date to the strike price or the multiplier. Both before and after the ex date, the contract will be 1 ABC Jan 50 Call. If the contract is exercised, the "deliverable" will be adjusted for the 25% stock dividend. The deliverable will now become
- $100 \times 1.25 = 125$  shares at  $50/1.25 = \$40$
9. The best answer is d. See prior explanation.
  10. The best answer is a. A class of option consists of all options of one type on an underlying security. For example, all ABC calls are a "class;" all ABC puts are a "class."

## SECTION 10: CHARACTERISTICS OF STOCK INDEX OPTIONS

### 10a. OVERVIEW

The "idea" behind individual stock options is carried one step further with index options. A market "index" is composed of a number of issues traded. For example, the Standard and Poor's 500 Index is composed of the 500 largest companies (based on market capitalization) headquartered in the United States. If one believes that the market as a whole will rise, instead of picking calls on individual stocks, why not buy a call on the index instead? If one thinks the market as a whole will fall, why not buy a put on the index?

Index options are considered by some people to be gambling. This is not really true. Assume that one is a portfolio manager, with \$100,000,000 invested in NYSE issues. One can protect the portfolio against a drop in the market by purchasing individual puts on each stock position. Alternatively, one can buy index puts as a hedge - which is simpler and cheaper. Maybe the manager believes that the market will stay flat and wants to earn some extra income during this time period. Why not sell index calls against the portfolio for the added premium income?

All of the strategies that were discussed using equities as the underlying security apply to **all** option contracts - including index options.

We all should know the name of the most widely quoted index - the Dow Jones Industrial Average. It consists of 30 industrial stocks listed on the NYSE, such as IBM, GE, Exxon, American Express, etc. The DJIA is the index one always hears quoted in the news - such as "The Dow was up 20 points today." It would make sense that an index option would be traded on the DJIA, but Dow Jones and Co. did not (until October of 1997) allow its name to be put on an index option because it believed that "gambling" using its index could have a negative effect on its value.

**Standard and Poor's 100 Index (OEX)**

**Traded On CBOE**

The very first index option was introduced in 1983 by the Chicago Board Options Exchange (about 10 years after stock options first started trading in that market). At that time, the CBOE attempted to license the DJIA, but was rebuffed by Dow Jones. Instead, the CBOE went to Standard and Poor's to license the S & P 500 index. Standard and Poor's problem with the licensing was that if the contract was a failure, it could reflect badly on their index, so a compromise was

struck. A sub-index of 100 stocks out of the 500 was created, called the S & P 100 index. An index option was created by the CBOE called the "OEX" - as in Options Exchange Index - that started trading in 1983.

|   |  |
|---|--|
| <b>OEX - American Style</b>                     | Trading in this index option exploded after introduction, and the other exchanges that trade options quickly came out with products for this marketplace. The OEX became the most actively traded option contract in the world. It was modeled after traditional stock options, in that it is an "American Style" option - that is, one that is exercisable at any time.   |
| <b>Very Actively Traded Option On CBOE</b>      |  |
| <b>Standard and Poor's 500 Index (SPX)</b>      | With the success of the OEX, the CBOE was able to license the full S & P 500 index, and introduced the "SPX" index option in 1984. First introduced as an American Style option, it was changed to a "European Style" option about 6 months later. A European Style option is one that is exercisable only at expiration. These contracts are more attractive to institutional writers, since there is no risk of an unexpected exercise. This contract has also been very successful - the SPX is now the most actively traded index option contract. |
| <b>Traded On CBOE</b>                           |  |
| <b>SPX - European Style</b>                     |  |
| <b>Major Market Index (XMI)</b>                 | The American Stock Exchange came up with an index that mimics the DJIA - it is called the Major Market Index and consists of 20 stocks, most of which are in the DJIA. The Major Market Index, known as the "XMI" index, tracks the DJIA with 99% accuracy.  |
| <b>Traded On AMEX</b>                           |  |
| <b>Dow Jones Industrial Average Index (DJX)</b> | In October of 1997, Dow Jones and Co. finally decided to license its Dow Jones Industrial Average to the Chicago Board Options Exchange, stating at the time that it believed that the options market had matured enough; and that investors had become sophisticated enough; to allow trading of options on the index. The Dow Jones Industrial Average Index option (DJX) covers the 30 stocks in the industrial average.  |
| <b>Traded On CBOE</b>                           |  |
| <b>OEX, SPX and XMI - "Broad Based"</b>         | The most popular index options, by far, are the OEX and SPX, with these being the most actively traded of all options. The XMI has not been as successful. These are termed "broad based contracts" since they measure a cross section of the market.  |
| <b>"Narrow Based"</b>                           |  |
| <b>9 Or Fewer Stocks</b>                        | Other index options were devised using sectors of the market - such as an airlines index, an energy index, etc. These are termed "narrow based contracts" and have been relatively unsuccessful. The technical definition of a narrow-based index is one with 9 or fewer stocks; where no one stock is more than 30% of the value of the index; and no more than 60% of the index value is attributable to the 5 largest stocks in the index.  |

**10b. OEX (S & P 100) INDEX OPTION**

The OEX index option is traded on the Chicago Board Options Exchange and it mirrors price movements in the broad market. Instead of covering 100 shares, the contract is said to have a "multiplier" of 100.

If a holder of an index call exercises, he is not delivered 100 bundles of the 100 stocks in the index at the strike price. Similarly, if the holder of an index put exercises, he does not sell 100 bundles of the 100 stocks in the index at the strike price.

**Exercise Settles In  
Cash At Closing  
Index Value**

Exercise of index options results in a settlement in cash. If the holder of a call or put exercises, the writer must pay to the holder the difference between the strike price and the closing index value that day. Since the OEX option is American style, it can be exercised at any time. Also note that as a general rule, all of the other index options are European style - and can only be exercised at expiration. In reality, very few contracts are ever exercised. Positions are closed by making offsetting trades in the market.

Following is a financial listing for OEX contracts:

### S & P 100 Index (Chicago)

| Option & N Y Close                                   | Strike Price | Calls - Last |       |       | Puts - Last |               |       |
|--|--------------|--------------|-------|-------|-------------|---------------|-------|
|  |              | Sep          | Oct   | Nov   | Sep         | Oct           | Nov   |
| 495.54   | 490          | 11.75        | 14.75 | 17.50 | 5.50        | 11.00         | 14.50 |
| 495.54   | 495          | 8.50         | 12.25 | 14.75 | 7.65        | 11.75         | 16.40 |
| 495.54   | 500          | 6.00         | 10.50 | r     | 10.40       | 17.40         | r     |
| 495.54   | 505          | 4.00         | 7.50  | 11.00 | 13.00       | 19.00         | r     |
| <b>Total Call Vol: 64,749 Call Open Int: 229,354</b> |              |              |       |       |             | r: Not Traded |       |
| <b>Total Put Vol: 53,995 Put Open Int: 220,087</b>   |              |              |       |       |             |               |       |

A customer who believes that the market will rise can buy an OEX Call. Assume a customer takes the following position:

Buy 1 OEX Sep 490 Call @ \$11.75  
OEX Close: 495.54

The customer pays a premium of \$11.75 times a multiplier of 100 equals a total cost of \$1,175 for the contract. Trades settle next business day.

The contract covers a "value" of 490 index strike price times a multiplier of 100 = \$49,000. If this customer decided to exercise the contract (which technically cannot happen until the trade settles the next day), he does not take delivery of the index! The seller is obligated to pay to the holder:

|                  |        |         |          |
|------------------|--------|---------|----------|
| Contract Price = | 490    | x 100 = | \$49,000 |
| OEX Close =      | 495.54 | x 100 = | \$49,554 |

|                          |        |
|--------------------------|--------|
| Paid by seller to holder | \$ 554 |
|--------------------------|--------|

**Upon Exercise,  
Seller Pays Buyer  
"In the Money"  
Amount Computed  
Based Upon Closing  
Index Value**

If an index option is exercised, the seller must pay the holder the **next** business day. Notice that the seller pays the holder the closing index value. If a call holder exercised during this day when the OEX was at 515.82 at 1:00 PM and then the market fell sharply to close at 495.54, the cash settlement would be calculated from the **closing price** - not the price at the moment of exercise.

The OEX (or SPX) is used by portfolio managers who wish to hedge or get extra income. Assume that a portfolio manager runs a \$1,000,000 portfolio of "blue chip" stocks. To protect against a fall in the market, the manager can buy OEX Puts. Assume the manager decides to buy the following:

**Existing Portfolio: \$1,000,000 "Blue Chip" stocks**

**Hedge: Buy 20 OEX Sept 500 Puts @ 10 3/8**

**Matching Number Of  
Contracts To Hedge  
Portfolio**

Since each contract covers  $500 \times 100 = \$50,000$  of value, 20 contracts must be purchased to hedge the portfolio. If the market drops, the portfolio cannot be "put" to the writer. Instead, the cash profit on the put contracts will offset the loss in value of the portfolio.

**Beta - Measures  
Volatility**

Assume that one has a portfolio that tracks the market, but it consists of more volatile stocks. The measure for volatility is called the **"beta."** If one's portfolio moves as fast as the market as measured by the S & P 500 index, the portfolio has a beta of 1; a beta of 2 means the portfolio is twice as volatile; 3 means 3 times as volatile, etc.

**Can Use Beta  
Weighted Contracts  
To Hedge Against  
Systematic Risk**

To hedge a \$1,000,000 portfolio with a beta of 2, one needs **twice** the number of contracts. (Remember, if the index falls, one's portfolio falls twice as fast.) Matching portfolio "betas" allows for hedging against "market risk". This is the risk that the market will drop, taking the portfolio value with it. Market risk is also known as "systematic risk."

**Cannot Hedge  
Against  
Unsystematic Risk**

Hedging with index contracts does not protect against "unsystematic risk." This is the risk that a specific security may turn into a bad investment.

As a second example, assume that it is believed that the market will stay flat for the next few months. The portfolio manager decides to generate extra income from the portfolio by selling 20 OEX Sep 500 Calls @ \$6 (collecting  $\$600 \times 20$  contracts =  $\$12,000$ ). If the market rises, any gain



on the portfolio will be offset by an equal loss on the short calls (but one wouldn't do this if it was thought that the market will rise). If the market drops, the calls expire and the premiums are kept as a partial hedge against stock losses in the portfolio.

### 10c. OEX / SPX LEAPS

#### **OEX / SPX LEAPS**

#### **Long Term Index Options**

#### **Index LEAP Maximum Life Is About 36 Months**

#### **Minimum Premium**

A newer type of index option is a contract with a long life. On the CBOE, these are known as "LEAPs" - Long-term Equity AnticiPation options. LEAPs cover both the OEX and SPX indexes. Both of these products expire in December of each year, and contracts are issued for each of the two Decembers after the current year.

For example, in the beginning of December of 2010, index LEAPs are available with December '10 (about to expire), '11, and '12 expirations. After the Dec '10s expire, the '11s and '12s still trade; and in January of 2011, LEAPs are issued with a Dec '14 expiration. Thus, the maximum life on these contracts is 35 months (but this is tested as 36 months).

The LEAP contract is issued in the same "style" as the regular index option. Thus, OEX LEAPS are American style options; while SPX LEAPS are European Style Options. If LEAP contracts on indexes are exercised, the writer must pay the holder the "in the money" amount (identical to the exercise of regular index options). For LEAP index contracts, the multiplier is 100.

Following is a comparison of the OEX, along with its LEAP variant, to a regular stock option.

|                             | <b>Stock Option</b>                         | <b>OEX Option</b>                           |
|-----------------------------|---|---|
| <b>Multiplier:</b>          | 100   | 100   |
| <b>Trade Settlement:</b>    | Next Day                                    | Next Day                                    |
| <b>Exercise Settlement:</b> | 3 Bus. Day<br>Delivery of Stock             | Next Day<br>Delivery of Cash                |
| <b>Premium Increment:</b>   | \$0.05 if < \$3;<br>\$0.10 if \$3 or higher | \$0.05 if < \$3;<br>\$0.10 if \$3 or higher |

(Note: For any stock option contract that is in the "penny pilot program," the minimum premium increment is \$.01)

|                         |   |   |
|-------------------------|---|---|
| <b>Maximum Life:</b>    | 8 months<br>(may be tested as 9 months)               | 4 months<br>(may be tested as 3 months) |
| <b>Style:</b>           | American  | American                                |
| <b>LEAP Max. Life:</b>  | 30 months   | 36 months                               |
| <b>LEAP Style:</b>      | American  | American                                |
| <b>Trading Cut-Off:</b> | 4:00 PM EST   | 4:15 PM EST                             |
| <b>Expiration:</b>      | Saturday following 3rd Friday Of Month @ 11:59 PM EST |   |

#### 10d. OTHER INDEX OPTIONS

|                                  |   |
|----------------------------------|---|
| <b>Russell 2000 Index (RUT)</b>  | Russell 2000 Index (RUT) contract traded on the CBOE. The Russell 2000 Index consists of small capitalization stocks, specifically the bottom 2,000 stocks out of the largest 3,000 stocks by market capitalization traded in the U.S. This index option is moderately successful. Note that this index's price movement will not correlate as well with a large capitalization portfolio's price movement. |
| <b>Major Market Index (XMI)</b>  | Major Market Index (XMI) contract traded on the AMEX. It consists of 20 stocks and mimics the Dow Jones Industrial Average. With the advent of the DJX option on the CBOE, this contract will probably be discontinued.   |
| <b>Value Line Contract (VLE)</b> | Value Line Index (VLE) contract traded on the Philadelphia Exchange (PHLX). The Value Line index consists of approximately 1700 common issues, selected from the NYSE, AMEX, and OTC markets. This contract would be useful to a portfolio manager whose securities mirrored this selection. This contract has been unpopular, and will probably be discontinued. The multiplier is 100.                    |
| <b>NASDAQ 100 Index (NDX)</b>    | NASDAQ 100 Index (NDX) traded on the CBOE. The NDX consists of the 100 largest non-financial NASDAQ stocks based on market capitalization.  |
| <b>Narrow Based Contracts</b>    | A variety of narrow based index options contracts are traded on the various exchanges. These contracts are either country specific or industry specific. Examples of these narrow based contracts are:  |
|                                  | CBOE: Mexico Index (MEX)<br>Technology Index (TXX)  |
|                                  | AMEX: Japan Index (JPN)<br>Pharmaceutical Index (DRG)   |

**Narrow Based Contracts Have Higher Betas**

**Most Contracts Other Than OEX Are European Style**

**VIX - Volatility Index Options**

**VIX Based On SPX Expected Volatility Over Next 30 Days**

**VIX Value Of "0" Implies Flat Market**

**VIX Negatively Correlated To Stock Price Movements**

PHLX: Gold/Silver Index (XAU)  
Oil Service Index (OSX)

It is not necessary to memorize these for the examination, but, for example, it should be known that these portfolios will tend to have higher "betas" than broad based indexes; and that they are available, though not very actively traded, in the market. In contrast to the OEX (Standard and Poor's 100 Index option), which is American style, the other contracts, including the XMI, SPX and narrow based contracts; and any LEAPS on these contracts; are typically issued in European style only.

### 10e. VIX OPTIONS

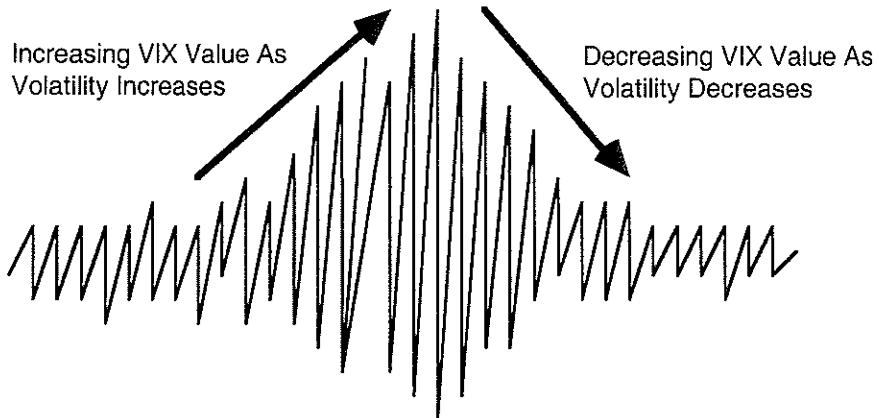
"VIX" is the trading symbol for S & P Volatility Index Options. This is a benchmark index that gauges investor sentiment - commonly referred to as a "fear gauge."

The index is derived from real-time S & P 500 Index option (SPX) bid and ask quotes. It reflects investors' consensus view of expected stock price volatility over the upcoming 30 days. It uses a formula to derive expected volatility excluding changes in underlying price, dividends, interest rates and time to expiration (these are the regular determinants of the option premium).

What is truly odd about the "VIX" contract is that it is an option on a futures contract. In 2003, the CBOE started the "CFE" - the Chicago Futures Exchange - to electronically trade futures and options on futures. However, the CFE uses the CBOE's electronic trading platform to trade, so the contract is deemed to be "SEC" regulated and not CFTC regulated - hence it is a securities product that can be tested on Series 9!

A VIX value of "0" implies no market volatility over the next 30 days - that is no daily change in the S & P 500 Index. An extreme VIX measure (the VIX has tended to range between 15 and 50) implies high volatility. However, historically, the S & P Index is not very volatile - rarely moving more than 5% in a given day. Very low VIX levels imply that the market is calm and the next likely market move is upwards. Very high VIX levels indicate heightened investor fear and the next market move is likely to be down.

During normal market conditions, the VIX is negatively correlated to the price movements of the S & P 500 Index. The "idea" here is that when VIX values are rising (increasing market volatility), this is an indicator of increased "fear" and an impending market decline.



Conversely, when VIX values are falling (decreasing market volatility), this is an indicator of increased "confidence" and an impending market rise.

CBOE statistics show that over the past 15 years, during days of sharp price movement in the S & P 500 Index, when stock prices dropped on average 4%, the VIX went up by 17%; and on days when the S & P 500 Index rose by 4%, the VIX dropped by 9% (all numbers are rounded). Thus, the VIX could be used as a "catastrophic hedging tool" for stock portfolios.

The index allows risk managers and hedge funds to trade "volatility," and market makers that trade "volatility" can use these options to hedge their positions.

This option contract differs from standard index options in that the:

contracts available are the upcoming 2 months plus 1 more upcoming month based on the February quarterly cycle (either Feb., May, Aug., or Nov.);

contract is a 30-day benchmark of expected market volatility as measured by SPX options' prices.

Exercise settlement is based upon a monthly calculation of expected market volatility over the upcoming 30 days. It is based on SPX options that will expire exactly 30 days prior to the third Friday of the following calendar month;

exercise settlement calculation is not performed on the Friday that is 30 days prior to expiration, but the Wednesday morning before. Options exercises settle on this Wednesday, so that the expiration does not coincide with the regular index option exercises



(which occur on the third Friday). Exercise settlement is in cash, on the business day following the calculation;

last day to trade an expiring contract is the Tuesday before the monthly Wednesday morning exercise-settlement value calculation;

underlying value of the VIX option is the forward value (expected future value) of SPX options expiring 30 days later. A June VIX contract measures implied market volatility for the July following; a July VIX contract measures implied market volatility for the August following, etc.

This option contract is the same as regular index options in that the:

contract multiplier is \$100;

contract is only issued in European Style;

contract trades between 9:30 AM and 4:15 PM ET (8:30 AM and 3:15 PM CT);

exercise settlement occurs in "cash" the next business day, with the writer paying the holder any "in the money" amount.

## 10f. INDEX WARRANTS

As opposed to issuer-created warrants that are attached to new issue bond and preferred stock offerings as a sweetener, index warrants are created by a broker-dealer or bank and are settled and cleared through the OCC (Options Clearing Corporation).

There are both index call warrants and index put warrants, and they are available on a broad range on stock indices (including foreign indices) as well as individual stocks and currencies.

Index warrants are really no different than options, however index warrants

trade on stock exchanges and not on the options exchanges;

are created by an issuer and only a fixed number of contracts is created. In contrast, an options contract is created "out of thin air" when a new buyer and new seller meet and trade that contract.

The niche for index warrants trading on stock exchanges is that issuers can quickly create and issue warrants based on market conditions. For example, after the 2011 Japanese earthquake and nuclear meltdown, Nikkei put warrants became popular.

Index warrants are subject to position limits and exercise limits set by the exchange where they are listed. In addition, the exchange requires reporting of positions when set thresholds are reached.



## STOCK INDEX OPTIONS SECTION EXAMINATION

1.

A customer buys 1 OEX Jan 450 Call @ \$5 when the index closes at 451. The maximum potential loss is:

- a. \$450
- b. \$451
- c. \$500
- d. unlimited

2.

Index options expire:

- a. each week
- b. each month
- c. every four months
- d. every nine months

3.

Index calls would be purchased by a customer who:

- a. is bullish on the direction of the market
- b. is bearish on the direction of the market
- c. believes that interest rates will rise
- d. believes that interest rates will fall

Use the following information to answer the next 2 questions:

A customer sells 1 XMI Dec 830 Put @ \$8 when the index is at 829.00. The customer is exercised when the index closes at 825.00.

4.

The writer is obligated to:

- a. deliver cash
- b. receive cash
- c. deliver stock
- d. receive stock

5.

The writer must pay:

- a. \$30,000 to the holder
- b. \$5,000 to the holder
- c. \$1,000 to the holder
- d. \$500 to the holder

6.

Which are true statements regarding index options?

- I Upon exercise, the writer must pay to the holder the "in the money amount"
  - II Settlement upon exercise occurs next business day
  - III Settlement is based on the index value at the time of exercise
  - IV The maximum risk for an index option writer is the loss of the premium
- a. I and II
  - b. II and III
  - c. I, II, III
  - d. II, III, IV

7.

The manager of a \$400,000 aggressive stock portfolio wishes to hedge with OEX 400 contracts. The portfolio has a beta of 1.5. To hedge, the manager will buy:

- a. 10 OEX puts
- b. 15 OEX puts
- c. 10 OEX calls
- d. 15 OEX calls

8.

Which statements are true regarding LEAP index option contracts?

- I LEAP index contracts have shorter initial expirations than regular index contracts
  - II LEAP index contracts have longer initial expirations than regular index contracts
  - III LEAP index contracts have higher initial time premiums than regular index contracts
  - IV LEAP index contracts have lower initial time premiums than regular index contracts
- a. I and III
  - b. I and IV
  - c. II and III
  - d. II and IV

9.

The sale of index calls against a portfolio of listed securities is a:

- a. covered writing strategy
- b. naked writing strategy
- c. horizontal spread strategy
- d. bullish strategy

10.

A customer buys 1 OEX Jan 450 Put @ \$10 when the index is at 448.25. The maximum potential gain for the holder is:

- a. \$1,000
- b. \$43,825
- c. \$44,000
- d. \$45,000

11.

The VIX option is based on the:

- a. DIX
- b. SPX
- c. OEX
- d. NDX

12.

Regarding an exercise of VIX options, the contracts are issued in:

- a. American Style
- b. European Style
- c. a choice of either American or European style
- d. non-exerciseable form

13.

The last day to exercise a VIX contract is the:

- a. third Friday of the month
- b. Saturday following the third Friday of the month
- c. Friday preceding the third Wednesday of the month
- d. Wednesday that is 30 days prior to the Third Friday of the following month

14.

VIX options trade during the hours of:

- a. 9:30 AM - 4:00 PM ET  
(8:30 AM - 3:00 PM CT)
- b. 9:30 AM - 4:15 PM ET  
(8:30 AM - 3:15 PM CT)
- c. 9:30 AM - 5:30 PM ET  
(8:30 AM - 4:30 PM CT)
- d. 9:30 AM - 11:59 PM ET  
(8:30 AM - 10:59 PM CT)

15.

An investor that is bullish on stock price movements would:

- I Buy VIX Calls
- II Buy VIX Puts
- III Sell VIX Calls
- IV Sell VIX Puts

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV



## STOCK INDEX OPTIONS SECTION EXAMINATION EXPLANATIONS

1. The best answer is c. The customer pays a premium of 5. Since the multiplier on the contract is 100, the total premium is \$500. This is the maximum potential loss.
2. The best answer is b. Index options expire monthly. Actively traded contracts extend out for **each** of the next 4 months. In addition, longer term contracts (LEAPs) are available with expirations of up to 35 months.
3. The best answer is a. Index calls are purchased by a customer who believes that the market will rise. Index puts are purchased by a customer who believes that the market will fall.
4. The best answer is a. If an index option is exercised, the writer is obligated to pay the holder the "in the money" amount in cash.
5. The best answer is d. The put has a strike price of 830. Upon exercise, the index closes at 825; therefore, the put is "in the money" by 5 points or \$500. The writer must pay this amount to the holder.
6. The best answer is a. If an index option is exercised, the writer must pay the holder the "in the money" amount the next business day. The index value is computed as of the close the day of exercise. The writer of an index call has unlimited risk; the writer of an index put has increasing risk as the market drops.
7. The best answer is b. Each OEX 400 Put contract covers \$40,000 of stock (400 strike times the multiplier of 100). To hedge a \$400,000 portfolio, 10 contracts are necessary. Since the portfolio is 1.5 times as volatile as the index (beta of 1.5),  $1.5 \times 10$  contracts = 15 contracts are needed to provide a complete hedge.
8. The best answer is c. LEAPs are long term options contracts. LEAP index options have a maximum initial life of 36 months (actually 35 months, but this is tested as 36 months); whereas regular index options have a maximum initial life of 4 months. Because LEAPs have a longer life, they have a longer time premium.
9. The best answer is b. If the writer of index calls is exercised, he does not deliver the stocks in the index - he delivers **cash**. Index call writing against a portfolio of securities is therefore considered to be a "naked" writing strategy. As with any "income writing" strategy where the call writer owns the physical instrument or an equivalent, the writer expects the market to remain neutral or be mildly bearish.
10. The best answer is c. If the index drops to "0", the writer must pay the holder  $450 \times 100 = \$45,000$ . Since the holder paid 10 points (\$1000) in premiums, the maximum potential gain is \$44,000.
11. The correct answer is b. The VIX option (CBOE Volatility Index) is based upon the expected price movements of the Standard and Poor's 500 Index Option Contract (SPX) option) over the upcoming 30 days.
12. The correct answer is b. The VIX option (CBOE Volatility Index) is issued in European style - that is, it can only be exercised at its expiration.

13. The correct answer is d. The VIX option (CBOE Volatility Index) measures expected market volatility over the upcoming 30 days. It can only be exercised at expiration, with the exercise value based on a computation of expected upcoming 30 day SPX volatility. Instead of the computation being done on the third Friday of the month at market close, the computation is done at market open on the Wednesday preceding the third Friday that is 30 days prior to the calendar month immediately following the expiring month.
14. The correct answer is b. The VIX option (CBOE Volatility Index) trades during the normal market hours for trading of index options - 9:30 AM - 4:15 PM ET (8:30 AM - 3:15 PM CT).
15. The correct answer is c. The VIX option is negatively correlated to stock price movements. If stock prices are rising, then the VIX would be expected to fall. The profitable VIX options positions would be long VIX puts and short VIX calls.



## SECTION 11: FOREIGN CURRENCY OPTIONS

### 11a. FOREIGN CURRENCY MARKET OVERVIEW

#### Interbank Market

#### Unregulated

Foreign currency values relative to the dollar affect U.S. business activity and therefore the financial markets.

Foreign currencies are traded in the "interbank" market. Trading is unregulated between domestic and foreign banks, in very large units (usually \$5,000,000 minimum).

For each foreign currency trade, the buyer and seller negotiate the price and settlement terms. Settlement can be:

#### Spot Market

Spot: Settlement and delivery in 1 or 2 business days. (The more active the trading in the currency, the quicker the settlement time.)

#### Forward Contract

Forward: Settlement later than "spot," usually months in the future.

#### Floating Exchange Rates

Because exchange rates "float," the value of currencies is determined in the marketplace. Central banks are big players in this market and can easily drive prices up or down for the short term. If a country feels its currency is undervalued, it will buy the currency in the market. If it feels the currency is overvalued, it will sell the currency in the market.

However, long-term price trends reflect the changing economic fortunes of each country. As a country's economy strengthens and its interest rates rise, currency values rise. As a country's economy weakens and its interest rates fall, currency values fall. Because long-term prices are based on the country's economic performance, fiscal and monetary policies of each country are determinants of price direction.

#### 24-Hour Trading

Trading occurs 24 hours a day, with no systematic trade reporting taking place.

#### Options On Foreign Currencies

Options on foreign currencies are traded on the Philadelphia Stock Exchange (PHLX). They can be used to speculate on the direction of the currencies' values. For example, if you believe that the Japanese Yen will strengthen, buy yen calls. If you believe that the Canadian Dollar will weaken, buy Canadian dollar puts.

Importers and exporters can also use these contracts. Suppose an importer needs to pay for a shipment expected

in 2 months from Britain in Pounds. To protect against the Pound rising (and hence costing more dollars), he can buy Pound calls and lock in a fixed cost for the currency.

Assume an exporter will be paid in EUROS when a shipment arrives in 2 months. To protect against a fall in that currency (meaning the currency is worth less in dollars), buy EURO puts.

#### **PHLX World Currency Options**

The PHLX completely revamped the foreign currency options that it offers in mid-2007 to make them more logical and user-friendly. The revised currency options are called PHLX World Currency Options and trading volumes have been decent.

The revisions to the PHLX currency option contracts bring them in line with stock and index options. In addition, to increase investor interest, the PHLX has developed new products, such as FLEX options and 3D options, which are covered later in this section (and these are tested).

### **11b. CURRENCY OPTION CONTRACTS**

The PHLX currency options contracts that must be known for the Series #56 exam are:

| Foreign Currency         | Contract Size | Premium                 |
|--------------------------|---------------|-------------------------|
| Australian Dollar        | 10,000        |                         |
| Canadian Dollar          | 10,000        | Multiplier<br>Of        |
| British Pound            | 10,000        | 100                     |
| Swiss Franc              | 10,000        |                         |
| European Curr.<br>(EURO) | 10,000        |                         |
| Japanese Yen             | 1,000,000     | Multiplier<br>Of<br>100 |

These are the six major world currencies and the contracts are sized to appeal to the "smaller" investor - the contract sizes are much smaller than currency futures contracts and options on futures (which are not securities and thus are not on this exam). Note that the contract sizes must be memorized for the exam.

Below is a sample quote for a PHLX EURO (the symbol is XDE) contract:

**1 PHLX XDE Nov 145 Call @ 2.10**

**(Market = 146.00)**

The customer will pay a premium of 2.10 times a multiplier of 100 = \$210 for the contract.

This contract allows the holder to buy the EURO at a price of 145 cents (\$1.45). Since the market price is \$1.4600, the contract is "in the money" by \$.0100.

To breakeven the EURO must climb above 145 + 2.10 premium or above \$1.4710.

If the EURO rises in value from 146 to 147 (\$1.46 to \$1.47), this is an increase in value of \$.01 x 10,000 units of currency = \$100. All other things being equal, this increase in value would directly result in an increase in the premium from 2.10 to 3.10, which equals an increase from \$210 to \$310 - again, a \$100 increase in value.

This example shows that the basics of options apply to **all** types of contracts. Also note that the PHLX states that the multiplier on the larger Japanese Yen contract is also "100" - but they add a "00" to the computation. Thus, a \$.01 move in the Japanese Yen contract equals (.00)01 = \$.0001 x 1,000,000 = \$100 - the same as for the contracts that are sized in 10,000 units of currency.

**Trades Settle  
Next Business Day**

**European Style**

Foreign currency option trades settle next business day through the Options Clearing Corporation. The contracts are available only as "European Style" - which can be exercised only at expiration (but can still be traded). European style options are more attractive to institutional writers of contracts that do not want an unexpected exercise.

The contracts are essentially similar to index options. If the contract is "in the money" at expiration, the holder could perform a closing trade to realize the profit, or could exercise at expiration, with the last day to trade being the third Friday of the month, just like stock and index options.

**Exercise Settlement  
In Cash**

Exercise settlement results in a delivery of cash (U.S. dollars) from writer to holder the next business day, again just like index options. The settlement value is based on the 12:00 Noon "Buying Rate" determined by the Federal

Reserve on the third Friday of the month (last trading day for that month, just like stock and index options).

Also note that an exercise of the "previous" generation of PHLX currency options could be settled by delivering the foreign currency - this is no longer the case.

For example, assume that a customer has purchased 1 PHLX Mar XDC (Canadian Dollar) 100 Put @ 2.10 when the Canadian Dollar is at 99. Just prior to expiration, the Canadian Dollar falls to 95 and the premium on the contract rises to 5.00 (intrinsic value only since there is no "time" left to the contract). The customer performs a closing trade. The profit is:

|                       |                    |
|-----------------------|--------------------|
| Closing Sale Proceeds | \$500 (5.00 x 100) |
| Opening Purchase Cost | \$210 (2.10 x 100) |
| <hr/>                 |                    |
|                       | \$290 Profit       |

For example, assume that a customer has purchased 1 PHLX Mar XDC (Canadian Dollar) 100 Put @ 2.10 when the Canadian Dollar is at 99. The Canadian Dollar falls to 95, and on the 3rd Friday in March, the exercise settlement value is set at 95.00. The customer exercises the contract.

As a result of the exercise, the writer must pay the holder the "in the money amount" of  $5 \times 100 = \$500$ . Since a premium of  $2.10 \times 100 = \$210$  was paid for the contract, the profit is  $\$290 (\$500 - \$210)$

**Block Transaction  
Is 1,000 Contracts  
Or More**

Please note that the PHLX establishes special block trading procedures for trades of 1,000 contracts or more. While the actual procedures are not tested, the size of a block transaction should be known for the exam.

**FLEX Options**

Also, please note that the PHLX offers the ability to customize currency options contracts (and any other option traded on the exchange). So-called FLEX options give the customer the ability to customize any aspect of the contract; with the contra-side of the contract taken by a Specialist on the exchange. Such FLEX options must be in minimum units of 50 contracts. Finally, the CBOE also now offers "FLEX" options on its options products.

**3D Foreign  
Currency Option  
Is Obsolete**

Finally, when the PHLX traded the "old style" foreign currency options that permitted exercise settlement in delivery of the foreign currency, (these all expired at the end of 2007), they also offered a currency option called "3D" - (Dollar Denomination Delivery), where exercise settlement was only in U.S. dollars. Since this is the way that the "new" PHLX currency options settle, "3D"



options are obsolete, but may still be tested as a type of available contract.

The specifics on foreign currency option contracts traded on the PHLX are:

|                                |   |
|--------------------------------|---|
| <b>Contract Size:</b>          | 10,000 units of currency except for Japanese Yen, which cover 1,000,000 units of currency         |
| <b>Multiplier:</b>             | 100   |
| <b>Settlement of Trades:</b>   | Next business day   |
| <b>Settlement of Exercise:</b> | Writer pays the holder the "in the money" amount the next business day                            |
| <b>Expiration Type:</b>        | European (exercise only at expiration)  |
| <b>Automatic Exercise:</b>     | If contract is "In the money by \$.01 (\$1.00 for the contract) on the 3rd Friday at market close |
| <b>Expiration Cycle:</b>       | This month, next month, and upcoming 3 months in Cycle 3 (Mar, Jun, Sept and Dec)                 |
| <b>Trading Cut-Off:</b>        | 4:00 PM ET on the 3rd Friday of the month   |
| <b>Expiration Date:</b>        | 11:59 ET on the Saturday following the 3rd Friday of the month                                    |
| <b>Trading Hours:</b>          | 9:30 AM - 4:00 PM ET (same as equity options; in contrast, index options trade until 4:15 PM)     |
| <b>Position Limit:</b>         | 200,000 contracts on 1 side of the market in a single currency                                    |

## FOREIGN CURRENCY OPTIONS SECTION EXAMINATION

1.

When reading the morning newspaper, you see that Japan is experiencing record economic growth, while Switzerland is suffering from labor shortages. An appropriate strategy is to:

- I Buy Swiss Franc Calls
  - II Buy Yen Calls
  - III Buy Swiss Franc Puts
  - IV Buy Yen Puts
- a. I and II
  - b. I and IV
  - c. II and III
  - d. II and IV

2.

Canadian Dollar Feb 95 Calls on the PHLX are quoted at 1.25. Canadian Dollars are trading at 95.25. What is the total premium for 10 contracts?

- a. \$125
- b. \$250
- c. \$1,250
- d. \$2,500

3.

A customer buys 1 PHLX British Pound 201 Call @ 4.00 when the Pound is trading at 200. Later, the Pound is trading at 207 and the contract is closed at intrinsic value. The profit is:

- a. \$200
- b. \$400
- c. \$600
- d. \$700

4.

A foreign currency trader has bought 1,000,000 Swiss Francs in the spot market at 92. To hedge, he buys 100 PHLX Jun SF 92 Puts @ 1.75. The position will be profitable at which price?

- a. .9025
- b. .9200
- c. .9375
- d. .9400

5.

Which contract is at parity?

- a. British Pound Jul 205 Call @ 6.00 when the Pound closes at 210
- b. British Pound Jul 205 Put @ 1.00 when the Pound closes at 210
- c. Canadian Dollar Oct 101 Call @ 3 when the Canadian Dollar closes at 104
- d. Canadian Dollar Oct 101 Put @ 3 when the Canadian Dollar closes at 99

6.

The size of a PHLX EURO contract is:

- a. 5,000 Euro
- b. 10,000 Euro
- c. 50,000 Euro
- d. 100,000 Euro

7.

The holder of a PHLX World Foreign Currency call option:

- I can exercise at any time
- II can exercise only at expiration
- III will receive cash as the result of an exercise
- IV will receive the foreign currency as a result of the exercise

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

**8.**

A Japanese corporation that exports goods to the U.S. purchases Yen puts on the PHLX exchange. If the Japanese corporation exercises the puts, it will:

- a. deliver U.S. Dollars in the U.S.
- b. deliver Japanese Yen in the U.S.
- c. receive U.S. Dollars in the U.S.
- d. receive Japanese Yen in the U.S.

**9.**

An option contract that is exercisable only on the expiration date is a(n)

- a. Spot contract
- b. American contract
- c. European contract
- d. Cash contract

**10.**

Performance on foreign currency option contracts is guaranteed by the:

- a. Exchange where the currency option trades
- b. Writer of the contract
- c. Options Clearing Corporation
- d. International Monetary Market

**11.**

A Japanese Company purchases beef in the United States for import into Japan. The importer pays for the beef in U.S. dollars. The importer is concerned that the dollar may rise. To protect against this, the best strategy is to:

- a. Buy Yen Calls
- b. Buy Yen Puts
- c. Sell Yen Calls
- d. Sell Yen Puts

**12.**

Foreign currency options expire on the:

- a. Saturday preceding the third Wednesday of the month
- b. Saturday following the third Wednesday of the month
- c. Saturday preceding the third Friday of the month
- d. Saturday following the third Friday of the month

**13.**

Exchange traded options are available for all of the following currencies EXCEPT:

- a. Canadian Dollars
- b. Australian Dollars
- c. United States Dollars
- d. Japanese Yen

**14.**

A Japanese exporter to the United States will receive payment in U.S. dollars. To hedge against a fall in the dollar, the exporter should:

- a. Buy Yen calls
- b. Buy Yen puts
- c. Sell Yen calls
- d. Sell Yen puts

**15.**

A United States manufacturer exports goods to Germany, and is paid in EUROS. To protect against foreign currency fluctuations, the firm should:

- a. Buy EURO calls
- b. Buy EURO puts
- c. Sell EURO calls
- d. Sell EURO puts

## FOREIGN CURRENCY OPTIONS SECTION EXAMINATION EXPLANATIONS

1. The best answer is c. If Japan is experiencing economic growth, its currency can be expected to strengthen. To profit, buy Yen calls. If Switzerland is having labor problems, its economy is in trouble, weakening the currency. To profit, buy Swiss Franc puts.
2. The best answer is c. A quote of 1.25 on a Canadian Dollar contract is 1.25 times a "multiplier" of \$100 = \$125 per contract. Since the customer is buying 10 contracts, the total premium is \$1,250.
3. The best answer is a. The contract was purchased at a premium of  $4 \times \$100$  multiplier = \$400. When the contract is closed, the British Pound is trading at 207. The call strike price is 201, so the contract is "in the money" by 6 points. The contract is closed at a premium of  $6 \times 100$  multiplier = \$600. Because \$400 was paid for the contract, the profit is \$600 - \$400 = \$200.
4. The best answer is d. The trader bought the Swiss Francs at 92 and paid a premium of 1.75 for the put option, for a total cost of .9375. To be profitable, the price must rise above .9375. The only choice above .9375 is .9400 - choice d.
5. The best answer is c. A contract trades "at parity" when the premium equals intrinsic value. The CD Oct 101 Call has intrinsic value of 3 (since the market is 104). Since the premium is 3, the contract is at parity.
6. The best answer is b. The size of PHLX traded "World" Foreign Currency option contracts is 10,000 units of currency, except for the Japanese Yen, which is 1,000,000 units of currency.
7. The best answer is c. PHLX World Foreign Currency option contracts are issued in "European" style - that is, they can be exercised only at expiration. Exercise settlement is in U.S. dollars - the writer must pay the holder the "in the money" amount on exercise. There is no delivery of the foreign currency.
8. The best answer is c. Exercise of a PHLX World Foreign Currency put settles in cash - the exercise requires that the writer deliver the "in the money" amount in cash (U.S. dollars) to the holder. Since the Japanese corporation bought the puts, if it exercises, it will receive cash.
9. The best answer is c. "American" options are exercisable at any time until expiration. "European" options are only exercisable on the expiration date, not before.
10. The best answer is c. The O.C.C. (Options Clearing Corporation) guarantees performance on listed options contracts. If the writer fails to perform, the O.C.C. will make good on the contract.
11. The best answer is b. To pay for the beef, the Japanese importer must sell yen to buy dollars. If the dollar rises, it becomes more expensive relative to the yen. Thus, the yen is falling in relation to the dollar. The importer must take its yen and convert them to dollars to pay for the beef. To protect against a fall in the yen, the best strategy is to buy yen puts. Another way to look at this is to understand that the importer is "short" dollars

and "long" yen. To hedge a long yen position, the appropriate strategy is to buy yen puts.

12. The best answer is d. PHLX traded "World" Foreign Currency options expire on the same date as all other listed options, which is the Saturday following the third Friday of the month.

13. The best answer is c. No PHLX listed options are traded on the U.S. Dollar in the United States. Options are traded on the Euro, British Pound, Swiss Franc, Canadian Dollar, Australian Dollar, and Japanese Yen.

14. The best answer is a. The Japanese exporter is receiving payment in U.S. Dollars. If the dollar falls, then he will receive fewer yen when converting the dollars received to yen. Because the dollar is falling relative to the yen, the yen is becoming more expensive relative to the dollar. If the importer buys yen calls, the gain on the long call contracts (due to the appreciating yen) will offset any loss realized upon conversion of the dollars received. Another way to look at this is to understand that the exporter is "long" dollars and "short" yen. To hedge a "short" yen position, the appropriate strategy is to buy yen calls.

15. The best answer is b. The U.S. exporter will be paid in EUROS. Thus, the firm will realize a loss if the EURO falls relative to the U. S. Dollar. The firm should buy EURO puts to protect against any fall in the EURO. Another way to look at this is to understand that the firm is "long" EUROS. To hedge a long position, the appropriate strategy is to buy EURO puts.

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## TRADING MARKETS CHAPTER (3)

|   | PAGES          |
|---|----------------|
| <hr/>   |                |
| <b>SECTION 1: TRADING MARKET BASICS</b>                       | <b>1 - 26</b>  |
| 1a. DEFINITIONS OF THE TRADING MARKETS.....                   | 1 - 8          |
| 1b. BROKERS AND DEALERS.....                                  | 8 - 10         |
| 1c. ORDER TICKET INFORMATION.....                             | 10 - 14        |
| 1d. TYPES OF ORDERS.....                                      | 14 - 19        |
| 1e. EX-DATE ADJUSTMENTS TO ORDERS.....                        | 19 - 20        |
| TRADING BASICS EXAM.....                                      | 21 - 23        |
| EXAM EXPLANATIONS.....  | 24 - 26        |
| <hr/>   |                |
| <b>SECTION 2: OPTIONS TRADING RULES</b>                       | <b>27 - 42</b> |
| 2a. LISTED OPTIONS TRADING.....                               | 27 - 33        |
| 3b. TYPES OF OPTIONS ORDERS.....                              | 33 - 35        |
| 3c. REPORTS TO OPTIONS EXCHANGES.....                         | 35 - 36        |
| OPTIONS TRADING RULES EXAM.....                               | 37 - 39        |
| EXAM EXPLANATIONS.....  | 40 - 42        |
| <hr/>   |                |
| <b>SECTION 3: MAJOR TRADING RULES</b>                         | <b>43 - 64</b> |
| 3a. REGULATION SHO.....                                       | 43 - 47        |
| 3b. LIMIT ORDER RULES.....                                    | 48 - 53        |
| 3c. DEFINITIONS UNDER SECURITIES EXCHANGE<br>ACT OF 1934..... | 53 - 55        |
| 3d. NATIONAL MARKET SYSTEM RULES<br>(REGULATION NMS).....     | 55 - 59        |
| MAJOR TRADING RULES EXAM.....                                 | 60 - 62        |
| EXAM EXPLANATIONS.....  | 63 - 64        |

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## SECTION 1: TRADING MARKET BASICS

### 1a. DEFINITIONS OF THE TRADING MARKETS

Negotiable securities trade in specific "markets." The overall marketplace for securities is divided into the:

**Primary Market**

**Primary Market:** New issues being sold to the public for the first time; and

**Secondary Market**

**Secondary Market:** Trading of issued securities.

This chapter deals with the "secondary" market - trading of issued securities. Issued securities trade on an exchange floor, or are traded "over-the-counter."

**Secondary Market Subdivisions**

The secondary market is divided into 4 submarkets. These are called the:

**First Market;**  
**Second Market;**  
**Third Market;**  
**Fourth Market.**

The names of the markets follow the chronology of each market's founding. A description of each of these markets follows.

**First Market**

**First Market:** The first market is trading of exchange listed securities on the floor of the stock exchange. This was the first market, as the New York Stock Exchange (NYSE) is a bit over 200 years old. The largest stock exchange by far is the NYSE, followed by the American Stock Exchange (AMEX).

**Trading On Exchange Floors**

These exchanges have specific listing standards for companies that wish their stocks to be traded, both requiring that companies have a **national** investor base to be listed. As of this writing, on average, more than 1,500,000,000 shares change hands on the NYSE each day, spread among approximately 3000 listed companies. This is a very active trading market.

The American Stock Exchange is much smaller and generally trades national companies that do not meet NYSE listing standards. AMEX has been purchased by the NYSE Group and is being operated as a subsidiary market, trading about 600 smaller listed companies.

There are also regional stock exchanges which trade companies specific to that region, and they may also trade some NYSE and AMEX listed issues (so called "dual listings").

These exchanges are:

Regional Stock Exchanges

Pacific (ARCA)  
Philadelphia (PHLX)  
Boston (BOX)  
National Stock Exchange (NSX)

As the securities industry continues its consolidation, the NASDAQ Stock Market has bought both the Boston and Philadelphia Stock Exchanges and operates them as subsidiaries. The NYSE Group owns the Pacific Stock Exchange, now renamed the Arca (as in Archipelago) exchange. The NYSE purchased Archipelago (an electronic trading network that owned the Pacific Exchange) in 2006. The National Stock Exchange (NSX) used to be the "Chicago Stock Exchange." It relocated its headquarters to Jersey City and renamed itself the National Stock Exchange. It has no trading floor and is an all electronic exchange.

**Options Trading**

Options also trade on exchange floors. The largest options exchange, by far, is the Chicago Board Options Exchange (CBOE). The exchanges that trade options, listed in order of trading volumes, are:

**Options Trading Floors**

|                                |        |
|--------------------------------|--------|
| Chicago Board Options Exchange | (CBOE) |
| American Stock Exchange        | (AMEX) |
| Philadelphia Stock Exchange    | (PHLX) |
| Pacific Stock Exchange (ARCA)  | (PSE)  |

These exchanges maintain separate options trading areas. Also, please note that the NYSE used to trade options, but it started later than the other exchanges and never achieved a sizable market share. In mid-1997, it abandoned options trading and sold its options trading business to the CBOE.

**ISE - Electronic Options Market**

Additionally, in May 2000, a new electronic options exchange started trading - the International Securities Exchange. This exchange competes against the four major options exchanges, with the advantage of lower operating costs. This should increase competition and lower costs of options trading. The ISE has been very successful, and has captured about 25% of options trading.

**Second Market**

**Second Market:** The second market is trading of securities which are not listed on an exchange, "over-the-counter." The second market developed in the early 1900s with the invention of the telephone. Instead of needing an exchange floor to meet and trade, trading could now take place over the phone. The "over-the-counter" (OTC) market trades a greater number of companies than the stock exchanges, and since 1995, has had greater trading volume

**Over-The-Counter Trading Of Unlisted Securities**

**Greater Number Of Companies Trade OTC**

**Regulated By FINRA**

than the exchanges. It is regulated by FINRA - the FINRA - Financial INdustry Regulatory Authority.

**NASDAQ**

Well over 10,000 companies trade OTC, with trading concentrated in approximately 3200 companies quoted on the NASDAQ Stock Market. About 2,000,000,000 NASDAQ shares change hands each day.

NASDAQ listing requirements are less stringent than NYSE or AMEX rules, and most start-up companies begin trading over-the-counter. As a company grows and matures, it may move its listing to the AMEX or NYSE, but companies also may stay in the NASDAQ market.

**No Options Trading On NASDAQ**

Generally speaking, options don't trade over-the-counter - for example, NASDAQ does not trade options.

**Third Market**

**Third Market:** The third market is trading of exchange listed securities which takes place "off the trading floor" through over-the-counter market makers.

**Over The Counter Trading Of Exchange Listed Securities**

The third market developed in the 1960s, but really did not come into prominence until the 1980s. At that time, the NYSE had a rule that if a member firm had an order to buy or sell an exchange listed stock during the hours the exchange was open, the trade had to be performed on the exchange floor. Because of this rule, virtually all trades were funneled to the exchange floor and there were no competing marketplaces to perform trades in NYSE listed issues.

**19c-3 Securities**

This NYSE rule was deemed to be "anti-competitive" and was modified in 1979 under SEC pressure (SEC Rule 19c-3 that is now rescinded that specified which securities were subject to the restriction) and finally was dropped at the end of 1999. Thus, NYSE listed issues can now be traded anywhere.

Starting in the 1980s, as new companies were listed by the NYSE, these could be traded anywhere - not only on the floor of the NYSE. It was at this point that the so-called "Third Market" - that is NASD member firms (FINRA was first created in 2007 from the merger of the NYSE and NASD regulatory groups) that are making markets in NYSE listed issues - started to become active. These "Third Market Makers" would trade NYSE listed issues at narrower bid-ask spreads than the market makers on the NYSE floor, attracting orders away from the exchange floor.

In addition, Third Market Makers started to "pay for order flow" to attract orders away from the NYSE trading floor. In effect, the Third Market Maker was rebating a portion of its spread to the member firm that sent it the order.

Furthermore, during the 1980s, a global market developed trading NYSE listed issues. In response, "Third Market Makers" began to stay open 24 hours. Imagine that a trader in London wants to buy 1000 shares of GM at 10:30 AM London Time (5:30 AM New York Time). The NYSE doesn't open for 4 hours, so the trader calls a Third Market Maker such as Jefferies & Co., or Weeden and Co., and performs the trade.

The Third Market has been very successful at pulling market share away from the NYSE - to the point where more NYSE-listed securities are now traded through Third Market Makers than are actually traded on the floor of the NYSE.

**Fourth Market**  
**Direct Trading**  
**Between Institutions**  
**Over-The-Counter**

**INSTINET**

**ECN - Electronic Communications Network**

**Fourth Market:** The fourth market is direct trading of securities between institutions, without the use of a broker. This market also developed in the 1960s, because at that time the NYSE had fixed commission rates (these were abolished under Federal Law in 1975). Under the fixed commission rates, institutions did not get discounts for large trades, so the "cost" of trading for these firms was quite high. Instinet ("Institutional Network") was created at that time as an electronic bulletin board for banks, insurance companies, etc. to list offerings of securities to sell, or bids for securities they wished to buy. The subscriber simply called the listing firm directly to trade, bypassing the brokers and large commissions.

In 1975, when fixed commissions were abolished, brokers started giving large discounts on institutional trades. The main reason for Instinet's existence was eliminated and it never developed into a large marketplace for this reason. Instinet was purchased in 1989 by Reuters. Reuters used the system as the basis for a global electronic trading system that it was developing. Instinet was repositioned by Reuters as an institutional intermediary, brokering institutional trades at much lower cost. This proved to be a very successful strategy, and Instinet volumes grew wildly - to the point where it was executing more trades in NASDAQ securities than NASDAQ itself (though it was not as successful at eroding the NYSE's market share trading NYSE issues).

Instinet was the first of what are now called "ECNs" - Electronic Communications Networks, that match customer buy and sell orders 24 hours a day on an agency basis. During the 1990's, as computer network technology advanced, other ECNs started up that were either "cheaper" or "faster" than Instinet or they were ECNs that were owned by large member firms, which allowed these firms to "internalize" their order flow. These included the Brut ECN, Island ECN, Archipelago ECN and others.

**NASDAQ Purchases  
INET**

ECNs were capturing an ever-increasing portion of order flow, and the 2 dominant markets in the U.S. - the NYSE and NASDAQ - responded in a similar fashion. In mid-2005, NASDAQ announced that it was buying INET (Instinet and Island) and the NYSE announced that it was buying Archipelago.

**NYSE Purchases  
ARCHIPELAGO**

In the case of NASDAQ, the issue was simple - Instinet and Island had captured about 50% of NASDAQ trading volume because their trading technology was superior to NASDAQ's and their trade pricing was much cheaper. NASDAQ figured that once it completed the purchase (which closed in January 2006), it could drop many of its more expensive and slower trading systems and achieve large cost savings. In early 2007, NASDAQ rolled out NASDAQ "Single Book" - a single trading platform that combined INET and some smaller ECN purchases (like the Brut ECN) with its existing SuperMontage (now renamed SingleBook) trading platform

In the case of the NYSE, the worry was that using human floor traders would be quickly outmoded by electronic trading, especially when a new SEC Regulation - Regulation NMS - took effect in 2006.

**Regulation NMS**

Regulation NMS (National Market System) requires that orders for both NYSE and NASDAQ stocks be routed to the market center that provides the best price (the same as the previous rule). This is known as the "trade-through" rule, because an order cannot be executed in a marketplace at a price that is worse than the best price posted by any other market center - thus, one cannot "trade through" that market center's best price. The new rule also requires that execution occur at that price within 1 second, instead of the previous 30 seconds. Human-based floor trading works great when you have 30 seconds to fill an order; but is not so great if you only have 1 second to complete the fill!

The NYSE has become a "hybrid" market that offers both human-based trading and electronic trading via the Archipelago purchase. Human based floor trading will continue because there are "opt out" provisions from the "trade-through" rule - for example, an institution might want a human trader on the NYSE floor to "work" a large block order that is not easy to fill via an automated system. However, with a 1-second execution rule, a larger and larger portion of NYSE trading has gravitated to the automated systems provided by the Archipelago purchase, and human-based trading on the NYSE floor is in decline.

Both NASDAQ and the NYSE have completed their integration of INET and Archipelago - however they are run as separate subsidiaries of these markets. Thus, the 4th

Market still exists. In addition, there are new entrants in the 4th Market, such as DirectEdge, BATS, and LavaFlow.

#### **BATS Exchange**

These newer entrants have a different business model - with some of these offering "free" trading, using a "Google" approach for revenue - paid advertising and links are their revenue sources. One of these, BATS (Better Alternative Trading System) has been spectacularly successful and in late 2008 received approval from the SEC to operate as a true electronic exchange (since it had captured about 15% of NYSE and NASDAQ trading volume). DirectEdge has also become a registered exchange. Needless to say, the NYSE and NASDAQ are not happy about this and have yet to figure out how to respond.

#### **Payment For Order Flow**

As mentioned previously, the NYSE used to have a rule that required its members to direct their orders to the NYSE floor - these orders could not be routed to other markets for NYSE listed issues such as Third Market Makers and ECNs. This rule was completely abolished at the end of 1999, and NYSE member firms are free to route their orders for NYSE listed issues to any market that trades that security.

The SEC requires that member firms route their orders to the market that is posting the best available price. So if a Third Market Maker is offering an NYSE listed stock for a cheaper price than can be obtained on the NYSE floor itself, then the order must be sent to the Third Market Maker.

But what happens if both the Third Market Maker and the NYSE are offering the stock at the same price? Then another issue comes up. Some market makers have a policy of "paying for order flow" - that is, they actually pay a small amount to the retail member firm that directs the order to that market maker. In essence, the market maker is rebating some of its profit on executing that order back to the retail member firm that sent it the order.

In the real world, what often happens is that whoever is the dominant market maker in that security sets the price and moves it according to market conditions; and the other smaller market makers continuously match that price. In such an environment, a retail member firm will then simply send the order to the market maker that will pay the most for it!

#### **SEC Rule 606**

The SEC permits this practice, because it believes that such competition will ultimately result in a lower execution cost for the customer. However, they do attach strings if firms engage in this practice under Rule 606 of Regulation NMS (National Market System). The requirements of the rule are:



**Disclosure Of  
Payment For  
Order Flow**

The fact that the firm made a payment for order flow must be disclosed on the customer trade confirmation;

**Disclosure On Request  
Of Routing Of Customer  
Orders In Prior 6 Months**

The firm, on request of the customer, must disclose the identity of the market to which the customer's orders were routed for execution in the preceding 6 months along with the time of execution. (These are known as "non-directed" orders, since the customer did not tell the broker the specific market where the order was to be executed, so the member firm could route the order to wherever it wanted.)

The firm must notify customers, in writing, at least annually, of the availability of this information.

**Quarterly Report  
Detailing Order  
Routing Procedures  
And Payment For  
Order Flow**

In addition, the rule requires member firms to prepare a quarterly report that is publicly available that details the percentage of customer orders that were "non-directed"; the identity of the ten largest markets or market makers to whom non-directed orders were routed; and details the member firm's relationship with that market maker (for example, many larger retail member firms own their own market maker subsidiaries to whom they route orders); and any arrangement for payment for order flow or profit-sharing.

Because of this rule, member firms cannot have "hidden" arrangements with market makers to favor them in return for "payment for order flow" - everything is out in the open and is fully disclosed. Thus, customers can make informed decisions about how retail member firms are routing and executing their orders.

**SEC Rule 605  
Exchange Report  
On Execution Quality**

Aside from member firm reports of routing procedures, the SEC requires the exchanges to compile reports covering their order execution quality under Rule 605 of Regulation NMS.

**Monthly Reports  
By Market Center**

Rule 605 requires market centers to make monthly electronic reports about the quality of execution in each stock traded, including:

how market orders of various sizes are executed relative to public quotes;

information about effective spreads; and

the extent to which the market center was able to "improve" execution prices for limit orders as compared to the public quote at that time.

The monthly "Rule 605" report is posted on each exchange's website, making it easily accessible to the public.

Finally, as competition heats up among the different markets (First, Second, Third and Fourth markets), there are other points to consider. During the hours that the NYSE is open, a retail member firm can route a customer order to the floor of the NYSE (First Market); to an over-the-counter dealer who makes a market in the NYSE listed issue (Third Market) or to an ECN for execution (Fourth Market). Because of SEC Rule 611, such an order should always get an execution at the best price.

#### **SEC Rule 611**

SEC Rule 611 (part of Regulation NMS), requires that:

all markets that quote NYSE, AMEX and NASDAQ issues be electronically linked (this includes 3rd and 4th market makers); and that

any executable order received by a specific market for a stock must either be executed at the best price showing in any of these markets within 1 second or be routed to the market that is posting the better price for execution there.

#### **Rule 611 - Trade Through Rule**

This is called the "trade-through" rule, because a market that receives an executable order cannot "trade-through" another market's better-priced quote. It must either match it and execute in 1 second or send it to the better priced market. This forces markets to use electronic order routing algorithms that are "Rule 611 compliant" and insures that customers will always get the "best price."

(Note: All of rules of Regulation NMS are summarized in the last section of this chapter.)

## **1b. BROKERS AND DEALERS**

In order to function, markets must be liquid. Orders to buy and sell must be filled at all times. It is the function of the dealers to make markets in securities. Dealers are expected to maintain an inventory of each security in which they make a market: to buy if a customer wishes to sell, and to sell if a customer wishes to buy.

#### **Dealer Quotes In Bid and Ask**

Dealer quotes are in terms of Bid and Ask. The Ask price is the price at which the dealer will sell the security. The Bid price is the price at which the dealer will buy the security. To make a profit, the Ask price is always higher than the Bid - the difference is the **spread** - the dealer's gross profit margin. For example, a dealer quotes ABC stock at:

#### **Spread**

|     | <u>Bid</u> | <u>Ask</u> |
|-----|------------|------------|
| ABC | 13         | 13.50      |

The dealer is offering ABC stock at 13.50 to a person wishing to buy. The dealer is willing to buy ABC stock at 13 from a person wishing to sell. The spread is \$.50, so for each "round turn" (a buy and sell), the dealer earns \$.50.

**Active Markets Characterized By Narrower Spreads**

The more active the trading market, the narrower the spreads become. This makes the market more "efficient" and is better for customers, since the "spread" gives the customer a built-in loss (the customer in this example buys at \$13.50 but can only sell for \$13) that is recovered only if the market price moves up.

**Specialists Are Dealers On NYSE**

On stock exchanges (First Market), the dealers are called specialists. On the NYSE, there are 5 specialist member firms handling the 3000 NYSE listed issues, so each specialist firm handles about 600 different stocks. The specialist is the sole market maker in that stock.

**Specialist Is An Exchange Member**

Specialist firms are prohibited from dealing with the public. They are wholesalers of securities and only deal with the retail members of the NYSE. Retail members (firms such as Merrill Lynch, Morgan Stanley, etc.) accept customer orders and go to the exchange floor to execute the trade with the specialist. For acting as a middleman (broker), the retail firm earns a commission.

**Specialists Do Not Deal With The Public**

Historically, under NYSE rules, retail members were prohibited from owning specialist units. Brokers remained distinct from Dealers to avoid conflicts of interest. However, specialists need large amounts of capital to handle today's trading volumes, and the small privately held specialist firms did not have sufficient capital. The NYSE relaxed its rules and now allows retail members to buy specialist units; as long as the operations are kept truly separate from the retail business.

**OTC Dealers Are Market Makers**

In the OTC market (Second and Third Markets), the structure is very different. Instead of assigning a stock to one specialist, the OTC market uses a system of competing market makers. Market makers register with FINRA and are expected to maintain a market in that issue. For example, Intel is one of the most heavily traded OTC stocks and there are over 30 market makers competing at any time. NASDAQ feels that competition among market makers narrows spreads and makes for a more efficient market. This contrasts with the exchanges' view that the market should be concentrated in the hands of one specialist.

**OTC Firms Can Act As Broker Or Dealer**

NASDAQ allows firms to wear either of two hats. Market makers can also deal with the public. On the exchanges,

the specialist firms are prohibited from dealing with the public - only the retail members are allowed to take customer orders. OTC firms are called broker/dealers because they can handle either function.

**Broker Earns A Commission**

Assume that a customer wishes to buy Intel stock and goes to a small broker/dealer who is not a market maker. The small broker/dealer gets the best quote for Intel from the NASDAQ system and buys from that market maker. For acting as middleman, the firm charges a commission - the firm is acting as a broker.

**Dealer Earns A Mark-Up**

Assume that a customer wishes to buy ABCD stock, and goes to the broker/dealer who is the sole market maker in the issue. The firm will sell ABCD to the customer from its inventory directly. The firm is acting as a dealer and is allowed to "mark-up" the stock to the customer. When acting as a dealer, OTC firms earn mark-ups.

**In OTC Transactions, Firm May Act As EITHER A Broker OR A Dealer**

In each OTC transaction, the firm can act either as broker or dealer - it cannot be both at once. When acting as a broker, a commission is earned. When acting as a dealer, a mark-up is earned. As a comparison, on exchanges, all customer transactions are handled through brokers. Customers cannot contact specialists directly - specialists trade only with retail members.

### 1c. ORDER TICKET INFORMATION

To place an order in the secondary market, an order ticket must be completed, either on paper or electronically. The order ticket must be completed in full prior to order entry.

| ACME Securities Inc. ORDER TICKET  |                |                  |   |                         |                       |
|--|----------------|------------------|---|-------------------------|-----------------------|
| <input type="radio"/> Buy<br><input type="radio"/> Sell<br>Long      Short |                | Size<br>100      | <input type="radio"/> Day<br><input type="radio"/> GTC<br><input type="radio"/> DNR | Spec. Inst.<br>Discret. |                       |
| Name of Security<br>ABC Common   |                |                  |   | Price<br>Mkt            | Stop<br>Stop<br>Limit |
| Customer Name<br>Smith   |                |                  | Account Number<br>01487   |                         |                       |
| R R Number<br>333  | Date<br>3/7/10 | Manager Approval |   |                         |                       |

The order ticket must specify the following:

**Buy Or Sell**

Whether the order is to Buy or Sell: When stock is bought, a long position is being taken. In this case the customer is buying, so "Buy" is circled on the ticket. If a customer sells a long position, it is termed a long sale. Then "Sell" and "Long" would be circled on the ticket. If a customer sells borrowed shares, he or she is taking a short stock position. In this case, both "Sell" and "Short" would be circled.

**Short Sale Fundamentals**

To understand the mechanics of a short sale, one must have a basic understanding of margin rules. When a customer opens a margin account, buying securities with credit extended by the brokerage firm, the brokerage firm takes all of the securities held in the account as collateral for the loan, and keeps them in the name of the brokerage firm.

The brokerage firm has the right to lend these securities to anyone else. If another customer wishes to sell short this stock, the brokerage firm simply "borrows" the first margin customer's securities and sells them (this is a "short sale"). At a later date, the shares are repurchased by the second customer and replaced in the vault. On the following page is a more detailed short sale example.

**Short Sales Subject To Regulation SHO**

Short sales of stock in all markets are subject to SEC Regulation SHO. Regulation SHO (as in SHOrt sale) basically requires that every order ticket to sell be marked as either a "long sale" or a "short sale;" and that if the sale is "short," the securities to be borrowed must be "located" by the broker and the borrowed shares delivered on settlement. In addition, Regulation SHO has many other provisions, which are covered later in this chapter.

**Order Size**

The size of the order is specified: The number of shares of stock (in this case 100 shares), or number of option contracts or number of bonds to be traded. If an order is for more than a round lot (100 shares for stock), then it is assumed that the customer will accept a partial execution if the whole order cannot be filled. For example, if a customer wants to buy 400 shares at 30 and the trader can only get 300 shares at 30, then 300 shares will be bought.

**Day Order**

The duration of the order is specified: An order is assumed to be a day order if nothing is said on the ticket. In this case "Day" is circled. Day orders are canceled at the end of the day if the order is not filled.

**Good Til Canceled (GTC)**

The order can be entered "GTC" - Good Til Canceled. This order sits with the exchange until it is canceled by the customer. Orders can be entered by a customer with special instructions such as "Good Thru the Week" or "Good Thru the Month." These orders are entered as "GTC" orders and if the order isn't filled in that time period, it is the firm's responsibility to cancel the order.

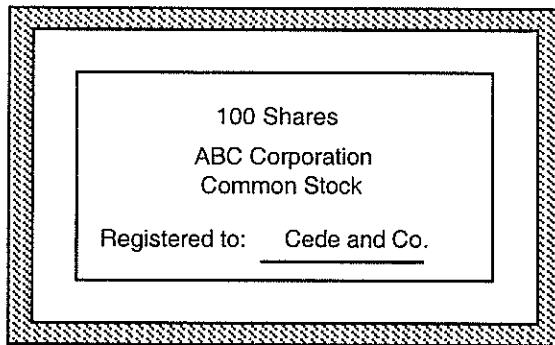
## Short Sale Example

1. Customer #1 buys 100 shares of ABC stock in a margin account.

When opening a margin account, the customer signs a margin agreement and a loan consent agreement. By signing the margin agreement, the customer pledges the securities in the account to the brokerage firm as collateral for the margin loan. Such shares are held in "Street Name", with a common depository name being "Cede and Co." By signing the loan consent agreement, the customer permits his or her shares to be loaned out on short sales.

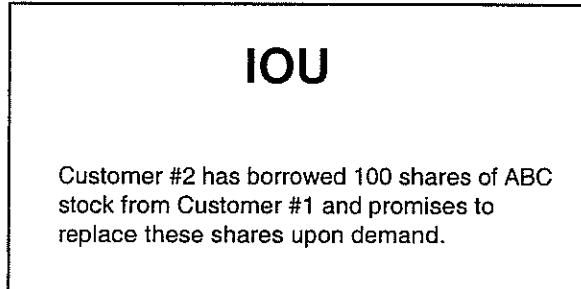
The brokerage firm deposits the 100 shares of ABC stock in its vault.

Customer  
#1 Stock  
Position  
In Firm's  
Vault



2. Customer #2 comes into the same brokerage firm and wishes to sell 100 shares of ABC stock "short". The brokerage firm goes to its vault and "borrows" the 100 shares of ABC owned by Customer #1, selling these shares for Customer #2. An "IOU" is placed in the vault, representing the borrowed shares that Customer #2 owes Customer #1.

Customer  
#2 "IOU"  
To Customer  
#1 For  
Borrowing  
His Shares



3. During the period of the "stock loan", Customer #2 pays any dividends on the borrowed shares to Customer #1 (because the issuer now sends dividend checks to the person who bought the shares that were sold short). At a later date, Customer #2 buys back the ABC shares and the firm replaces them in the vault. During this whole time Customer #1 never knew that the shares were missing!

|   |  |
|---|--|
| Other special instructions are:   |  |
| <b>AON</b>  | AON: "All or None" - either the entire order is filled or the order is not executed. Depending on the duration specified in the order, a trader is free to attempt an entire execution again and again until the order expires. Note that NASDAQ prohibits AON orders.   |
| <b>FOK</b>  | FOK: "Fill or Kill" - either the entire order is filled on the first try or the order is canceled. There can be no extra attempts at executing the order.  |
| <b>IOC</b>  | IOC: "Immediate or Cancel" - either part or all of the order is filled on the first try and the balance is canceled. There can be no extra attempts at executing the order.  |
| <b>Either/Or</b>  | Either/Or: An "Either/Or" order specifies <b>two</b> possible trades, e.g., <b>"Either Buy 500 ABC at \$40 Or Sell 500 ABC at \$60.</b> If one side of the order is filled, the other side is canceled. If one side of the order is partially filled, the remaining amount applies to both orders. For example, if 300 shares were purchased at \$40, the remaining order would be "Either Buy 200 ABC at \$40 or Sell 200 ABC @ \$60."  |
| <b>Not Held</b>   | Not Held: Not held is used in conjunction with an order to be filled at the market price. A simple market order is to be filled immediately at the prevailing price. If the order is marked "Not Held," the trader is free to "hold back" and determine the best time and price of execution during that day. If the trader believes the market will rise and it is a buy order, he would fill the order immediately. If he believes that the market will fall, he will hold back and wait till later in the day. Firms with astute traders may encourage customers to place market orders "not held" - but the customer has no recourse if he doesn't like the price or time of execution. Also note that "market-not held" orders given verbally by a customer must be filled that day. If the order has a life or more than one day, the customer must give the instruction in writing. |
| <b>Discretion Over Price And Time Of Execution</b>                        |  |
| <b>Must Be Filled That Day If Price/Time Discretion Is Given Verbally</b> |  |
| <b>Discretionary</b>  | Discretionary: The registered representative is placing an order where the customer has not specified the security and size of the order. The registered representative has chosen this under a power of attorney granted by the customer. Discretionary accounts are covered in the Customer Accounts chapter.  |
| <b>DNR</b>  | DNR: "Do Not Reduce" - On ex-date, when the price of the stock is adjusted by the exchange, certain orders are also reduced to reflect the loss of the dividend or any other distribution. This is covered later in this chapter.  |

|                                |  |
|--------------------------------|--|
| <b>Market On Opening (MOO)</b> | At The Opening or At The Close: An order placed "At The Opening" is to be filled <b>at</b> the opening price or else canceled. An order placed "At The Close" is to be filled <b>at</b> the closing price, otherwise the order is canceled. Also note that the NYSE will accept MOC (Market on Close) orders until 3:40 PM; while NASDAQ accepts them until 3:50 PM. |
| <b>Security Name</b>           | Name of Security: The ticket specifies the name of the corporate security to be traded - in this case, ABC common. If the trade were in preferred stock, the ticket would say "Pfd;" if the trades were warrants, it would say "wts" etc.  |
| <b>Execution Price</b>         | Price of Execution: In this case, the order is a "MKT" or market order, to be filled at the prevailing market price.   |
| <b>Market Order</b>            | Notice that no specific price is being specified in the order.   |
| <b>Limit Order</b>             | If a price is specified, e.g., "Buy 100 ABC @ 42," the price is the limit. A limit order to buy is to be filled at that price or better (lower). A limit order to sell is to be filled at that price or better (higher).   |
| <b>Stop - Limit Order</b>      | Stop and Stop-Limit: In addition to market and limit orders, orders may be placed to "stop a loss." These are stop or stop-limit orders and are covered with all order types in the next section.  |
|                                | The NYSE accepts stop orders in its systems, but no longer accepts stop limit orders, since they were an extremely small percentage of order flow to the NYSE floor.   |
| <b>Principal Approval</b>      | In addition, the customer name and account number are on the order, as well as the date, registered representative number (so the registered representative gets credit for the trade), and a space for the principal's initialing of the order.   |
| <b>Alterations Prohibited</b>  | The order ticket must be completely filled out. Alterations to the order ticket after it is written out are prohibited unless the change is approved, in writing, by a Principal.  |

#### **1d. TYPES OF ORDERS**

There are four basic order types:

**Market Order;**  
**Limit Order;**  
**Stop Order;**  
**Stop Limit Order.**

**Market Order**

A market order is to be filled immediately at the prevailing market price. There is no price specified on the order. A market order - NOT HELD is to be filled at whatever time and price the trader thinks best - but it must be completed that day. Thus, market orders do not carry over to the next day.

**Market Not Held**

**Limit Order  
Specifies A Price**

Limit orders specify a price at which to buy or sell. To understand how these orders (and stop orders) are used, you must focus on the security's price at the time the order is placed.

Assume that XXX stock is now trading at 70. A customer wishing to buy XXX stock at this price would simply place a market order. But what if the customer only wants to buy at 65 or lower? The order would be placed as:

**Buy 100 XXX @ 65 GTC**

**(BUY LIMIT ORDER)**

**Buy Limit Order**

A limit order to buy has been placed (the price is the limit). The order was placed GTC, because it would be canceled at the end of the day if it were a Day order.

**Placed Below  
Current Market**

If the market falls to 65 or lower, the order will be filled. Thus, limit orders to buy are placed **BELOW** the current market and are executed only if the market **DROPS**. Again, with XXX trading at 70, a registered representative has a customer who wishes to sell XXX stock that he owns (a long sale) if the price reaches 75. The following order would be placed:

**Sell 100 XXX @ 75 GTC**

**(SELL LIMIT ORDER)**

**Sell Limit Order**

A limit order to sell has been placed (the price is the limit). The order was placed GTC, because it would be canceled at the end of the day if it were a Day order. If the market rises to 75 or higher, the order will be filled. Thus, limit orders to sell are placed **ABOVE** the current market and will be executed only if the market **RISES**.

**Placed Above  
Current Market**

**Specialist Acts As  
"Broker's Broker"**

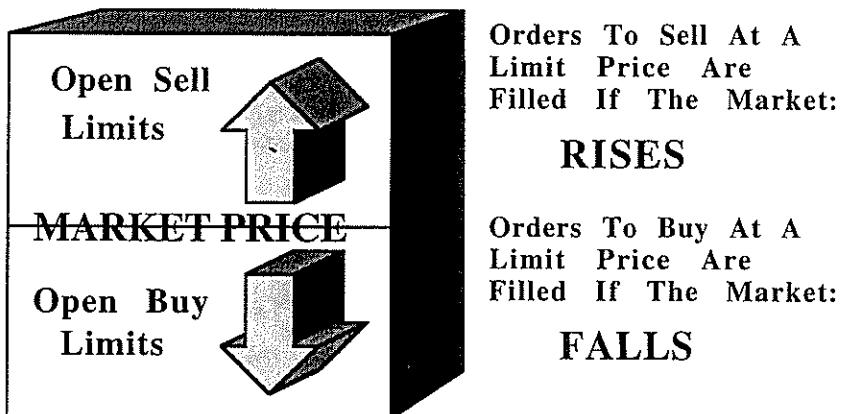
Limit orders to buy and sell are given to the specialists on the stock exchanges. The specialist is at the center of trading and executes these orders for the retail firms. In this case, the specialist is acting as a broker for another brokerage firm, "a broker's broker."

For performing this function, the retail firm shares its commission with the specialist. So, in addition to acting as a dealer, specialists handle limit orders for retail firms, acting as a "broker's broker."

#### OTC File Of Open Limit Orders

"Over-the-counter" trading desks at each firm keep a file of limit orders and execute them if the market price moves to the customer's limit.

To summarize for limit orders:



Assume that XXX is now trading at 70 and the registered representative has a customer who owns XXX stock, purchased at that price. The customer tells the registered representative that he wishes to sell if the market drops to 65, to "stop" any further loss. If the registered representative entered the following order, he or she would be in trouble with the customer:

**Sell 100 XXX @ 65 GTC**

**(ERRONEOUS ORDER)**

Since XXX is now trading at 70, someone will be only too happy to buy the stock from this customer at 65. The buyer could then turn around and sell it for its true value of 70. This order is entered in error. A limit order to sell has been entered at a price lower than the market. Limit orders to sell can only be entered above the market (see prior diagram). This order would be returned to the registered representative for correction. The registered representative reenters the order as:

**Sell 100 XXX @ 65 Stop GTC**

**(SELL STOP ORDER)**

**Sell Stop Order**

**Used To Limit Loss  
On A Long Stock  
Position**

**Placed Below  
Current Market**

The stop on the order tells the trader that this order cannot be executed until the market reaches the specified price (65). Once a trade occurs at 65 or lower, this order is triggered and turns into a market order. The order is then filled on the next trade (which can be higher or lower than \$65).

Sell stop orders are used to limit losses on long stock positions in falling markets. Thus, they are always placed **BELLOW** the current market and are executed if the market **FALLS**.

Again with XXX now trading at 70, assume that the registered representative has a customer who has sold short XXX stock at that price. The customer tells the registered representative that he wishes to buy in, if the market rises to 75, to "stop" any further loss. If the registered representative entered the following order, he or she would be in trouble with the customer:

**Buy 100 XXX @ 75 GTC**

**(ERRONEOUS ORDER)**

Since XXX is now trading at 70, someone will be only too happy to sell the stock to this customer at 75 (since he or she can buy it at its true value of 70). This order is entered in error. The registered representative has entered a limit order to buy at a price higher than the market. Limit orders to buy can only be entered below the market (see prior diagram). This order would be returned to the registered representative for correction. The registered representative reenters the order as:

**Buy 100 XXX @ 75 Stop GTC**

**(BUY STOP ORDER)**

**Buy Stop Order**

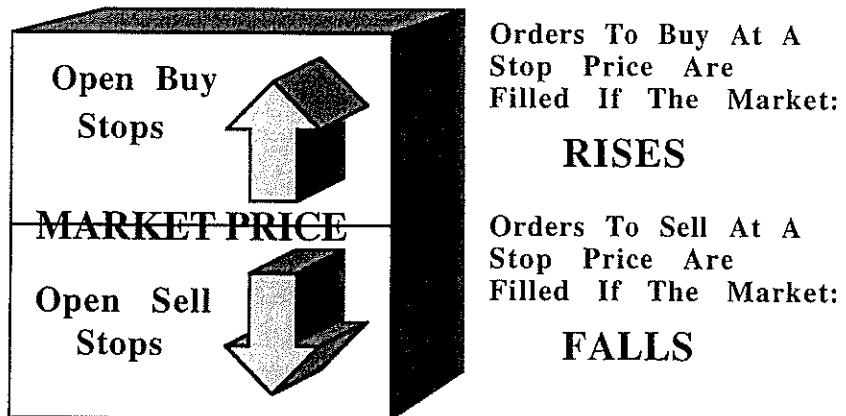
**Used To Limit Loss  
On A Short Stock  
Position**

**Placed Above  
Current Market**

The stop on the order tells the trader that this order cannot be executed until the market reaches the specified price (75). Once a trade occurs at 75 or higher, this order is triggered and turns into a market order. The order is then filled on the next trade (which can be higher or lower than \$75).

Buy stop orders are used to limit losses on short stock positions in rising markets. Thus, they are always placed **ABOVE** the current market and are executed if the market **RISES**.

To summarize for stop orders:



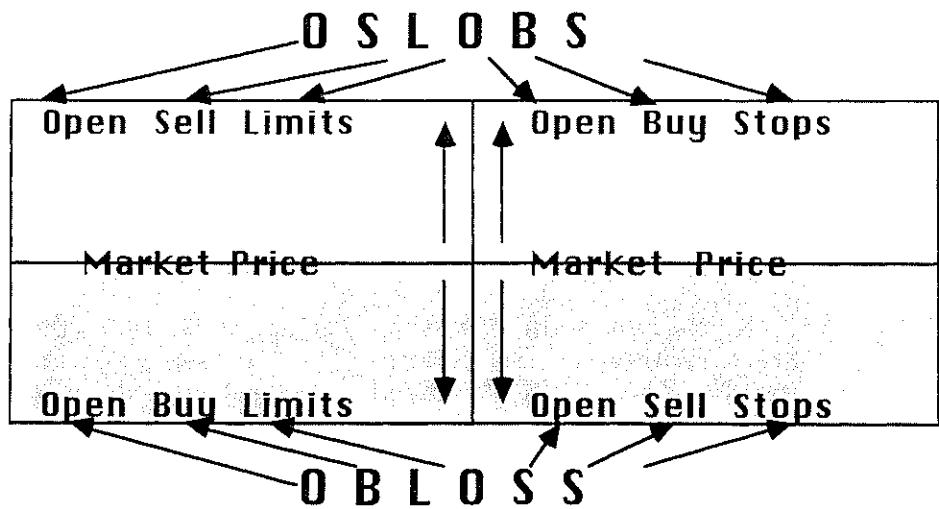
#### Stop-Limit Order

If a simple stop order is triggered, it becomes a market order to be filled on the next trade. If an order is entered stop-limit, when the stop price is hit, the order is to be filled at the limit price or better. If the market never hits the limit price, the order will never be executed. The limit price at which the order is to be executed can be different from the stop price.

For example, a customer wishes to sell 100 shares of ABC if the market falls to 30, but doesn't want to sell for any less than 28. The order to be placed is **not** "Sell 100 ABC @ 30 Stop" because when triggered it turns to a market order and the stock may be sold for less than 28.

The appropriate order is "Sell 100 ABC @ 30 Stop Limit 28." If the price falls to 30, the order is triggered. It turns into a limit order to sell for 28 - meaning sell for 28 or higher.

If we put together the diagram for limit orders and stop orders, the composite picture is found following:



**Orders Above The Current Market Are OSLOBS**

The orders that are always placed **ABOVE** the market are open sell limits and open buy stops (**OSLOBS**). The orders that are always placed **BELOW** the market are open buy limits and open sell stops (**OBLOSS**).

**Orders Below The Current Market Are OBLOSS**

You must memorize OSLOBS (above market) and OBLOSS (below market). These will be used later in the chapter.

### 1e. EX-DATE ADJUSTMENTS TO ORDERS

Orders that are above the market and that are below the market are placed on an exchange's "book" for execution. The NYSE calls the book "Super Display Book;" NASDAQ calls its book "Single Book," etc.

**Ex-Date For Cash Dividends Is 2 Business Days Prior To Record Date**

On the ex-date for a cash dividend, the price of the stock is reduced by the amount of the dividend. This is done to stop individuals from day trading simply to capture cash dividends. The ex-date for cash dividends is set at 2 business days prior to record date. This is the first day where the purchaser of the stock will not settle on or before the record date, and therefore is not entitled to the cash dividend.

**On Ex Date, Stock Price Is Reduced For Cash Dividend Amount**

For example, if a stock closes to \$50 and goes ex-dividend for a \$.25 cash dividend, it will open at \$49.75 on the morning of the ex-date. If the cash dividend is not a rounded penny amount (e.g., a \$.245 cash dividend), then dividend amount is rounded up to \$.25 and this is the subtraction amount, since stocks trade in minimum penny increments.

**If Customer Wants To  
Buy Stock In Time To  
Get Cash Dividend -  
Must Buy Before The  
Ex Date**

Because of the ex-date adjustment, if a customer wants to buy stock in time to get a cash dividend, the stock must be purchased 3 business days prior to the record date in a regular way trade. This is the business day prior to the ex-date. Similarly, because exercise of equity call options settles in 3 business days, if a customer wishes to exercise a call option in time to get a cash dividend, the exercise must occur 3 business days prior to record date.

**If Customer That Owns  
Stock Wants To Sell Yet  
Retain The Cash Dividend  
Then The Stock Cannot  
Be Sold Until The Ex-Date**

Conversely, if a customer owns a stock and wishes to sell it, yet retain the cash dividend, the stock cannot be sold until the ex-date. If the stock is sold prior to the ex-date, then the trade will settle before record and the customer will not show on the record books to get the cash dividend. If a customer owns stock and owns a put option on that stock, to retain the cash dividend, the put cannot be exercised until the ex-date, again, because exercise settlement for stock options takes place in 3 business days.

**Orders Below The  
Market (OBLOSS)  
Automatically  
Reduced On Ex  
Date For Cash  
Dividends**

On the ex-date, because the price of the stock is dropped at the opening, the orders below the market could become "fillable" simply due to the dividend reduction. To stop this from happening, the orders that are below the market ("OBLOSS") are automatically reduced on ex date. If the customer does not care about the dividend reduction, the order can be noted as "DNR" - "Do Not Reduce" and the order will not be reduced on the ex-date. Because the orders above the market are not impacted by this (the "OSLOSS" orders), they are left alone and are not adjusted.

**All Orders Adjusted  
For Stock Splits /  
Stock Dividends**

On the other hand, for non-cash distributions, such as stock splits and stock dividends, all of the orders, both above and below the market, are adjusted.

**All Orders Canceled  
For Reverse Stock  
Splits**

Finally, for reverse stock splits, all of the orders are canceled and new orders must be entered (because these are rare events and the exchanges do not want to incur the programming costs to support this).



## TRADING MARKETS BASICS SECTION EXAMINATION

1.

A customer has asked you to sell 100 XYZ if the market falls to 50, but he does not want to sell for less than 45. The proper order is:

- a. Sell 100 XYZ @ 50 Stop Limit
- b. Sell 100 XYZ @ 45 Stop Limit
- c. Sell 100 XYZ @ 50 Stop 45 Limit
- d. Sell 100 XYZ @ 45 Stop 50 Limit

2.

Referring to the prior question, this type of order is a:

- a. stop order
- b. limit order
- c. stop limit order
- d. split order

3.

A trade of a listed security takes place between an over-the-counter market maker and a bank during the hours that the exchange is closed. This trade took place in the:

- a. First market
- b. Second market
- c. Third market
- d. Fourth market

4.

All of the following must be on an order ticket before it can be entered EXCEPT:

- a. size of transaction
- b. execution price if the order is not a market order
- c. commission
- d. customer account name and/or number

5.

An order to sell 100 shares of ABC at 50 GTC on the Specialist's (DMM's) book is a:

- a. market order
- b. limit order
- c. stop order
- d. stop limit order

24.

Which orders, if executed, do **NOT** guarantee a specific price or better?

- I Buy Limits
- II Buy Stops
- III Sell Limits
- IV Sell Stops

- a. I and II
- b. III and IV
- c. I and III
- d. II and IV

7.

In a falling market, which orders will be executed?

- I Open Buy Stops
- II Open Buy Limits
- III Open Sell Stops
- IV Open Sell Limits

- a. I and II
- b. III and IV
- c. I and IV
- d. II and III

8.

An order placed "market - at the close:"

- a. will either be executed at the closing price that day or will be canceled
- b. will be executed as close to the closing price that day
- c. will be executed as close to the closing price the next trading day
- d. will be executed during the day at the discretion of the trader

9.

Rule 605 of Regulation NMS requires that:

- a. market centers prepare monthly reports on quality of trade executions
- b. broker-dealers prepare quarterly reports on their order routing procedures
- c. ECNs limit their payments for order flow
- d. NMS securities be quoted in minimum 1 cent increments

10.

The "Third Market" trades:

- a. listed and unlisted stocks between institutions without the use of a broker
- b. listed securities on the trading floors of regional exchanges
- c. unlisted securities over-the-counter
- d. listed securities over-the-counter

11.

The Second Market is a(n):

- a. auction market
- b. negotiated market
- c. unregulated market
- d. primary market

12.

All of the following must be disclosed to customers by member firms upon request **EXCEPT**:

- a. which market received the customer order
- b. whether the order was directed or non-directed
- c. the time of execution of the order
- d. the best market for the security at the time of execution

13.

Which of the following is **NOT** an ECN?

- a. INET
- b. Archipelago
- c. LavaFlow
- d. NASDAQ

14.

Which statements are true regarding SEC Rule 606 of Regulation NMS?

- I If a firm makes a payment for order flow, this must be disclosed on the customer trade confirmation
  - II If the firm makes a payment for order flow, this is not required to be disclosed on the customer trade confirmation
  - III On request, the firm must disclose the identity of the markets to which that customer's orders were routed for execution
  - IV There is no requirement for the firm to disclose, on request, the identity of the markets to which that customer's orders were routed for execution
- a. I and III
  - b. I and IV
  - c. II and III
  - d. II and IV

15.

The Specialist is a(n):

- a. exchange employee
- b. exchange member
- c. SEC employee
- d. SEC member

16.

Just before the exchange opens, an order is placed as "market - at the opening." The order is transmitted immediately, but reached the exchange floor after the opening. The order will be:

- a. executed immediately as a market order
- b. canceled
- c. executed at the opening the next morning
- d. executed as a "not held" order at the best time and price for the customer

17.

Which of the following orders would be reduced on ex-date?

- I Buy 100 ABC @ 50 DNR
- II Buy 100 ABC @ 60 Stop
- III Sell 100 ABC @ 60
- IV Sell 100 ABC @ 50 Stop

- a. I and II
- b. III and IV
- c. IV only
- d. I and IV

18.

An open order is in SuperDisplayBook to sell 400 XYZ at 50 Stop GTC. The company has declared a 25% stock dividend. On the morning of the ex-date, the order on the book will be:

- a. Sell 400 XYZ at 50 Stop
- b. Sell 500 XYZ at 50 Stop
- c. Sell 400 XYZ at 40 Stop
- d. Sell 500 XYZ at 40 Stop

19.

A NASDAQ Global Market issue that closes at \$20.00 per share goes ex-dividend the next morning for a \$.045 cash dividend. The opening price of the stock will be set at:

- a. \$19.94
- b. \$19.95
- c. \$19.96
- d. \$20.00

20.

Which statement about a stock exchange is **TRUE**?

- a. The exchange will step-in to buy or sell a listed security to maintain a stable price
- b. The exchange will assign trading of a listed security to a specific post
- c. The exchange will establish the opening price of a listed security
- d. The exchange will maintain the book of open orders that are away from the current market

## TRADING MARKETS BASICS SECTION EXAMINATION EXPLANATIONS

1. The best answer is c. An order to sell that is placed **BELOW** the market must be a sell stop order (sell limit orders are placed above the market). The customer wants to sell if the market falls to 50, so the order is "Sell 100 XYZ at 50 Stop." If triggered, this order becomes a market order to sell (which will happen at the prevailing market price). But the customer has also specified that he doesn't want to sell for less than 45 per share, meaning there is a limit on the execution price. The proper order is "Sell 100 XYZ at 50 Stop 45 Limit."
2. The best answer is c. The order in the previous question is a stop limit order. There is no such thing as a "split" order. Note that the stop price and the limit price do not have to be the same.
3. The best answer is c. Listed securities are traded over-the-counter in the "Third Market." Most Third Market trades are effected when the exchange where that security is listed is closed.
4. The best answer is c. The commission is calculated after the trade is executed - it is not on the order ticket that is used to enter the order. The ticket must include the size of the trade, desired execution price, and customer identification.
5. The best answer is b. A limit order specifies an execution price ("the limit"). An order to sell at 50 is a limit order. Market orders do not specify a price. Stop orders must state "Stop" with a price.
6. The best answer is d. If a "Stop" order is elected, it becomes a market order to be filled at the first opportunity. Thus, the actual price at which the order is executed is not known. On the other hand, a "Limit" order specifies that the execution must comply with the limit price specified or better. Thus, limit orders are filled at that price or better.
7. The best answer is d. The orders that are executed if the market drops are "OBLOSS" - open buy limits and open sell stops. The orders that are executed in a rising market are "OSLOBS" - open sell limits and open buy stops.
8. The best answer is a. An order placed "market - at the close" receives an execution at the closing price that trading day, or is canceled.
9. The best answer is a. Rule 605 of Regulation NMS requires that market centers prepare monthly reports on the quality of their trade executions. The "Rule 605" report is posted on each exchange's website.

Rule 606 requires that each broker-dealer discloses payments for order flow; that the broker-dealer will provide each customer that requests with a report detailing where the customer's orders over the prior 6 months were routed and whether a payment for order flow was received; and requires the broker-dealer to prepare a quarterly report that breaks down the different market venues to which is sent its orders and whether payments for order flow were received. This quarterly report is posted on the broker-dealer's website.

10. The best answer is d. The "Third Market" is over-the-counter trading of exchange-listed securities. It can be viewed as a competitor for the exchanges as a place to execute trades of exchange listed stocks.
11. The best answer is b. The Second Market is trading of securities in the over-the-counter market that are not exchange listed. This is a negotiated market. In comparison, the First Market is trading of exchange listed securities on the exchange floor - this is an auction market
12. The best answer is d. Rule 605 requires that, upon customer request, a member firm must disclose which markets the customer's orders were routed to during the past 6 months; whether the orders were directed (that is, the customer specified the market where the order was to be filled) or non-directed (the member firm chose the market where the order was to be filled); and the time of execution of the orders. There is no requirement to disclose the best market available for that security at the time, since SEC rules require that execution must occur at the "best market."
13. The best answer is d. "ECN" stands for "electronic communications network." These are firms that match buyer and seller for a matching fee, and used mainly by institutional investors. The larger ECNs are INET and Archipelago. ECNs act as agent only, matching buyer and seller. They do not make markets in the stock. In contrast, NASDAQ uses a system of competing market makers, who post their quotes in the system, and also shows open agency orders from customers for NASDAQ stocks.
14. The best answer is a. SEC Rule 606 requires the disclosure of "payment for order flow" on customer trade confirmations; and requires that on customer request, the member firm must disclose the markets to which that customer's orders were routed in the preceding 6 months. For example, if a customer places an order to buy 100 shares of Pfizer stock, the order must always be routed to the market that is posting the best price. But if all markets are posting the same price, then the order can be routed to the market that will "pay" the member firm for the order. Even though the NYSE is the dominant market trading Pfizer stock, the order could be routed to a regional exchange that dual lists the stock, or to a Third Market Maker - as long as the "best execution" requirement is met.
15. The best answer is b. The Specialist is the market maker on the floor of an exchange and is an exchange "member" - that is, the Specialist owns a seat on the exchange that gives the firm the privilege to trade on the floor.
16. The best answer is b. An order placed "at the open" is to be filled at the opening price or it is canceled.
17. The best answer is c. The orders that are reduced on ex-date are "OBLOSS" - Open Buy Limits and Open Sell Stops. These are the orders below the current market. Therefore, choices I and IV would be reduced normally. However, choice I is "Buy 100 ABC @ 50 DNR"- this buy limit order says "Do Not Reduce" on ex-date and therefore would not be adjusted. Only choice IV is reduced.

18. The best answer is d. To adjust the order for the 25% stock dividend, the number of shares is multiplied by a factor of 1.25 (since there are 25% extra shares) while the order price is divided by a factor of 1.25.

$$400 \text{ shares} \times 1.25 = 500 \text{ shares on the adjusted order}$$

$$\$50 \text{ price} / 1.25 = \$40 \text{ adjusted order price}$$

19. The best answer is b. On ex-date, the opening price of the stock is reduced for the cash dividend amount. If the cash dividend is not an exact "penny," then the convention is that the dividend amount is rounded "up" to the next highest penny and this is the subtraction amount. The cash dividend of \$.045 is rounded up to \$.05. The opening price will be  $\$20.00 - \$0.05 = \$19.95$ .

20. The best answer is b. It is the Specialist (not the exchange) that acts as the buyer and seller of last resort; that maintains the book of public orders that are "away" from the market; and that sets the opening price of the assigned security. The exchange designates the physical location (the trading post) at which the security will be traded by the Specialist.

## SECTION 2: OPTIONS TRADING RULES

### 2a. LISTED OPTIONS TRADING

#### Chicago Board Options Exchange

Listed options are traded on exchanges - almost no trading occurs OTC. The principal options exchange is the Chicago Board Options Exchange (CBOE)

The CBOE has a different structure from the stock exchanges, modeled on the "futures" markets that are based in Chicago. On stock exchanges, the specialist acts as market maker and also acts as a "broker's broker" handling limit and stop orders via the "book," for other firms. The CBOE splits this function between 2 different individuals - the Market Maker and the Order Book Official. Before discussing these individuals, we will start with the Floor Brokers on the CBOE.

#### Floor Broker

To execute a transaction on the CBOE, your firm will use a "floor broker" to handle the order. The floor broker may either be an employee of the member firm (the "nominee" of the firm) or may be an independent, whose business it is to execute transactions for retail firms on the trading floor.

#### Cannot Hold An Inventory

The floor broker will trade either with another floor broker, a Market Maker or an Order Book Official, earning a fee for each completed transaction. Floor brokers do not take inventory positions. Sometimes, floor brokers are called "Registered Options Traders ("ROTs").

#### Can Accept ALL Orders

Floor brokers accept public orders and orders for member firm trading accounts. A floor broker can accept any type of order for execution. Floor brokers are under the obligation to obtain the best available price in the market for their customers.

#### Find Best Available Market

If a floor broker simultaneously holds a buy and sell order for the same contracts from two different customers, the floor broker cannot simply "cross" the orders at whatever price he sees fit. The price at which a cross is effected must reflect the prevailing market. To insure this, the CBOE imposes a rigid procedure for crossing orders:

#### Crossing Orders

If a floor broker holds an order to buy an options contract at the market; and also holds an order to sell the equivalent contract at the market, he is only permitted to "cross" the orders if the following procedure is used:

The floor broker must first request bids and offers for those contracts from the trading crowd, including the Order Book Official;

The floor broker must then bid above the highest bid received by the minimum trading increment; and must offer below the lowest offer received by the minimum trading increment;

If this higher bid or lower offer are not taken, he may cross the orders at such higher bid or lower offer by announcing by public outcry that he is crossing, and giving the quantity and price.

Essentially, this procedure forces the floor broker to first attempt an execution with other traders before crossing the orders himself; and also forces the floor broker to cross the orders at a price that truly reflects the current market.

#### **Market Maker**

The market maker function is handled by registered "Market Makers" ("MMs") on the CBOE trading floor or these individual can operate as Remote market Makers, where they are electronically linked to the trading floor. These are individuals who trade for their own account in the security in which they are registered. Market Makers trade only with other participants on the floor, such as floor brokers - they cannot deal directly with the public.

#### **Minimum Quote Size Is 10 Contracts**

Market Makers must make a continuous market in the option contracts in which they are registered. For example, the IBM contract market maker must continuously make bids and offers on IBM contracts. These quotes are firm, and must be good for a minimum trading unit of 10 contracts. The profit to the market maker is the "spread" between his bid and ask quotes.

For example, the market maker might quote IBM Jan 100 Calls @ 4.00 - 4.50.

Any other trader on the floor who wishes to buy IBM Jan 100 Calls from this market maker may do so from the market maker at 4.50 Offered;

Anyone who wishes to sell IBM Jan 100 Calls may do so at 4.00 Bid by the market maker.

The spread that the market maker earns on each "round turn" is 1/2 point or \$.50.

#### **Designated Primary Market Maker (DPM)**

In the past couple of years, the CBOE has changed its trading system to allow for a new participant - a "DPM" - Designated Primary Market Maker. DPMs are similar to stock exchange specialists. A Designated Primary Market Maker is appointed by the CBOE for given classes of options

and acts as both market maker; floor broker; and order book official. Thus, similar to the NYSE Specialist, the DPM will maintain a bid and ask quote in each assigned option; and will handle the book of public limit orders. Unlike the NYSE Specialist system, there are still competing options Market Makers on the floor for these options classes.

**Lead Market Makers (LMM)** In options classes where there is no DPM, typically because trading is thin, the CBOE can designate a Market Maker as either a "LMM" (Lead Market Maker) or "SMM" -

**Supplemental Market Maker (SMM)** (Supplemental Market Maker). The idea is to add liquidity to the market without taking on all of the obligations of the DPM. LMMs or SMMs are appointed for a period of 1 month; and the appointment can be renewed each month. They are given "preference" in the CBOE's order allocations to MMs for both electronic and open outcry trading.

In return for this preference, LMMs agree to:

provide continuous quotes for the minimum number of contracts specified by the CBOE (usually 10 contracts);

respond to requests for quotes by floor brokers;

participate in the opening rotation (covered following) for each class of option to which they are assigned;

facilitate opening order imbalances by taking the opposite side to those trades.

(SMMs agree to perform only the last 2 functions on this list.)

**Maximum Allowable Spreads** To insure that market makers do not charge excessive spreads, the CBOE imposes maximum allowable spreads that market makers may charge. These are:

| Premium Amount | Maximum Spread |
|----------------|----------------|
| \$0 - \$2      | \$ .25         |
| \$2 - \$5      | \$ .40         |
| \$5 - \$10     | \$ .50         |
| \$10 - \$20    | \$ .80         |
| Over \$20      | \$1.00         |

If a market maker is registered in a given security, he or she is **not** allowed to act as a Floor Broker in that security. However, the CBOE will permit a Market Maker, in say, IBM contracts, to act as a Floor Broker in another contract. For example, it is acceptable for the Market Maker in General

Motors contracts to also register and act as a Floor Broker, executing trades of Disney contracts.

If a Floor Broker receives an order from a public customer that cannot be executed at the current market price, as quoted by the Market Maker, the order will be given over to the Order Book Official ("OBO").

**Order Book Official**

The OBO is an exchange employee who works on a salaried basis, maintaining the book of **public** orders (not those from member firms' own trading accounts) and executing these trades when the market moves in the desired direction. As such, the OBO accepts limit orders on the book, but is not permitted to accept so-called "contingency orders" - these are stop orders, stop limit orders, and market-if-touched orders on the book (these orders are defined in the section following).

**Will Accept Market Orders Before Opening**

The OBO does not ordinarily accept Market orders during the course of the trading day - these are executed by Floor Brokers and never enter the "book." However, the OBO will accept market orders prior to the market opening, to be filled at the opening price.

**Cannot Accept Spread Or Straddle Orders**

OBOs are also prohibited from accepting spread and straddle orders on the book - these must be handled manually by the Floor Broker and are discussed in more detail below. Finally, OBOs are prohibited from acting as a dealer and cannot take inventory positions.

**Order Priority**

Public orders entered on the exchange have priority over orders for the account of member firms or market makers entered at the same price. Thus, the highest bid displayed by the Order Book Official (which only show **public** orders) or DPM will have priority, as will the lowest ask shown on the "book."

Trading procedures on the CBOE are also modeled on the futures markets. On the NYSE, the specialist decides at what price a stock should open each morning, based on the balance of buy and sell orders that has accumulated overnight. The opening is "orderly" because a price is set to fill those open orders, and then the normal stream of orders coming in at the opening is handled.

**Trading Rotation Opening and Closing**

On the CBOE, for each stock, there may be 20 or 30 option series to open (remember, each series has a different expiration and strike price). To open all the series for trading in an orderly manner, the OBO conducts a "trading rotation." He calls for Bids and Offers for each series, to establish opening pricing. After all series have gone through the rotation, the market is open to trade all series. A similar "closing" rotation may be gone through at the

close of the day, and is **always** performed on the last trading day prior to expiration.

Note that the opening and closing rotations are only in **single** specified option contracts. Thus, during the rotation, only single orders can be filled. Combination, spread and straddle orders, which require two or more contracts to be filled simultaneously, cannot be executed.

**Spread and Straddle Orders**

Certain order types are peculiar to the options markets. A spread or straddle order requires the execution of 2 trades to complete the position. These orders are entered on a single ticket specifying the two positions creating the spread or straddle. If it is a market order, the trades are executed at the prevailing premiums. If it is a limit order, the ticket specifies the **net** debit or credit desired for the spread or straddle. Premiums are not specified for each side of the spread or straddle. This gives the trader the needed leeway to get both positions in the market, as long as he satisfies the limit of the net debit or credit.

**Spread Priority Rule**

The CBOE also has a "spread priority rule," which states that during the trading day, spread limit orders have priority over single contract limit orders. In this way, it is easier for Floor Traders to satisfy both sides of the position, thus creating the desired spread.

**Accommodation Liquidations**

The Options Exchanges also perform "accommodation" transactions for persons who have "worthless" options positions. Instead of letting the contract expire, the contract can be closed at a net premium of \$1.00 per contract through this type of transaction. In this manner, there is a closing trade record, which is **very** useful for tax purposes. Accommodation transactions are also known as "Cabinet Trades," because the orders are placed in a "cabinet" for execution.

The rules for accommodation transactions are:

Only orders for a premium of \$1 per contract are permitted (these are limit orders);

The orders are handled by the Specialist, Market Maker or Order Book Official, and are placed "in the cabinet" for execution;

Orders to buy and sell the same contract at \$1 are matched by the Specialist, Market Maker or OBO on a First In, First Out basis;

All cabinet trades must be marked as such, and must be reported following the close of each business day. Note that they are not reported to the "Tape," and are considered to be "off floor" transactions.

Cabinet trades are available for all closing transactions in worthless contracts - both for customer accounts and proprietary (firm trading) accounts. Thus, Order Book Officials, who normally **cannot** take orders for member firm proprietary accounts on the Book, are permitted to effect accommodation liquidations for member firm accounts.

#### **Trading Halts**

If two Floor Officials agree, trading on the options exchange may be halted in any option contract for up to 2 consecutive business days. Reasons for trading halts are:

Trading of the underlying security has been halted or suspended in the primary market;

The opening of the security has been delayed in the primary market due to unusual circumstances;

Other unusual conditions are present (e.g., a stock market "crash").

#### **Trading Suspension**

Trading is resumed when the 2 Floor Officials agree that the conditions that led to the halt are no longer present. In addition, 2 Floor Officials can agree to "suspend" trading for time periods shorter than 1 day for the same reasons stated above.

#### **Fast Markets**

If trading in any options contract is excessive in the judgment of 2 Floor Officials, the Exchange can declare that the market in one or more classes of options is "Fast." To meet the unusual activity level, the Floor Officials may:

Assign the contracts to Order Book Officials that are not assigned the issue;

Authorize the Order Book Officials' clerks (in addition to the OBO) to execute transactions;

Direct one or more trading rotations to be employed;

Take any other actions deemed to be necessary to maintain a fair and orderly market.

These procedures are designed to handle the order "overload." When normal conditions resume, as determined by 2 Floor Officials, these procedures become null and void. If "mayhem" continues, then a Trading Halt may be declared. Also, the Exchange can restrict the entry of stop, stop-limit and market-if-touched orders (covered in the next section), if needed, to calm the market.

#### **Erroneous Trade Reports And Resolution**

The CBOE rule for resolution of "clearly erroneous trades" requires that the trade be reported to a Trading Official within 15 minutes of execution. The Trading Official must

review the circumstances of the trade and make a determination within 60 minutes.

|   |   |
|---|---|
| <b>Obvious Error Panel</b>              | If either party disagrees with the determination, an appeal can be made to the Obvious Error Panel within 30 minutes.   |
| <b>Final Determination The Same Day</b> | The Obvious Error Panel reviews the complaint and makes a final determination by the end of that trading day. (Also note that if a trade occurs after 2:30 PM CT, either party has until 8:30 AM CT the next day to request the review, in which case, the determination is made by the end of that day.) |

## 2b. TYPES OF OPTIONS ORDERS

The types of options orders accepted on the exchanges are:

|                         |  |
|-------------------------|--|
| <b>Market Order</b>     | Market Order: Does not specify a price, this order is to be executed immediately at the best price available in the market. Market orders have priority over all other orders (except for spread orders at the market under the "spread priority rule").   |
| <b>Limit Order</b>      | Limit Order: Specifies a price (the "limit") for execution. A Buy limit order must be executed at the limit price or lower. These orders are used to buy the contracts at prices <b>LOWER</b> than the current market. A sell limit order must be executed at the limit price or higher. These orders are used to sell the contracts at prices <b>HIGHER</b> than the current market.  |
| <b>Day / GTC</b>        | Any limit orders that cannot be executed immediately are placed on the "book" of either the Specialist (AMEX, PHLX), or on the "book" of the Order Book Official (CBOE). If nothing is stated on the order, it is assumed that the order is good for the "Day." If the order cannot be executed that day, it will be canceled. If the order is to remain on the books until it can be executed, it must be marked "GTC" - Good-Til-Canceled. |
| <b>Stop Limit Order</b> | Stop-Limit Order: Sometimes called "stop loss" orders, these are used to limit losses on long positions (Sell Stops) or on short positions (Buy Stops). The stop price on a sell-stop limit order represents a "trigger." If the market falls to this price, the order becomes a limit order to sell. Thus, sell stop limit orders are used to sell the contracts at prices <b>LOWER</b> than the current market.                            |
|                         | Buy stop-limit orders are not triggered until the market rises to the "stop price." Then, they must be executed at the limit price or better. These orders are used to buy the contracts at prices <b>HIGHER</b> than the current market.  |

Stop limit orders that cannot be immediately executed are placed on the Specialist's book on the AMEX and PHLX exchanges. Note, however, that as a contingency order, these do not go on the book of the CBOE Order Book Official.

**Spread Order**

Spread Order: An order to buy and sell the same number and type of option contracts, with different strike prices, or expirations. The orders are entered at a "net debit" or "net credit." Both legs of the order must be filled to satisfy the execution. These orders cannot go on the Specialist's book or be placed with the Order Book Official or Board Broker.

**Straddle Order**

Straddle Order: An order to either buy the same number of calls and puts on the same underlying security with the same contract terms; or to sell the same number of calls and puts on the same underlying security with the same contract terms. Both legs of the order must be filled to satisfy the execution. These orders cannot go on the Specialist's book or be placed with the Order Book Official.

**Combination Order**

Combination Order: Is the same as a straddle order, except the contract terms are **not** the same.

**Order Qualifiers**

The following qualifiers can be placed on an order:

**AON**

All or None Order: An order to be filled in its entirety in **one attempt**. If execution cannot be accomplished, the floor trader is allowed later re-attempts at execution.

**FOK**

Fill or Kill Order: An order to be filled in its entirety in **one attempt**. If execution cannot be accomplished, the order is canceled. No further re-attempts are permitted.

**IOC**

Immediate or Cancel: An order to be filled either in its entirety or in part in **one attempt**. The unexecuted portion is canceled.

**OCO**

One Cancels the Other Order: An order where, if one "side" of the order is filled, the other side is canceled. For example, a customer could place an order to sell if the price rises to \$6 (to take a gain), or sell if the price falls to \$4 (to limit a loss). If one side is filled, the other side is canceled.

**Contingency Order**

Contingency: An order that is dependent upon the market reaching a certain price for execution. Stop orders are a type of contingency order. A contingency order that is peculiar to the CBOE is a "Market If Touched" (MIT) order.

**Stop Order**

**Market If Touched Order To Buy**

An MIT order to buy is similar to a buy limit order, in that it will be filled in a falling market. The difference is that if that market falls to a certain



price, the order becomes a market order to buy - there is no limit on the price.

**Market If Touched Order To Sell**

Similarly, an MIT order to sell is similar to a sell limit order, in that it will be filled in a rising market. The difference is that if the market rises to a certain price, the order becomes a market order to sell - there is no limit on the price.

Again, note that all contingency orders are not permitted on the "book" of the Order Book Official on the CBOE.

**Not Held**

Not Held: The designation "Not Held" can be placed on market orders. If nothing is stated on a market order, it is filled immediately at the market price. If "Not Held" is designated, the floor trader is "not held" to an immediate execution. He can use his best judgment to decide the price and time of execution.

**At The Close**

At the Close: An order to be filled as close to the close as possible, but there is no guarantee of getting the actual closing price (note that the CBOE definition of a MOC order is very different than the NYSE or NASDAQ, where the order must be filled at the closing price, or it is canceled.)

## 2c. REPORTS TO OPTIONS EXCHANGES

**Position Reports**

Position Reports: The Exchanges require member firms to file reports when members exceed specified position amounts. The amounts are usually lower than the position limits specified by the O.C.C. and give the Exchanges an "early warning" indication. Reports must be filed on the business day following the day the position amount was exceeded. The report must include the name, address, and tax I.D. number of any customer that exceeds the reporting level.

**Uncovered Short Positions Report**

Uncovered Short Positions Report: Upon request of the Exchange, each member firm must submit a report detailing all uncovered short positions, breaking out proprietary and customer positions. The report is due 2 business days after request by the Exchange.

**Market Maker Account Reports**

Market Maker Account Reports: Market Makers on the CBOE are required to file with the Exchange a report identifying all accounts for stock, options, and related securities in which the Market Maker, directly or indirectly, participates. These reports must be kept "current."

**Market Maker  
Activity Reports**

Market Maker Activity Reports: Market Makers on the CBOE are required to file reports of all orders entered for the purchase or sale of the underlying security (or equivalent, such as a convertible) in which the Market Maker deals. This order report must include the names of the firms through which the orders were entered, times of entry and or cancellation, the time that any execution report was received, along with that transaction's quantity and price. Reports must be made on the next business day.

**Transfer Of Accounts  
Form**

Transfer of Accounts: If a customer transfers his account from one broker-dealer to another, the Options Clearing Corporation must be notified to transfer ownership of the positions on its books. Both the clearing firm receiving the account and the clearing firm delivering the account must submit input forms to the O.C.C. to effect the transfer.



## OPTIONS TRADING RULES SECTION EXAMINATION

1.

Which of the following orders has priority during the trading day on the Chicago Board Options Exchange?

- a. market order
- b. limit order
- c. stop order
- d. spread order

2.

On the CBOE, customer good-till-canceled limit orders are handled by the:

- a. Specialist
- b. Market Maker
- c. Order Book Official
- d. Floor Broker

3.

All of the following statements are true about "cabinet trades" EXCEPT:

- a. The trades are handled by the market maker as an accommodation for persons with worthless positions
- b. Only limit orders at an aggregate premium of \$1 are accepted
- c. Trades are handled on a first come, first served, basis
- d. Trades are reported to the Exchange Tape within 90 seconds of execution

4.

An order to be filled in its entirety, or canceled, is known as a(n):

- a. Immediate or Cancel Order
- b. All or None Order
- c. One Cancels the Other Order
- d. Fill or Kill Order

5.

The Specialist will take which of the following options orders onto the "book"?

- I Limit order
- II Not Held order
- III Spread order
- IV Stop order

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

6.

A market maker on the CBOE displays a quote without any qualifications. This quote is good for:

- a. 1 contract
- b. 10 contracts
- c. 100 contracts
- d. the smallest order presented on the floor at that time

7.

A market maker on the exchange floor would like to handle transactions for family members and a few close friends. Which statement is true?

- a. This is absolutely prohibited under exchange rules
- b. This is permitted if the market maker also becomes a registered representative
- c. This is permitted if the market maker limits his customers to 10 or less
- d. This is permitted under Exchange rules

8.

Opening trading rotations include which of the following orders?

- I Market orders
- II Limit orders
- III Spread orders
- IV Straddle orders

- a. I only
- b. I and II only
- c. III and IV only
- d. I, II, III, IV

9.

The "spread priority rule" affords precedence to:

- I One on one transactions
- II Accommodation liquidations
- III Simultaneous purchase and sale of option positions

- a. I only
- b. II only
- c. I and III
- d. I, II, III

10.

The OBO will take which of the following orders onto the "book"?

- a. limit order
- b. stop order
- c. spread order
- d. all of the above

11.

Accommodation liquidation orders are placed at an aggregate premium of:

- a. \$1 per contract
- b. \$10 per contract
- c. \$100 per contract
- d. \$1000 per contract

10.

All of the following may trade for their own account, or for the firm's account, on the floor of an options exchange EXCEPT a:

- a. DPM
- b. LMM
- c. SMM
- d. OBO

13.

A market maker on the CBOE is inundated with a flood of orders because of a major news announcement about the issuer in which he makes a market. The market maker cannot keep up with the order flow and declares a "FAST" market. This action is:

- a. permitted because of the influx of orders
- b. permitted if the primary market for the stock also declares a "FAST" market
- c. prohibited because the market maker does not have the authority to declare a "FAST" market
- d. prohibited because market makers must have the ability to keep up with all orders they receive

14.

What is the purpose of the opening rotation?

- a. To insure that opening trades in every option contract are conducted at the same price
- b. To insure that the opening price of a listed option is fair and reasonable
- c. To insure that all orders present in the market are filled at the opening
- d. To insure that all markets open each option contract at the same price

15.

All of the following can participate in an opening rotation EXCEPT:

- a. OBO
- b. DPM
- c. LMM
- d. Floor Official

## OPTIONS TRADING RULES SECTION EXAMINATION EXPLANATIONS

1. The best answer is d. Spread orders entered on a one to one basis (both sides of the spread are on one ticket) have priority during the trading day on the CBOE. This rule helps spread orders be completed, since both "legs" of the order must be filled to complete the spread position.
2. The best answer is c. The CBOE splits the specialist function into two. The order book official handles the book of customer limit orders. The market maker acts as the dealer in the security.
3. The best answer is d. Cabinet trades are **not** reported to the "Tape" - they are treated as though they were "off floor" transactions. They are simply a means of producing a transaction record for the close out of worthless contracts. Cabinet trades are handled by Specialists on AMEX and Order Book Officials on the CBOE on a first in, first out basis. All trades are for aggregate premiums of \$1 per contract (\$.01 per share for equities).
4. The best answer is d. A "Fill or Kill" order must be filled in its entirety in one attempt, or it is canceled. An order placed "All or None" must also be filled in its entirety, but if execution is not possible, the floor trader can reattempt a later execution. This order is **not** canceled. An immediate or cancel order requires execution in part or in full, in one attempt. The unexecuted portion of the order is canceled. A "One Cancels the Other" order (OCO) is a type of contingency order. If one side of the order is executed, the other side is canceled.
5. The best answer is b. A specialist on an options exchange is prohibited from accepting "Not Held," Spread, Straddle, and Combination orders on its book. These orders must be handled by floor traders. Specialists on stock exchanges can take limit and stop orders on their books. On the CBOE, Order Book Officials can only take limit orders on their books.
6. The best answer is b. Quotes by market makers on the CBOE that do not specify a size are good for 10 contracts.
7. The best answer is a. Market makers are prohibited from executing trades for non members of the exchange. They are only allowed to trade with other members on the exchange floor.
8. The best answer is b. The opening rotation is a brief trading period in 1 option series exclusively, moving on to the next options series, etc. Since only 1 contract is trading at any moment during the rotation, the filling of spread and straddle orders is impossible. Only single orders (e.g., market or limit) can be filled at the rotation.
9. The best answer is c. Accommodation liquidations are simply a means of closing out worthless contracts for an aggregate premium of \$1. They have no bearing on the spread priority rule. This rule gives priority to "combination" orders (e.g., spreads and straddles) that require 2 positions to be filled at 1 net debit or credit. Choice III describes a spread position and falls under the rule. A "one on one" transaction describes an order that requires one trade followed by another (e.g., a long straddle requires the purchase of a call and the purchase of a put) and also falls under the rule.

10. The best answer is a. On the CBOE, Order Book Officials can only take limit orders on their books. They cannot take so-called contingency orders such as stop, stop limit, and market-if-touched orders on their book. Note that this differs from the exchange Specialists, who can take limit, stop, and stop limit orders on their books.

11. The best answer is a. An accommodation liquidation order is placed by a customer who wishes to receive a closing trade confirmation for a worthless option contract (if one is audited by the IRS, the IRS really appreciates having a closing trade confirmation showing that the option position was liquidated rather than simply having the contract expire). An order is placed to close the contract at an aggregate premium of \$1 (\$.01 per share). This is a limit order. The order book official handles these orders as an "accommodation" to the public, hence the name.

12. The best answer is d. On the Options Exchanges, OBOs (Order Book Officials) handle trades as agent only. They accept orders from the public for execution but do not trade for their own account, nor do they trade for proprietary (firm) accounts. Market makers on the exchange floor make markets in option contracts and are buying and selling for their own account. They can be designated as DPMs (Designated Primary Market Makers), LMMs (Lead Market Makers), or SMMs (Supplemental Market Makers).

13. The best answer is c. A market maker cannot declare a "FAST" market - it can only be declared with the approval of 2 Floor Officials. If an options market is "FAST," meaning that trading is exceptionally heavy, the Exchange rules provide for the following measures to help execute all of those orders. The exchange may shift trading in that class of contracts to alternate posts, increasing the number of locations at which trading may occur. The exchange may allow other Order Book Officials and their clerks to execute transactions in that class of contracts, increasing the number of personnel trading that class of contracts. If trading becomes disorderly, the Exchange may impose trading rotations in that class of contracts.

14. The best answer is a. The purpose of the opening rotation is to insure that opening trades in every option are conducted at the same price. For each contract, the DPM sets an opening price that result in a "match" of the existing buy orders to the sell orders present in the opening rotation. The DPM (Designated Primary Market Maker) opens each contract for trading in an established order (longest expiration with highest strike price is opened first), rotating through all contracts with that expiration in sequence from highest to lowest strike price. Then the DPM rotates to the next (closer) expiration and rotates through all of those contracts, etc. Once all of the contracts have been rotated through, then the market is opened for trading.

During the rotation, there is no trading of options contracts, not even in contracts that have been "opened." The rotation must be completed and then the entire market is opened for trading.

Note that the price set by the DPM to clear the existing orders can be erratic; that limit orders to buy or to sell that are too far away from the opening "match" price will not be filled in the rotation; and that each market conducts its own rotation prior to opening, so the fill price in the rotation can be different in each market.

15. The best answer is d. The opening rotation is conducted by the Designated Primary Market Maker (DPM) or the Order Book Official (OBO). Floor brokers can participate in the opening rotation, as can LMMs (Lead Market Makers). Floor officials do not trade - they oversee the options trading floor.

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## SECTION 3: MAJOR TRADING RULES

### 3a. REGULATION SHO

In mid-2004, the SEC approved a new short sale regulation, called "Regulation SHO." The intent of the rule is to have a uniform federal rule that can be applied to all securities markets and to curb the potentially manipulative practice of "naked short selling."

#### **Basic Short Sale Rule Is Eliminated**

The basic premise of the original "short sale rule" that dates back to the 1930's - that is, short sales can only be effected when the market is rising, was rescinded effective July 2007. The SEC, after a 2 year test, determined that the potential to manipulate stocks downward in price by relentless short selling was no longer an issue. However, in 2010, the SEC reversed course and issued a "short sale rule" that is specific to each stock (Rule 201 covered following).

#### **Short Sale Definition - Sale Of Shares Not Owned By Seller**

Rule 200 of Regulation SHO defines a "short sale" as the sale of a security:

that the seller does not own; or

any sale that is settled by the delivery of a security that the seller does not own; or

any sale that is settled by the delivery of a security borrowed by the seller or borrowed for the account of the seller.

#### **Long Sale Definition - Sale Of Shares Owned By Seller And Delivered On Settlement**

In order to be considered to be "long" a security:

the seller must own the stock and deliver on settlement; or

if the seller owns a convertible or derivative security, the seller must convert or exercise and deliver the underlying security on settlement.

#### **Sale Of Shares To Be Received From Conversion Or Exercise Is A Long Sale**

Also, the SEC has added a provision to the rule, explicitly stating that if a customer is long a convertible security; or long an option or warrant; and the customer has either tendered the shares for conversion or has exercised the option or warrant; then the sale is considered to be long, even if the security cannot be delivered by settlement. This recognizes the fact that the transfer agent may take a longer amount of time to handle the conversion or exercise than the 3 business days needed for regular way settlement.

**Long Sale Of Shares  
To Be Received From  
Conversion Or  
Exercise - If Seller  
Fails To Deliver, Buy  
In 35 Days From Trade**

However, in no event can such "long sale" fails to deliver last more than 35 days, since the SEC requires that if delivery is not made within 35 days of the trade, the broker-dealer must either borrow those securities or close out the open position by making an offsetting purchase.

**Only "Long" To  
Extent Of Net Long  
Position**

In determining whether an order ticket to sell is marked "long" or "short," a customer is only considered to be "long" to the extent of the seller's net long position in the security. Consider the following position held by a customer:

**Long: 1000 ABCD      Short: 1000 ABCD**

**Short Against The  
Box**

(This customer is "short against the box" 1000 shares of ABCD - meaning that the customer has sold 1000 shares of ABCD short against 1000 shares being held long by the firm (in the firm's box, or vault). This is a strategy that is used to lock-in a gain on an appreciated stock position.

This customer has a "net long position" of "0." If the customer places an order to sell any of the ABCD position, this is a technical short sale, and the short sale rule would apply.

Now consider the following position held by a customer:

**Long: 1000 ABCD      Short: 600 ABCD**

This customer has a net long position of 400 ABCD shares. If the customer places an order to sell 1000 shares of ABCD, the order to sell would be: Sell 400 Long and Sell 600 Short. The short sale portion of the order is subject to the provisions of Regulation SHO.

Rule 200 of Regulation SHO requires that every order ticket to sell be marked either:

**Marking Sell Order  
As Long**

**Long Sale:** When the seller is delivering securities that are owned on settlement.

**Marking Sell Order  
As Short**

**Short Sale:** When the seller is delivering securities that are borrowed on settlement. Short sales are subject to the provisions of Regulation SHO.

**Short-Exempt  
Order Ticket  
Marking**

There used to be a provision for marking an order ticket "sell short - exempt," that was meant to be used where a short sale was being effected, but the sale was not subject to the "uptick" requirement. This is now used for short



sales that are exempt from the provisions of Rule 201, covered next.

**Short Sale Rule  
Triggered In A Stock  
If Price Falls By 10%**

**Can Only Sell Short  
ABOVE Best Bid For  
Rest Of The Day And  
The Entire Next Day**

Rule 201 of Regulation SHO is new (2010) and was put in place due to market volatility that was experienced in specific stocks.

Once a specific stock's price drops by 10% or more from the previous day's closing price, a circuit breaker is triggered for that security and, for the remainder of that day and the entire next day, a short sale is only permitted at a price above the national best bid for that security.

For example, if ABCD closes at \$20 and the next day, a trade occurs at \$18 or lower, the circuit breaker is triggered. If a short sale at the market is entered the next business day when the NBBO is: \$17.50 - \$17.75, it can only be executed at \$17.51 or higher.

The rule only applies to NMS stocks (NYSE, AMEX and NASDAQ). It does not apply to OTCBB or Pink Sheet issues.

Furthermore, the short sale rule does not apply to:

- Short sales effected above the national best bid;
- Technical short sales where the seller actually owns the security but delivery is delayed;
- Odd lot transactions;
- Arbitrage transactions;
- Riskless principal transactions;
- Volume Weighted Average Price (VWAP) transactions (these are filled right after the market close).

**Short Exempt**

These transactions are designated on the order as "short exempt" - meaning that they are exempt from the Rule 201 circuit breaker.

Rule 203 of Regulation SHO specifically addresses a potentially manipulative practice on the part of hedge funds, where these investors have shorted stock without first having borrowed the shares to make delivery. This is known as "naked short selling." If the shares are "difficult to borrow," then the trade may not settle because the seller "fails to deliver" the stock to the buyer on settlement.

**Borrowed Securities' Location Must Be Determined Prior To Short Sale** The rule requires short sellers in all equity securities to locate the source from which the shares can be borrowed before effecting a short sale. The "locate" requirement must be documented in writing prior to effecting the short sale.

**Locate Requirement** Specifically, Rule 203 states that a broker-dealer cannot execute a short sale for its own account or for the account of another person unless;

the security has been borrowed or an arrangement has been entered into to borrow the security; or

there are reasonable grounds to believe that the security could be borrowed and delivered on settlement.

**Easy To Borrow List - Updated Daily** To meet the "reasonable grounds" test, a broker-dealer can create a list of "Easy To Borrow" securities that is less than 24 hours old. These "Easy to Borrow" securities are readily available and are unlikely to create a fail to deliver on settlement.

**Threshold Securities Are "Hard To Borrow"** The rule also requires the exchanges to create a daily list of securities that are "Hard To Borrow." These are known as the "threshold" securities.

A "threshold list security" is one which has:

a clearing short position at NSCC (National Securities Clearing Corporation division of DTCC) of 10,000 shares or more; and

this clearing short position represents at least 1/2% of the total shares outstanding.

**List Is Updated Daily** To be on the list, the security must meet these tests for 5 business days. The NYSE and NASDAQ update the list every day.

**Threshold List Includes NASDAQ, OTCBB And Pink Sheet Issues** Basically, a threshold list security is one that has a large outstanding short position - the SEC and FINRA/NASD do not want large outstanding short positions that cannot be covered, to build over time. Note that the NASDAQ threshold list covers not only NASDAQ securities, but OTCBB and Pink Sheet issues as well.

**Buy-In Of Undelivered Shares 10 Bus. Days From Settlement If On The Threshold List** If a customer sells short a security and fails to deliver on settlement, the rule requires that the position be bought after 10 business days from settlement if the security is on NASDAQ's threshold list as of trade date and remains there for the 10 business day window following settlement.



**Buy In Of  
Undelivered Shares  
If On Threshold  
List For 13  
Consecutive  
Settlement Days**

**Rule 144 Threshold  
List Undelivered  
Shares -  
35 Settlement Days  
For Buy In**

**Customer Sells Long  
And Fails To Deliver  
Buy-In 10 Business  
From Settlement**

**Rule 204 - Buy In  
Of Any Fail To  
Deliver, Otherwise  
Firm Cannot Short  
Stock**

**Regulation SHO  
Applies To Trades  
Originated In The  
U.S. That Are  
Executed Offshore**

**Reporting Of  
Short Interest**

Because of the mandatory buy-in requirement, large outstanding naked short positions in "difficult to borrow" securities should not occur. Also note that Regulation SHO's wording requires that the buy-in occur if the security is on the threshold list for "13 consecutive settlement days" following the trade date. This is another way of saying 10 business days past settlement, since regular way settlement is 3 business days.

Note that this 13 business day close out requirement is extended to 35 settlement days for Rule 144 restricted threshold securities, because of the additional processing steps needed by the transfer agent to "wash" the resale restriction off the shares.

On the other hand, if a customer sells long a security and fails to deliver on settlement, SEC Rule 15-c-3-3 applies, which requires that customer fails to deliver be bought in after 10 business days from settlement.

The "buy-in" requirements of Regulation SHO were expanded in 2009 with the adoption of Rule 204. While the original buy-in rule only applied to threshold list securities, this rule applies to sales of ALL NMS securities where there is a fail to deliver on settlement.

If a firm sells an NMS security and fails to deliver on settlement, the firm must immediately borrow that security or purchase that security, no later than the next business day (S + 1, which is the same as T + 4 for regular way trades), otherwise the firm can no longer place orders to sell short that security.

Note that the mandatory borrow or buy in is extended to 3 business days past settlement (S + 3, which is the same as T + 6) if the fail to deliver resulted from a long sale or resulted from a broker-dealer's bona-fide market making activities.

Regulation SHO applies to any person that effects a short sale in equity securities "using the means or instrumentalities of interstate commerce." It applies this to mean that if the trade is agreed to in the United States, even if the trade is effected on a non-U.S. market, then the provisions of Regulation SHO apply.

(Also note that under a separate rule, NASDAQ requires all member firms to report outstanding short positions in NASDAQ securities on the 15th and last day of each month. NASDAQ aggregates this information and reports it as the outstanding "short interest" in each NASDAQ issue. The major exchanges, such as the NYSE, have a similar rule.

### 3 b. LIMIT ORDER RULES

#### **Limit Order Protection Rule**

#### **Manning Rule**

#### **Limit Order Protection Rule**

#### **Upon Activation, Limit Order Filled Within 1 Minute**

#### **Proprietary Orders Not Protected**

#### **Price Improvement Allowed Without Executing Customer Order**

All of the SROs have rules prohibiting trading ahead of customer limit orders. These are called "limit order protection rules." The first limit order protection rule was adopted because an investment adviser named "Manning" sued NASDAQ market makers for front running his orders and won. Hence, this rule is often called the "Manning Rule."

Customer limit orders must be filled, in full or in part, before proprietary limit orders at that price or better can be filled.

For example, if a member accepts a customer limit order to buy 500 shares at 21.25, and in its market making capacity buys 200 shares at that price, it must fill that customer's order for 200 shares at the 21.25 price and protect the remaining 300 shares.

"Protect" means that if the market moves back within the limit price, the customer order will be filled contemporaneously, or before, the filling of a proprietary order at that price.

Once a limit order is "fillable," it must be executed promptly - specifically, that is within 1 minute after the order has been activated. If a firm has multiple limit orders, it must use a consistent methodology for the sequence of filling these orders - for example, choosing first in; first out.

All customer limit orders, whether they came from the firm's own retail base or from another member or member's customers, must be so protected. Proprietary orders for a firm's own trading account are not subject to the rule.

Also note that the limit order protection rule is not violated if a market maker fills an order for its own account at a better price than that offered by a standing customer limit order.

For example, assume that a market maker is quoting ABCD at 10.00-10.25. A customer sends in a limit order to buy 500 shares of ABCD at \$10.00. At the same time, another customer enters a market order to sell 500 shares, which the market maker offers to execute at 10.05. The market maker does not have to execute the limit order, because the firm has offered a "price improvement" of \$.05.

**Minimum Price Improvement Increment Is \$.01**

“Price improvement” means that the market maker is narrowing the bid-ask spread - bidding higher than an existing customer limit order to buy; or offering to sell lower than an existing customer order to sell. The minimum increment necessary to qualify for price improvement is \$.01.

**Chinese Wall Requirements**

Member firms that have proprietary trading desks are obligated under the rule to establish a “Chinese Wall” or information barrier between the proprietary market making desk and:

non-market making trading desks that handle customer orders;

non-market making desks, such as a risk arbitrage desk or a bond trading desk that trades convertible bonds (which are equity equivalents); and

other potential sources of information such as the firm’s research department or investment banking department (this is not a requirement of the limit order protection rule, but rather a requirement of the insider trading rules, covered later).

**Trading Ahead Is Prohibited**

These rules prevent the market making desk from obtaining knowledge of customer limit orders and “trading ahead” of such orders - which is, of course, prohibited. In addition, non-market making trading desks, such as risk arbitrage desks, are also prohibited from trading ahead of a customer limit order placed with a market maker.

As long as there is a Chinese Wall in place, then the risk arbitrage desk could trade without worrying about front running a customer limit order placed with that firm. If this information barrier is not in place, then customer limit orders would have to be protected from front running by these non-market making trading desks.

**Best Execution**

In customer transactions, members must use reasonable diligence to determine the best inter-dealer market for a security; and to execute the transaction so that the resulting price is as favorable as possible under prevailing market conditions. The following are considered when determining if members are following the “best execution” requirement:

Character of the market (price, volatility, liquidity);

Size and type of transactions;

Number of primary markets checked; and

Location and accessibility of primary markets and quotation sources.

Best execution means more than price. Equally important are speed of execution, fill rates (the number of executions that it takes to fill the order), and price improvement.

The SROs require members to perform a "regular and vigorous" review of their policies and procedures regarding executions of customer orders.

The SEC requires that member firms route their orders to the market that is posting the best available price. So if a Third Market Maker is offering an NYSE listed stock for a cheaper price than can be obtained on the NYSE floor itself, then the order must be sent to the Third Market Maker.

**Customer Limit Orders Priced At, Or Better Than, MM's Quote Must Be Displayed**

SEC Rule 11Ac1-4 (now renamed Rule 604 of Regulation NMS) requires that a market maker that receives limit orders priced at or better than its current quote to immediately (within 30 seconds of receipt) display the order's price and/or size.

This is an "older" rule, that pre-dated the existence of electronic centralized limit order books. In the "old days," market makers would keep customer limit orders in a separate file and they would not be displayed. The market maker would simply display its current quote. Thus, the true level of buying and selling interest in the marketplace was unknown to the public.

Now, any customer limit order received by a member firm must be entered into an "electronic" book and thus is displayed in conformity with the rule. However, the rule still stands as part of Regulation NMS (covered in the last section of this chapter), and it must be known for the exam.

Below are examples of how the Limit Order Display Rule was applied before the creation of the "electronic single book" - and this information must be known for the exam.

Assume that a market maker's current quote is:

**\$10.00 - \$10.50 (5 x 10)**

(1000 shares offered at \$10.50; 500 shares bid at \$10)

If the market maker receives a customer limit order to buy 200 shares at \$10.25, it must update its quote within 30 seconds of receipt to:

**\$10.25 - \$10.50** (2 x 10)

Assume that a market maker's current quote is:

**\$31.00 - \$31.25** (5 x 5)

(500 shares offered at \$31.25; 500 shares bid at \$31)

If the market maker receives a customer limit order to buy 200 shares at \$31.00, it must update its quote within 30 seconds of receipt to:

**\$31.00 - \$31.25** (7 x 5)

**De Minimis Customer Orders At Inside Market Do Not Have To Be Displayed**

If, however, a customer limit order is of a "de minimis" size in comparison to the market maker's displayed quote size, and the market maker's quote represents the inside market, then no updating is required. De minimis orders are defined as those that are equal to, or less than, 10% of the market maker's displayed size.

For example, assume that a market maker's current quote, which also happens to be at the "inside market," is:

**\$10.00 - \$10.50**  
15 x 10

(1000 shares offered at \$10.50; 500 shares bid at \$10)

If the market maker receives a customer limit order to buy 100 shares at \$10.00, no updating is required, since the limit order is at the same price (no price improvement) and is less than 10% of the size of the market maker's current quote.

**Undisplayed Customer Limit Orders**

Finally, if a market maker holds an undisplayed customer limit order (which is permitted if the customer so requests) that is better priced than the market maker's quote, it must match any incoming orders against the undisplayed limit order before it can match to its own quote.

**Limit Order Display Rule Exemption**

This rule does NOT apply to:

Customers who ask that their orders not be displayed;

Odd lots;

Blocks of at least 10,000 shares or a value of \$200,000;

All or none limit orders;

De minimis size orders - which are defined as orders that are 10% or less of the displayed quote size that happen to be at the inside market;

Limit orders delivered to ECNs - Electronic Communications Networks (covered following).

ECNs - Electronic Communications Networks - are FINRA member broker-dealers that accept agency orders from customers to buy and sell. They attempt to "match" these orders internally, or with other market participants - and in doing so, earning a matching fee. Some of the better known names of ECNs are Instinet and Archipelago. ECNs operate 24 hours a day, and collectively account for over 1/2 of the trading in equity securities.

**Ineligible ECN**

In the past, market makers could enter a quote into an ECN such as INSTINET that was better-priced than its NASDAQ quote. Investors, including other market makers, would not know about it unless they subscribed to that ECN's service. This type of ECN is now termed an "ineligible ECN," which means that quotes placed on it are not necessarily available to all market participants.

**If Market Maker Enters Better Priced Quote Into Ineligible ECN - MM Must Update NASDAQ Quote**

Under Rule 11Ac 1-4 (now renamed Rule 604 of Regulation NMS), the SEC changed all that by requiring market makers to update their NASDAQ quote if they entered a better priced order into an ineligible ECN.

For example, assume that market maker in a Global Market stock is quoting 37.38 - 37.60 (15 x 15). If the firm enters a customer buy order into an ineligible ECN at 37.50 for 1,200 shares, it must update its NASDAQ quote to 37.50 - 37.60 (12 x 15).

**Eligible ECN**

Instead of updating its NASDAQ quote to reflect the better priced order, the market maker may comply with the display requirements by delivering it to an "eligible ECN." An "eligible ECN" must:

distribute its best priced orders not only through the ECN, but also to NASDAQ; and

trade with non-subscribers who wish to trade at these quotes through NASDAQ.



**If MM Enters Better Priced Quote Into Eligible ECN - No Need For MM To Update NASDAQ Quote** By distributing its better-priced quote through the eligible ECN, the market maker is then, not obligated to change its NASDAQ quote to match, since the ECN itself will post the better-priced quote in NASDAQ. Note that other terms for an eligible ECN is a "linked" or qualifying ECN.

**Regulation ATS** The SEC wrote Regulation ATS in the year 2000, specifically to address the growth of ECNs. Regulation ATS requires Alternative Trading Systems, which include ECNs, member firm internal crossing systems and dark pools, to register with the SEC and be regulated as broker-dealers (as opposed to registering as an exchange and being regulated as such). Exchanges are SROs - Self-Regulatory organizations, that create rules for their members and can discipline their members for rule violations. ATSs are not SROs - they have no rules for their users other than the types of orders that can be placed and they cannot discipline their users, other than restricting access to the ECN.

**ECN Must Link If It Trades 5% Of NMS Issue's Volume**

Regulation ATS requires that any ATS:

that displays orders to anyone other than ATS employees; and

that has average daily trading volume in an NMS security of 5% of aggregate volume in that issue for 4 of the last 6 months; must

link with a national securities exchange so that the ECN's quote is displayed and can be accessed under Regulation NMS.

**Alternate Display Facility - ADF**

NASDAQ created the ADF - Alternate Display Facility - to display ECN quotes. Of course, since NASDAQ has its own captive ECN (Instinet), other ECNs are not so happy about posting their quotes there.

A regional exchange - the National Stock Exchange - (NSX) - has "rebranded" itself into the destination for ECNs that wish to link and show their quotes. It does this by offering cheaper hosting and no conflicts of interest. Just about all ECNs that are required to link have either migrated to the NSX from the ADF; or they have actually got themselves licensed by the SEC as an electronic exchange.

### **3c. CERTAIN DEFINITIONS UNDER THE SECURITIES AND EXCHANGE ACT OF 1934**

**Short Sale**

Short Sale - is defined under the Act as the sale of any security the seller does not own or which is consummated

by delivery of a borrowed security. A person is considered to be "long" that security if he has:

title to the security;

entered into an unconditional contract to buy the security (e.g. effected a purchase that has not yet settled);

owns a convertible security **and** has tendered for conversion;

owns options, rights, or warrants, **and** has exercised.

Furthermore, a person is only considered to be long to the extent of his "net long position" in that security. (If this seems like "deja vu," this definition was already used in the investment banking chapter of this text and for Regulation SHO earlier in this chapter.)

**Clearing Agency**

Clearing Agency - is defined under the Act as an intermediary in making payments or deliveries in connection with transactions in securities; or who provides facilities for making comparisons of data relating to the settlement of securities transactions.

**Market Maker**

Market Maker - is defined under the Act as any specialist permitted to act as a dealer; or any dealer who holds himself out as being willing to buy or sell a security for his own account on a regular or continuous basis.

**Listed**

"Listed" - is defined as a security admitted to full trading privileges upon application by the issuer (or banker engaged in distributing foreign securities via an ADR).

**Qualified OTC Market Maker**

Qualified OTC Market Maker - is defined under the Act as any broker-dealer who is registered with the SEC under Section 15 of the Act. (Registration of broker-dealers is covered in the Sales Supervision Chapter of this text.) The firm must meet minimum capital standards; must regularly publish bona fide quotes; must stand ready to effect transactions in reasonable amounts; and must have a reasonable turnover in each security in which a market is made.

**Qualified Third Market Maker**

Qualified Third Market Maker - is defined under the Act as a dealer in any stock registered on a national securities exchange who is registered with the SEC under Section 15 of the Act. A Qualified Third Market Maker must meet higher capital standards than an OTC market maker; and must meet the bona fide quote, turnover, and readiness to trade standards specified for OTC Market Makers.

**Qualified Block Positioner**

Qualified Block Positioner - is defined under the Act as any broker-dealer who is registered with the SEC under Section 15 of the Act that engages in the purchase or sale of blocks of stock of \$200,000 or more. A Qualified Block Positioner must meet higher capital standards than Qualified Third Market Makers. In executing block transactions, the firm must exercise reasonable diligence so that the block could not be sold to or purchased from others at better terms; and that the shares comprising the block are sold as rapidly as possible under the circumstances.

**3d. NATIONAL MARKET SYSTEM RULES**

Under the Securities Act Amendments of 1975, Congress mandated the creation of a "National Market System," fostering competition among the various exchanges. The exchanges were forced to participate in a Consolidated Quotation System, so that participants could get quotes from **all** markets in a security from one source; and were forced to participate in Consolidated Transaction Reporting System (the Consolidated Tape).

Rule 11Aa2-1 - Designation of National Market System Securities: Defines a "reported security" - as any equity security for which real time transaction reports are required to be made.

**Exchanges Must Publish Real Time Trade Reports**

Rule 11Aa3-1 - Dissemination of Transaction Reports: Requires each exchange to develop a transaction reporting plan in listed equity and NASDAQ securities.

**Exchanges Must Collect And Display Bids And Offers**

Rule 11Ac1-1 - Dissemination of Quotes For Reported Securities: Requires each exchange to establish a mechanism for collecting bids, offers, quotation sizes from broker-dealers and for disseminating this information to "quotations vendors" (for example, Bloomberg buys quotes and provides them to subscribers). (This rule forced the development of CQS - Consolidated Quotations Service.) The rule also obligates broker-dealers to promptly communicate changes in bids and offers to the exchange or association.

**SEC Regulation NMS**

SEC Regulation NMS (National Market System) is a comprehensive update to the "patchwork" of SEC rules that have been enacted from 1975 until now to foster competition between market centers in trading of "National Market Securities."

Regulation NMS consists of Rules 600 - 612. Some of these are "new" rules, and others are simply the renumbering of existing rules.

There are 3 basic new rules within Regulation NMS that impact market participants (Rules 610 - 612):

- 1) All market centers (defined as an order execution facility of any exchange or NASDAQ) are required to establish and enforce policies to prevent "trade throughs" - which is an execution of an order in that market at an inferior price to that displayed in another market. This is covered under Rule 611
- 2) All market centers must provide a "level playing field" when providing access to their markets (e.g. market access fees must be consistent across all market participants and cannot favor one firm over another). This is covered under Rule 610.
- 3) Sub-penny pricing is prohibited unless the stock trades below \$1.00. This is covered under Rule 612.

In addition, the other "older" SEC rules (already covered in the material) are now incorporated into Regulation NMS. Specifically:

Rule 11Ac1-1, the "Quote Rule" is now Rule 602. This was already covered on the previous page.

Rule 11Ac1-4, the "Limit Order Display Rule" is now Rule 604. This was already covered on Page 3-48.

Rule 11Ac1-5, the "Disclosure of Order Execution Information Rule" is now Rule 605. This was already covered on Page 3-7.

Rule 11Ac1-6, the "Disclosure of Order Routing Information Rule" is now Rule 606. This was already covered on Page 3-6.

The details of Regulation NMS's new rules are:

## **RULE 611: TRADE-THROUGH RULE**

A "trade through" occurs when an order is executed in a given market at a price that is inferior to that currently being posted by another market center. In a perfect world, this would not occur, since all trades are subject to "best execution" requirements. However, the old CQS (Consolidated Quotations Service) and ITS (Intermarket Trading System), which were the first attempt at preventing "trade throughs," date back to 1978 and are pretty "clunky." They produce a high level of "trade throughs" that current computer software technology would eliminate.

**Applies To All  
NYSE, AMEX And  
NASDAQ Stocks**

The new "trade through" rule applies to NYSE, AMEX and NASDAQ listed issues. These are now called the "NMS" stocks. Any order execution facility that executes orders internally in its market, even if its quote is not the NBBO (National Best Bid and Offer, also known as the "inside market"), must execute that trade at the NBBO. Thus, the rule forces the exchanges to update their linkages to other markets to attempt to eliminate "trade-throughs."

**1 Second Execution**

The quotes that must be protected under the rule are "immediately accessible" automated quotes. These quotes must be accessible within 1 second.

**Trade-Through  
Rule Exceptions**

**ISO - Intermarket  
Sweep Orders**

- 1) An institution can place an "ISO" - "Intermarket Sweep Order." Such an order will electronically "sweep" the exchange's limit order book. An ISO is a limit order sent to a particular exchange when another market center is posting better quotes. The recipient exchange is alerted by the "ISO" that the trader will also be sending the ISO to the other exchanges in an attempt to access their better-priced orders. That way, the first exchange does not have to re-route the order to the "better priced" market and can attempt a fill, subject to "best execution" requirements.

This forces the markets to compete with each other. Because of this, there will be no more negotiation of block trades - the process will be automated with sweep orders being routed electronically to the market centers posting the best quotes.

**Volume Weighted  
Average Price Trade**

- 2) An institution can place a trade based on an "average price" or "closing price." Also known as "VWAPs" - Volume Weighted Average Price transactions, the rule calls these "benchmark" trades.

**Stopped Orders**

- 3) An institution can place a "stopped" order - this is a block trade (a block is 10,000 shares or more or a trade of \$200,000 or more under Regulation NMS) that either sets a guaranteed minimum price to sell; or a maximum price to buy. Thus, the broker-dealer handling the block might take a loss in the block (an "underwater stop"). To complete the block trade, the price is likely to be inferior to the NBBO. Thus, a trade-through will have occurred. The SEC will permit this (but only for block trades with a stop price).

**Rule Applies  
To All National  
Securities  
Exchanges**

The “trade through” rule applies to all national securities exchanges, the NASDAQ Market, ECNs such as Archipelago, OTC market makers and block positioners, and any broker-dealer that executes trades internally, **regardless** of whether they are posting a quote for that issue. Thus, broker-dealers must have internal policies and procedures in place to insure that “trade-throughs” do not occur.

**Rule Only Applies  
During Regular  
Market Hours  
9:30 AM - 4:00 PM**

The rule only applies to “NMS” securities (NYSE, AMEX and NASDAQ issues). It does not apply to OTCBB or Pink Sheet issues. Finally, the rule only applies during regular market hours (9:30 AM - 4:00 PM ET).

## **RULE 610: MARKET ACCESS**

There are multiple trading venues for equity securities.

For example, NYSE securities are traded on the NYSE floor, on regional exchanges, in the Third Market via the Intermarket Trading System, and also there is limited trading via ECNs. Currently, about 25% of NYSE trading takes place “off the floor.”

NASDAQ securities are traded via Single Book, unlinked ECNs quote NASDAQ securities in the ADF (Alternate Display Facility) and trade them, NASDAQ securities are traded on regional exchanges on a “UTP” basis (Unlisted Trading Privilege). Currently, about 50% of NASDAQ trading occurs outside of Single Book.

Because of this market fragmentation, there has been an increasing incidence of “locked” and “crossed” markets - evidence of imperfect linkages between market venues because those quotes should have traded with each other. Competing market centers offer different types of access and speeds of execution. For example, Single Book trades of NASDAQ stocks are completely automated (a “fast market) whereas a NASDAQ stock traded via a UTP (Unlisted Trading Privileges) plan on a regional exchange might be handled manually (and thus, slowly).

**Quoting Market  
Centers Must  
Offer Automated  
Executions**

The rule requires quoting market centers and quoting market participants to offer automatic execution of orders, and they cannot discriminate by offering members faster automatic execution than that offered to non-members. (This was one of the driving forces behind the NYSE purchase of Archipelago - it gave the NYSE (a “slow” market) an instant “fast” market (Archipelago).

## RULE 612: SUB-PENNY QUOTING

While the NYSE, AMEX and NASDAQ quote stocks in minimum price increments of \$.01, the ECNs display quotes in their proprietary systems in "sub-pennies." These quotes are effectively hidden from the public, because the public display of these orders rounds them to the nearest penny. However, broker-dealer routing software accesses the unrounded quotes, so there is a "hidden" market where Securities trade at prices that are not transparent to the public.

The SEC is not too crazy about the fact that these superior sub-penny quotes on alternative markets are not available to the average investor. Furthermore, by using "sub-penny" pricing, market professionals can "step-ahead" of customer limit orders, without the customer being aware of this.

**No Sub-Penny Quotes  
For NMS Stocks  
Priced At \$1 Or More**

So the SEC solution is simple - no sub-penny pricing on NMS stocks trading at \$1.00 or more - the minimum quote increment is \$.01.

For stocks that are trading for less than \$1.00, the minimum quote increment is set at \$.0001.

Also note that Rule 612 does not apply to non-NMS stocks, such as OTCBB or Pink Sheet issues. These may be quoted by member firms in sub-penny increments.

## TRADING RULES EXAMINATION

1.

A customer is long 500 shares of ABCD stock and short 300 shares of ABCD stock. The customer places an order to sell 500 shares of ABCD. The order ticket must be marked:

- a. Sell 500 ABCD Long
- b. Sell 500 ABCD Short
- c. Sell 200 ABCD Long; Sell 300 ABCD Short
- d. Sell 300 ABCD Long; Sell 200 ABCD Short

2.

The threshold list is prepared:

I by NASDAQ  
II by NSCC  
III daily  
IV weekly

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

3.

Which of the following are included on the threshold list?

I NASDAQ Global Market (NGM) issues  
II NASDAQ Capital Market (NCM) issues  
III OTCBB issues  
IV Pink Sheet issues

- a. I only
- b. I and II only
- c. III and IV only
- d. I, II, III, IV

4.

A market maker, quoting 21.00-21.50 (10 x 10) receives a customer limit order to buy 800 shares at 21.10. The customer requests that the order not be displayed. The firm receives a market order to sell 500 shares. Under the Limit Order Protection Rule, the market maker

- a. may execute the market order at 21.00
- b. must execute the market order at 21.10
- c. must execute the market order at 21.50
- d. must direct the order to another market maker for execution

5.

Under SEC rules, limit orders for NASDAQ securities must be displayed within:

- a. 15 seconds of receipt
- b. 30 seconds of receipt
- c. 45 seconds of receipt
- d. 60 seconds of receipt

6.

The "locate requirement" Regulation SHO must be completed in which of the following circumstances?

I A customer enters a sell order where the member is in possession of the securities  
II A customer enters a sell order where the customer is in possession of the securities  
III A customer enters an order to sell short where the customer is not in possession of the securities

- a. II only
- b. I and II
- c. II and III
- d. I, II, III



7.

Under FINRA rules, member firms must create Chinese Walls between all of the following **EXCEPT**:

- a. Research Department and NASDAQ Trading Desk
- b. Investment Banking Department and NASDAQ Trading Desk
- c. Mergers and Acquisitions Department and NASDAQ Trading Desk
- d. Reorganization Department and NASDAQ Trading Desk

10.

A customer places a sell limit order for ABC stock at \$30 with your firm. Without executing the customer's order, the member is permitted to sell stock for its own account at:

- a. \$30.10
- b. \$30.00
- c. \$29.90
- d. any price

8.

A market maker is quoting 21.00-21.35 (15 x 10) and this quote is at the inside market. The firm receives a limit order to buy 100 shares at 21.00. Which two of the following statements are true?

- I The market maker must update its displayed size
  - II The market maker is not obligated to update its displayed size
  - III The order must be protected at 21
  - IV The order is not required to be protected at 21
- a. I and III
  - b. I and IV
  - c. II and III
  - d. II and IV

9.

All of the following are permitted to trade for their own account **EXCEPT**:

- a. Specialist (DMM)
- b. Floor Broker
- c. Qualified Block Positioner
- d. Over-the-Counter Market Maker

11.

A firm has received a limit order to buy an NYSE-listed stock from a customer. The market price has fallen to the customer's limit. Prior to executing the customer's order, the firm may:

- a. buy the stock for the firm's inventory account
- b. buy the stock for the account of an officer of the firm
- c. buy the stock for long-term investment
- d. sell the stock to fill an order from another customer

12.

A customer is considered to be "long" a security in all of the following examples **EXCEPT**:

- a. Stock has been purchased but the certificates have not yet been received
- b. A warrant to purchase shares of stock has been exercised
- c. A call option has been purchased and is fully paid
- d. Stock has been purchased but payment has not yet been tendered

**13.**

All of the following are considered to be "long" sales EXCEPT:

- a. A sell order for the stock placed after warrants to buy the stock have been exercised
- b. A sell order for the stock placed after the customer is exercised on a put option on that stock that was previously sold
- c. A sell order for the stock placed after convertible bonds of that issuer have been purchased
- d. A sell order for the stock placed after call options to buy the stock have been exercised

**14.**

Regulation NMS applies to:

- I NYSE listed issues
- II AMEX listed issues
- III NASDAQ listed issues

- a. I only
- b. I and II
- c. II and III
- d. I, II, III

**15.**

Under Regulation NMS, an ISO order:

- I is only sent to one exchange
- II is sent to multiple exchanges
- III is subject to the "trade-through" rule
- IV is exempt from the "trade-through" rule

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

## TRADING RULES EXAMINATION EXPLANATIONS

1. The best answer is c. A customer is only considered to be long to the extent of his or her "net" long position in a security. This customer is long 500 shares of ABCD and short 300 shares of ABCD, for a net long position of 200 shares. If the customer places an order to sell 500 shares, the order ticket must be marked "Sell 200 ABCD Long" and Sell 300 ABCD Short."
2. The best answer is a. The threshold list of "hard to borrow" securities is prepared each day by the exchange, which is NASDAQ in this case. If a security on the threshold list is sold short, and the securities are not delivered on settlement, then Regulation SHO requires mandatory buy-in "in 13 settlement days."
3. The best answer is d. The threshold list of "hard to borrow" securities includes exchange listed issues and OTC equity issues (NASDAQ, OTCBB and Pink Sheet stocks).
4. The best answer is b. If a market maker holds an undisplayed limit order priced better than its displayed quote, and subsequently receives a market order (or marketable limit order - which is a limit order at the inside price) on the other side of the market, the market maker is required to execute against the undisplayed limit order.
5. The best answer is b. SEC rules require that limit orders be displayed within 30 seconds of receipt. This rule applies to exchange listed and NASDAQ stocks, and this rule is now incorporated in NASDAQ Single Book programming. The limit order display rule does not apply to limit orders for OTCBB or Pink Sheet issues.
6. The best answer is c. The "locate requirement" of Regulation SHO applies when a customer is selling securities that must be borrowed for delivery by settlement. There is no requirement to "locate" the securities when the member is in possession of the securities, since the member has them in safekeeping, ready for delivery on settlement when a customer sells.
7. The best answer is d. Each SRO requires member firms to create "Chinese Walls" to stop the flow of information between the member firm's research department and its trading desk. This is to stop the trading desk from "trading ahead" of an impending research report - a prohibited practice. Similarly, member firms must place Chinese Walls between their investment banking department and their trading desk; and their mergers and acquisitions department and their trading desk; since it would be tempting to trade based on news of an upcoming investment banking or takeover deal. The reorganization department of a broker-dealer notifies existing shareholders of corporate reorganizations (such as bankruptcies). This department is dealing with "already released" news, so there is no need for a Chinese Wall between it and the member firm's trading desk.
8. The best answer is c. Limit orders that are "de minimis" do not have to be displayed if the order is priced the same as the dealer's quote, which must be at the inside market. Such an order is one equal to, or less than, 10% of the market maker's displayed size. This order is for 100 shares at 21.00, when the market maker is currently displaying 1,500 shares at 21.00, so it represents less than 10% of the display size and is not required to be displayed.

9. The best answer is b. Under SEC rules, floor brokers are prohibited from trading for their own accounts. They act as agent only, trading for their or other firms. Specialists are market makers on exchange floors; block positioners are OTC market makers. Any market maker can trade its own account.

10. The best answer is c. With a sell limit order, the customer has specified a price at which he wishes to sell if the market rises. Once the market hits \$30 or higher, the customer's order to sell at \$30 must be filled before the firm can trade for its own account at that price. The firm is free to sell for its own account below \$30 prior to executing the order, since this does not compete.

11. The best answer is d. Under SEC rules, a firm cannot execute an order for its own account or for the account of a person associated with the firm before executing customer orders that it holds at that price. Before the firm can buy, it must fill the customer's order to buy. There is no prohibition on the firm selling the stock, since this does not compete with the customer's buy order.

12. The best answer is c. A call option is not considered to be a "long" position in the underlying stock unless it is exercised (creating a binding contract to purchase the stock). Stock that is purchased, but is not yet paid, is considered to be "long," since the trade is binding on the customer.

13. The best answer is c. A customer is not considered to be long the stock unless convertible bonds of that issuer **have been tendered for conversion**. Simply owning the bonds is not sufficient. If a customer exercises any contract to buy the stock; or is exercised on any contract requiring him to buy; he is considered to be "long." Note that under Rule 203 of Regulation SHO, the shares must be delivered no later than 35 days from trade date, otherwise they must be bought-in by the executing broker.

14. The best answer is d. Regulation NMS applies to National Market System stocks, which are defined as NYSE, AMEX and NASDAQ listed issues - these are actively traded equity issues. This means that Regulation NMS does not apply to thinly traded OTCBB or Pink Sheet issues.

15. The best answer is d. An "ISO" is an Intermarket Sweep Order, which is exempt from the "trade-through" rule of Regulation NMS. Such an order will electronically "sweep" the exchange's limit order book. An ISO is a limit order sent to a particular exchange when another market center is posting better quotes. The recipient exchange is alerted by the "ISO" that the trader will also be sending the ISO to the other exchanges in an attempt to access their better-priced orders. That way, the first exchange does not have to re-route the order to the "better priced" market and can attempt a fill, subject to "best execution" requirements. This forces the markets to compete with each other.

## TRADING PRACTICES CHAPTER (4)

|   | PAGES   |
|---|---------|
| SECTION 1: SEC RULES                                  | 1 - 14  |
| 1a. INSIDER TRADING RULES.....                        | 1 - 4   |
| 1b. REGULATION FD (FAIR DISCLOSURE).....              | 4 - 6   |
| 1c. EXCHANGE ACT OF 1934 PROHIBITIONS.....            | 6 - 7   |
| 1d. PENNY STOCK RULES.....                            | 7 - 9   |
| 1e. TENDER OFFER RULES.....                           | 9 - 11  |
| 1f. ISSUER PURCHASING ITS OWN SECURITIES.....         | 11      |
| SEC RULES SECTION EXAMINATION.....                    | 12 - 13 |
| SEC RULES EXAM EXPLANATIONS.....                      | 14      |
| SECTION 2: PROHIBITED TRADING PRACTICES               | 15 - 24 |
| 2a. OVERVIEW.....                                     | 15      |
| 2b. FRONT RUNNING.....                                | 15      |
| 2c. TRADING AHEAD OF RESEARCH REPORTS.....            | 15 - 16 |
| 2d. TRADING AHEAD OF CUSTOMER MARKET ORDERS.....      | 16      |
| 2e. INTIMIDATION / COORDINATION.....                  | 16 - 17 |
| 2f. INTERPOSITIONING.....                             | 17 - 18 |
| 2g. OTHER PROHIBITED ACTS.....                        | 18 - 20 |
| PROHIBITED TRADING PRACTICES SECTION EXAMINATION..... | 21 - 22 |
| PROHIBITED TRADING PRACTICES EXAM EXPLANATIONS.....   | 23 - 24 |
| SECTION 3: OPTIONS CLEARING CORPORATION (OCC) RULES   | 25 - 36 |
| 3a. EXERCISE PROCEDURES.....                          | 25 - 26 |
| 3b. ASSIGNMENT OF EXERCISE NOTICES.....               | 26      |
| 3c. CLEARANCE PROCEDURES.....                         | 26 - 28 |
| 3d. OCC REPORTS .....                                 | 28 - 29 |
| 3e. POSITION AND EXERCISE LIMITS.....                 | 30 - 31 |
| OCC RULES SECTION EXAMINATION.....                    | 32 - 33 |
| OCC RULES EXAM EXPLANATIONS.....                      | 34 - 36 |

|   | PAGES          |
|---|----------------|
| <b>SECTION 4: SUPERVISORY RULES</b>                                   | <b>37 - 56</b> |
| 4a. GENERAL SUPERVISORY RULES.....                                    | 37 - 38        |
| 4 b. ANTI-MONEY LAUNDERING RULES.....                                 | 39 - 42        |
| 4 c. PORTFOLIO MARGINS.....   | 42 - 45        |
| 4 d. LEVERAGED ETF MARGINS.....                                       | 43 - 45        |
| 4 e. ORDER TAKING, TRADE REPORTING,<br>ERRONEOUS TRADE REPORTING..... | 45 - 47        |
| 4 f. SETTLEMENT RULES.....  | 48 - 50        |
| SUPERVISORY RULES SECTION EXAM.....                                   | 51 - 53        |
| SUPERVISORY RULES EXAM EXPLANATIONS....                               | 54 - 56        |
| <b>SECTION 5: PERSONNEL RULES</b>                                     | <b>57 - 76</b> |
| 5 a. REGISTRATION OF PERSONNEL.....                                   | 57 - 63        |
| 5 b. CONDUCT OF REGISTERED PERSONNEL.....                             | 63 - 66        |
| 5 c. DISCIPLINARY PROCEEDINGS.....                                    | 66 - 68        |
| PERSONNEL RULES SECTION EXAM.....                                     | 69 - 73        |
| PERSONNEL RULES EXAM EXPLANATIONS.....                                | 74 - 76        |
| <b>SECTION 6: RECORDKEEPING RULES</b>                                 | <b>77 - 84</b> |
| 6 a. RECORDKEEPING RULES.....   | 77 - 78        |
| 6 b. RULE 17a-5 - REQUIRED REPORTS.....                               | 78 - 79        |
| 6 c. RULE 17f-1 - REPORTING LOST/STOLEN<br>SECURITIES.....            | 79 - 80        |
| 6 d. RULE 17f-2 - FINGERPRINTING.....                                 | 81             |
| RECORDKEEPING RULES SECTION EXAM.....                                 | 82             |
| RECORDKEEPING RULES EXAM EXPLANATIONS                                 | 83 - 84        |

## SECTION 1: FEDERAL REGULATIONS

### 1a. INSIDER TRADING REGULATIONS UNDER THE EXCHANGE ACT OF 1934

Congress strengthened insider trading regulations in 1988 under the "Insider Trading and Securities Fraud Enforcement Act of 1988." This Act amends the insider trading provisions of the '34 Act.

The unusual problem with insider trading rules is that the SEC has never really defined an "insider" and has never really defined the point where "inside information" has been made public and hence can be used for trading.

|  |   |
|--|---|
| <b>Technical Definition Under '34 Act</b>                    | Under the Securities Act of 1934, an "insider" is defined as an:  |
|  | Officer;<br>Director;<br>10% shareholder of the issuer's equity securities.   |
| <b>Initial Filing - Form 3</b>                               | Upon becoming an "insider", an initial filing must be made with the SEC on Form 3 within 10 business days; and  |
| <b>Trade Filing - Form 4</b>                                 | Changes in ownership by any defined insider must be filed with the SEC on Form 4 no later than 2 business days after the event.   |
| <b>Short Swing Profits Must Be Disgorged</b>                 | Any short swing profits (defined as profits derived from trades within a 6-month period) in that stock must be paid back to the corporation.  |
| <b>Insiders Cannot Sell Short Their Own Company's Shares</b> | Insiders are prohibited from selling their own company's stock short except that they can "short against the box" at year-end to lock in a gain and defer tax (under very specific conditions in the Internal Revenue Code) to the next year - however, the position against the box must be closed out within 20 days. |
| <b>Prohibition On Trading On Material Non-Public Info.</b>   | Insiders are prohibited from trading based on "material non-public information" (this is covered in much greater detail following);   |

The SEC has used Rule 10b-5 (the "catch-all" fraud rule, discussed later in this section) to bring action against persons who do not fit this definition - and has succeeded. In a famous court case, an engineer for a company that discovered a rich mineral field, and who bought the shares

before the information was made public, was considered to be an "insider."

**Court's Definition Of An Insider**

Through court cases, the current definition of an "insider" is any person who has received material non-public information that can be expected to influence the price of a company's stock. If that person trades on the information prior to its becoming public, he is an insider who is in violation of the Act.

**Liability For Both "Tipper" and "Tippee"**

Please note that giving someone "inside information" is not a violation. A violation occurs if the recipient ("the tippee") uses the information to trade for profit. If this occurs, then the "tipper" is also liable under the Act.

The Act states that trading of equivalent securities or options of that issuer is a violation as well.

**Inside Information Not Public Until News Media Release**

Once the information is made public, that person can trade. Information is considered to be public once it has been released by the news media.

Under the Insider Trading and Fraud Enforcement Act of 1988 ("the Act"), insider rules were strengthened by Congress.

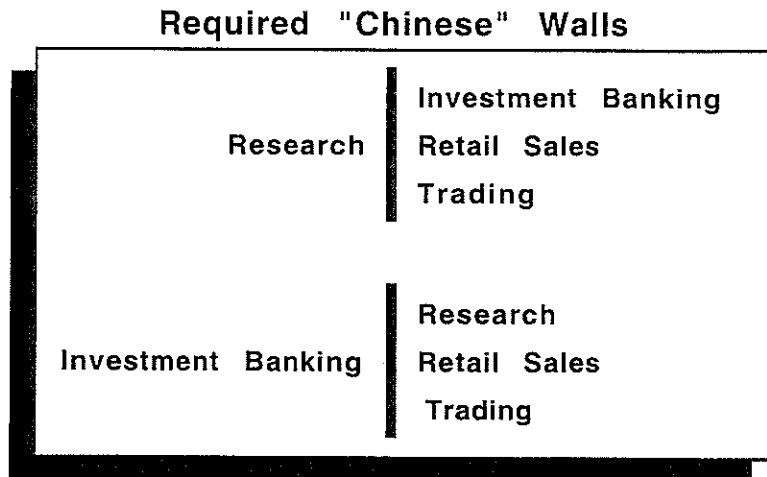
**Broker-Dealers Must Have Procedures To Prevent Misuse Of Material Non-Public Information**

This Act requires broker-dealers to establish, maintain, and enforce written policies and procedures designed to prevent the misuse of material, non-public information by any associated person.

In particular, this legislation was aimed at investment bankers engaged in takeovers. Large broker-dealers have divisions for investment banking; mergers and acquisitions; trading; and retail. Inside information is routinely received through investment banking and merger activities. It is not a violation to receive inside information. It is a violation to use the information to trade for profit.

**Chinese Walls**

To insure that such inside information is not communicated to the firm's trading or retail operations, all firms set up "Chinese Walls" that fully segregate the information flow. For example: A company's true identity may only be known to one or two top people; all communications about that company use a pseudonym.



**Violation For  
Insider - Defined  
As Person Who  
Misuses Material  
Inside Information**

If a person violates the insider trading rules by purchasing or selling a security while in the possession of material non-public information or by giving that information in connection with a transaction in those securities, he is liable for civil penalties. The penalty can be up to 3 times the profit realized or loss avoided (treble damages). Criminal penalties for individuals include a fine of up to \$5,000,000 and up to 20 years in jail for each violation.

**Violation For  
Controlling Person  
If He Knew About  
Misuse**

In addition, if that person is "controlled," e.g., that person is an employee of a broker-dealer that was supposed to have procedures designed to prevent misuse, the controlling person is liable under the Act. The liability for such firms is greater (since they have deeper pockets!) and is set at a \$25,000,000 fine.

However, the SEC will not impose damages on the controlling person **unless** it can be proven that the person knew or recklessly disregarded the fact that a violation occurred and that such failure substantially contributed to the occurrence of the Act.

**Informer Bounty**

Furthermore, the Act allows informants to be paid up to 10% of the amounts recovered under civil penalties.

**Insiders Can Be  
Sued By Any Person  
Who Traded That  
Security**

The Act also states that private parties have the right to institute action against persons who have violated the "insider trading" rules. Thus, anyone who bought or sold that security during the time period when the inside trades occurred can sue the "insider" for profit gained or loss avoided. The statute of limitations in such suits is 5 years.

**Rule 10b-5-1  
Pre-Arranged  
Trading Plan**

Insiders can avoid the "worry" that they will be accused of an insider trading violation under the provisions of Rule 10b-5-1 if they establish a pre-arranged trading plan. This is a "safe-harbor" rule that permits statutory insiders

(officers, directors and 10% shareholders) to set up a written plan for trading that company's securities.

Such a written plan specifies the future date with amount on which securities are to be bought and sold; or specifies the algorithm to be used for determining the amount and date of future purchases or sales. Once the plan is in force, the "insider" cannot have any further influence on trades effected under the plan. As long as the insider adheres to such a written trading plan, that person is given a "safe harbor" from being accused of using "inside information" as the basis for the trades that occur based on adhering to the plan.

## 1b. REGULATION FD (FAIR DISCLOSURE)

### **Regulation FD**

In the year 2000, the SEC passed Regulation FD to address specific issues related to insider trading rules. The new rules were designed to address three issues:

#### **Selective Disclosure By Issuers**

The selective disclosure by issuers of material non-public information;

#### **When A Trader Is Deemed To Be An "Insider"**

When insider trading liability arises in connection with a trader's "use" or "knowing possession" of material non-public information; and

#### **Family Member Trades**

When the breach of a family or other non-business relationship may give rise to liability under the misappropriation theory of insider trading.

The rules are designed to promote the full and fair disclosure of information by issuers, and to clarify and enhance existing prohibitions against insider trading.

#### **Selective Disclosure By Issuers Is Prohibited**

The regulation provides that when an issuer, or person acting on its behalf, discloses material non-public information to securities market professionals and holders of the issuer's securities who may well trade on the basis of the information, it must make public disclosure of that information.

In the past, issuers used to hold quarterly conference calls with securities industry research analysts and big institutional money managers to give them "earnings guidance" and to "clue them in" as to the outlook for the company for that quarter. The problem was that the SEC viewed this selective disclosure as causing these conference call participants to become "insiders." Now, under Regulation FD, issuers can no longer make such selective disclosures. There must be broad public distribution of the information, otherwise the issuer can

be considered to be a "tipper" and the recipients "tippees" under the insider trading rules.

If an issuer makes a disclosure of non-public information at such a meeting, the issuer can avoid liability by:

For an intentional disclosure, simultaneously disclosing the information by broad distribution to the public; or

For a non-intentional disclosure, promptly (defined as within 24 hours) disclosing the information either by filing an 8K report with the SEC (which makes the report public) or by a broad distribution of the information to the public.

#### **When A Trade Is Considered To Be Made On Inside Information**

The rule also gives a "definition" of when a trade is considered to be made based on "inside information." The rule defines an "inside trade" as one made on the basis of material non-public information, if the trader was aware of the material, non-public information when the person made the purchase or sale.

#### **Specific Defense Against Alleged Insider Trading**

The rule also provides specific defenses that a person can show to prove that a trade was not made based on such "inside" information. These are:

The person, before becoming aware of the information, had entered into a binding contract to buy or sell the security;

With respect to this purchase or sale contract, the person demonstrates that the contract specified the amount, date, and price of the trade (or gave a formula for this); and that the person had no further influence over the trade; and

The resultant trade happened because of the prior contract instruction.

In essence, the rule outlines Martha Stewart's insider trading defense - coincidence, perhaps?

#### **Family Member Insider Trading**

Finally, the rule details the situation under which family members are deemed to be "insiders." The rule states that a duty of trust or confidence exists when:

a person agrees to maintain information in confidence;

two people have a history, pattern, or practice of sharing confidences such that the recipient of the information knows or reasonably should know that the person communicating the material non-

public information expects that the recipient will maintain its confidentiality; or

a person receives or obtains material non-public information from certain close family members: spouses, parents, children, and siblings.

If, in these situations, a family member trades based on "inside information," liability exists. An affirmative defense permits the person receiving or obtaining the information to demonstrate that under the facts and circumstances of that family relationship, no duty of trust or confidence existed.

### **1c. PROHIBITIONS AND RULES UNDER THE EXCHANGE ACT OF 1934**

#### **Section 9: Unlawful Practices**

Section 9 of the Act lists a number of unlawful practices. These are:

Effecting transactions in securities where there is no beneficial change of ownership ("wash trades") with the purpose of creating a misleading appearance of activity in that security. This is also called "painting the tape." Note that such pre-arranged trading is prohibited.

Placing an order for a security upon knowledge of orders that have been, or will be placed, at substantially the same price.

Effecting a series of transactions in a security to create the impression of rising or falling prices.

Offering to buy or sell a security for a customer by giving information to the effect that the price is likely to rise or fall because of market operations of certain persons.

Inducing the sale of a security by using false or misleading statements.

Accepting payment for disseminating information that the price of a security is likely to rise or fall.

Pegging (stabilizing) the price of a security in the market other than under the prescribed rules set by the SEC.

**Suits Brought Within 2 Years Of Discovery; 5 Year Statute Of Limitations** Willful violations of these prohibitions make that person liable for damages sustained by investors in the security. Any suit must be brought within 2 years of discovery, but no later than 5 years after the violation occurred.

**Manipulation Is Fraud** Section 10 of the Act states that it is unlawful for any person to use or employ any deceptive or manipulative device in violation of the Act. The rules written under Section 10 detail a number of prohibited practices:

Rule 10b-1 - States that this section of the Act applies to manipulation of **both** exempt and non-exempt securities. Therefore, if a person manipulates U.S. Government bond transactions, a violation under the Act has occurred.

Rule 10b-3 - States that it is unlawful for broker-dealers, including municipal broker-dealers, to use or employ any deceptive or manipulative device.

Rule 10b-5 - Known as the "catch-all" fraud rule, makes it illegal for any person to commit undefined actions that would operate as a fraud.

**Broker-Dealer Registration With SEC** Section 15 of the Act places requirements on broker-dealers. Section 15-a-1 requires broker-dealers that effect transactions in securities (other than exempt securities) to be registered. It also allows the SEC to censure, suspend, or revoke the registration of a broker-dealer or associated person.

#### **1d. SALES OF PENNY STOCKS - SEC RULES 15g-1 THROUGH 15g-6**

Broker-dealers are required to pre-qualify new customers that wish to purchase penny stock as the result of a solicitation. SEC Rules 15g-1 through 15g-6 are designed to prevent high pressure telephone sales tactics when selling low price securities.

These rules apply to sales of "designated securities." These are equity securities that are not exchange listed, or are not included on NASDAQ, and which have a price of less than \$5 per share. Only a few of the penny stock rules are included in the exam.

If a firm wishes to sell "designated securities" to someone who is not an "established customer" it must first:

Obtain detailed information from the customer about his or her financial situation; investment experience; and investment objectives;

**Written  
Suitability  
Statement**

Determine, based on the above information, that the proposed transactions are suitable for the customer and that the customer has sufficient knowledge and experience in financial matters to evaluate the risks and merits of the recommended investment;

**Customer Signature  
Before Confirmation**

The firm must obtain this written, signed statement from the customer before the trade can be effected.

**Disclosures When  
Effecting Principal  
Transactions In  
Penny Stocks**

Prior to effecting a customer transaction in a penny stock on a principal basis (where the dealer buys into inventory or sells out of inventory), the broker-dealer must:

disclose the current inside bid and ask quote for the penny stock;

if an inside market does not exist, the dealer must:

disclose its current bid or offer price (as appropriate), if in the last 5 days, the dealer has effected 3 bona-fide transactions with other dealers;

or if there were not bona-fide 3 transactions in the last 5 days, disclose if the quote accurately reflects the price at which the dealer is willing to buy or sell to another dealer.

(If the dealer's quote does not meet these requirements, the dealer must disclose that it has not consistently effected inter-dealer trades at its bid or offer prices and it must disclose the last price at which it actually effected a trade in that stock with another dealer.)

**Disclosures When  
Effecting Agency  
Transactions In  
Penny Stocks**

Prior to effecting a customer transaction in a penny stock on an agency basis (where the firm acts as a middleman matching the client to a dealer), the broker-dealer must:

disclose the best inter-dealer bid or offer (as appropriate) obtained by contacting at least 3 dealers; or all known market makers if there are less than 3.

**Disclosure Of  
Quote Size**

Regardless of whether the bid or ask is disclosed on an agency or principal basis under this rule, the size of the quote must also be disclosed.

The bid and ask disclosures required by the rule must be given orally, or in writing, Prior to effecting a trade in a penny stock for a customer and must be disclosed in writing on the written trade confirmation sent to the customer. These must also be retained by the broker-dealer as a record for 3 years.

The following are exempted from the "penny stock" rules:

Broker-dealers whose transactions in penny stocks comprise less than 5% of revenues;

Transactions where the customer meets the definition of an "accredited investor" under the private placement rule;

Transactions with "insiders;"

Transactions not recommended by the broker-dealer.

**1e. TENDER OFFER RULES**

**Rule 10b-4  
"Short Tender Rule"**

Rule 10b-4 - Prohibits any person from tendering securities in a tender offer unless that person is "long" the security and will tender within the specified period

**Definition Of  
"Long" Position**

A sale is considered to be long if:

The customer owns the stock and will deliver on settlement day to satisfy the sale.

The customer owns a convertible security, has given orders to convert, and will deliver on settlement day to satisfy the sale.

The customer owns rights, warrants, or call options and has exercised and will deliver on settlement day to satisfy the sale.

For example: If a customer owns a call option on a stock and wishes to tender that stock, the option must be exercised and the stock delivered for the customer to be considered "long."

**"Long" To Extent  
Of Net Long Position**

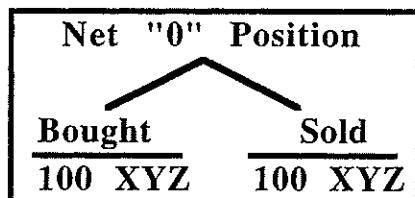
Furthermore, a customer is considered to be "long" only to the extent of his "net" long position in a security. As an example of how a "net" position is created assume a

customer owns 100 shares of XYZ purchased at \$20 and the stock is worth \$30 at year end. If the stock is sold "long," meaning delivered on the sale, the customer must pay tax on a \$10 capital gain.

Instead, the customer borrows another 100 shares of XYZ and sells those shares. The sale of borrowed shares is a tax strategy known as "shorting against the box" - that is, selling short shares that are held "long" in a box somewhere. Under 1997 tax law revisions, this will result in a taxable gain, unless the customer meets very specific tests (which are not on the Series 56 exam). Assuming that the customer meets these tests, the sale does not result in a taxable gain at that point, since different shares were sold. The customer has created the following position:

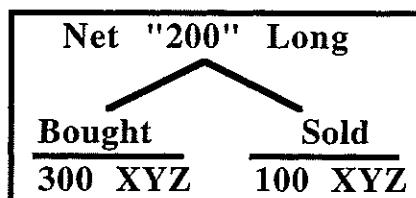
|             |              |
|-------------|--------------|
| <u>Long</u> | <u>Short</u> |
| 100 XYZ     | 100 XYZ      |

At a later date, the customer cover the short position by buying in the borrowed shares, and will pay tax at that point. However, assume that there is a tender offer for XYZ stock at \$40 per share, and the customer wishes to tender. Here is a picture of the customer's net position:



The customer has no ownership position and cannot tender the 100 shares that he holds "long." To tender, the customer has to buy back 100 shares to cover the short and then can tender the remaining net long 100 share position.

If the customer had a position of 300 shares held long and 100 shares held short, then the customer has a "net" long position of 200 shares. In this case, 200 shares of XYZ stock could be tendered. This is pictured following.



#### Short Tender Rule

This rule, requiring that a customer can tender only to the extent of his or her net long position, is called (confusingly) the "short tender rule." If a customer is net

"0" or net short a security position, the customer cannot tender. The customer can only tender if he or she is net "long" the stock.

## 1f. ISSUER PURCHASING ITS OWN SECURITIES UNDER THE 1934 ACT

**Rule 10b-18  
Sets Requirements  
For Issuers That  
Wish To Acquire  
Their Shares In  
The Open Market**

Rule 10b-18 sets the ground rules for issuers or affiliated persons who wish to buy their shares in the open market. If an issuer aggressively buys its stock in the market, or bids for its stock, it can manipulate the market price upwards. Bids and purchases that are made in compliance with Rule 10b-18 will not be considered manipulative activities under Rule 10b-5 ("catch-all" fraud rule).

**Rule 10b-18**

Rule 10b-18 purchases, as they are known,:

Must be effected through 1 broker/dealer on any given day;

Cannot be the opening transaction;

Cannot be executed within 10 minutes of market close if the security is "actively traded" as designated by Rule 101 of Regulation M (covered next); otherwise, the purchase cannot be executed within 30 minutes of market close;

Must be effected at prices no higher than the current highest independent bid for that security or last reported sale price (whichever is higher);

Cannot exceed 25% of the trading volume in the security that day (except for block purchases handled outside the normal flow of orders).

In essence, the rule says that if an issuer buys in its stock during market "quiet" hours; does not bid up the price of the stock; and does not buy too aggressively; then it will **not** be considered to be manipulating the price of its own securities. Generally, corporations buy back shares and either retire them (increasing reported Earnings Per Share) or use them to fund pension and stock option plans.

## SEC REGULATIONS SECTION EXAMINATION

1.

All of the following meet the statutory definition of an "insider" EXCEPT:

- a. Officer of a company
- b. Holder of 10% of the equity securities of a company
- c. Holder of 10% of the debt of a company
- d. Director of a company

3.

Which statements are true regarding broker-dealer requirements regarding "insiders" under the Insider Trading Act Amendments of 1988?

- I Broker-dealers are obligated to establish and enforce procedures to detect and prevent insider violations
- II Insider rules have forced broker-dealers to adopt "Chinese Wall" policies
- III Broker-dealers can be held liable for insider trading of their "controlled" employees

- a. I only
- b. I and II
- c. II and III
- d. I, II, III

2.

Under the Securities Act of 1934, liability for misuse of "inside information" rests with the:

- I Tipper if the information results in a securities transaction
  - II Tippee if the information results in a securities transaction
- a. I only
  - b. II only
  - c. I and II
  - d. None of the above

4.

Who can sue to recover damages from convicted "insiders"?

- a. The entire investing public
- b. Any current owner of the issuer's securities
- c. Any person who traded the issuer's securities during the period of "inside trading"
- d. No public suits can be brought after conviction



5.

Under SEC Rule 10b-18, which of the following statements are true regarding an issuer purchasing its own securities in the open market?

- I Purchases cannot affect the opening or closing price of the security
  - II Purchases on any given day must be made through 1 market maker or specialist
  - III Purchases on any given day cannot exceed 25% of average daily trading volume (ADTV)
  - IV Block purchases are prohibited
- a. II and III only
  - b. I and IV only
  - c. I, II, III
  - d. I, II, III, IV

7.

The SEC "Penny Stock Rule" applies to which of the following stocks trading at \$4 per share?

- I Pink Sheet stock
- II OTCBB stock
- III Capital Market stock
- IV Global Market stock

- a. I and II only
- b. III and IV only
- c. I, II, III
- d. I, II, III, IV

8.

Another name for pre-arranged trading is:

- a. painting the tape
- b. interpositioning
- c. block positioning
- d. dual capacity

9.

Under SEC Rule 15g-1, member firms are exempt from the provisions of the "penny stock rule" if its penny stock business is less than:

- a. 20% of its revenue
- b. 15% of its revenue
- c. 10% of its revenue
- d. 5% of its revenue

6.

A broker comes into possession of material non-public information as the result of a conversation with the chief financial officer of a publicly traded company. At this point in time, which statement is true?

- a. The chief financial officer has violated the insider trading rules
- b. The broker has violated the insider trading rules
- c. Both the chief financial officer and the broker have violated the insider trading rules
- d. Neither the chief financial officer nor the broker has violated the insider trading rules

10.

SEC Regulation FD covers:

- a. notification to customers of a member firm's privacy policies and practices
- b. selective disclosure of material non-public information by issuers
- c. standardization of disclosure of financial and non-financial information by issuers
- d. registration filings with the SEC by small business issuers

## SEC REGULATIONS SECTION EXPLANATIONS

1. The best answer is c. The Securities and Exchange Act of 1934 defines an "insider" as any officer; director; or 10% shareholder of the **equity** securities of the issuer.
2. The best answer is c. The misuse of material non-public information that leads to a securities transaction is a violation for **both** the tipper and the tippee.
3. The best answer is d. All of the statements are true. Under the Insider Trading Amendments of 1988 to the Securities Exchange Act of 1934, broker-dealers are obligated to establish procedures to detect and prevent insider violations by their employees. This has led firms to establish so called "Chinese Walls." If it is found that the firm failed to have the proper procedures in place and that it recklessly disregarded evidence of potential insider violations, the firm can be held liable as well for insider violations.
4. The best answer is c. Insider trading violators can be sued by any investor who held or traded the stock during the period that the violations took place.
5. The best answer is c. Purchases by issuers of their own stock under Rule 10-b-18 cannot affect the opening or closing price of the issuer; must be effected through 1 market maker; and purchases on any given day cannot exceed 25% of average daily trading volume. Block purchases are permitted (since they are handled under special rules that minimize the market impact of the block transaction) and do not count against the daily volume limit.
6. The best answer is d. A violation of the insider trading rules occurs only if a trade occurs using the "inside information" - with both the "tippee" who traded, and the "tipper" who gave the information - being potentially liable. Being in possession of the information, and not trading on it, is not a violation.
7. The best answer is a. The "Penny Stock Rule" applies to non-exchange listed, non-NASDAQ issues trading for less than \$5 per share. Thus it applies to solicitation of customers to buy OTCBB or Pink Sheet issues priced under \$5.
8. The best answer is a. Pre-arranged trading is a prohibited manipulative practice. Another name for this is "painting the tape" - since prearranged trades that are reported represent fictitious pricing and trading activity and are used to induce trading by others to move market prices up or down.
9. The best answer is d. If a member firm's revenue from penny stock transactions is less than 5% of total revenue, then the member firm is exempt from the penny stock disclosure rule requiring that when a customer is solicited to buy a penny stock, the customer must sign and return a detailed suitability statement prior to confirmation of sale. The intent of the rule is to make life difficult for firms that, as a majority of their business, push penny stocks.
10. The best answer is b. Regulation FD (Fair Disclosure), passed in 2000, is basically an elaboration of the insider trading rules. It prohibits issuers from making selective disclosure of non-public information to research analysts, mutual fund managers, and other industry professionals, unless at the same time, the information is broadly disseminated to the public.

## SECTION 2: PROHIBITED TRADING PRACTICES

### 2a. OVERVIEW

Certain trading practices, by market makers and non-market makers alike, are violations of SRO and SEC rules. The most important of these are covered following.

### 2b. FRONT RUNNING

Front running a customer order is prohibited. For example, if a market maker receives a large block order that is likely to have a market impact, it cannot take a position in that stock prior to filling the order (that is, "front run" the order). This prohibition applies to the member firm's proprietary accounts; accounts of the member firm's employees; and accounts over which the member firm has discretion.

In addition, a member cannot get around the front running prohibition by taking positions in derivative securities prior to effecting the large block order. For purposes of the rule, a block is defined as an order for 10,000 shares or more. Finally, a member firm cannot avoid the rule by "arranging" for partial executions of the full block amount so that the portions filled fall below the "block" definition.

### 2c. TRADING AHEAD OF RESEARCH REPORTS

#### No Trading Ahead Of Research That Will Be Distributed To Customers

If a firm's research department is going to issue a report on that company that is likely to affect the market price of the issue, the firm's market making desk cannot alter its pre-existing inventory position in that issue based on advance knowledge of the recommendation. Once the recommendation is disseminated, the firm is not bound by this restriction.

For example, assume that a member firm is about to issue a bullish research report about ABCD Corp. In order to meet anticipated customer demand, the member accumulates a position. After doing so, the member issues its report, filling customer orders from inventory. Under SRO rules, this action is prohibited.

This prohibition applies to member firms that are market makers in NASDAQ securities and exchange listed securities; and applies to taking positions in derivative securities as well in advance of the issuance of a research report.

The prohibition does not apply when changes in inventory are related to unsolicited order flow or to research done solely for in-house trading purposes (these reports are not released to customers).

#### **Chinese Wall**

Each SRO recommends, but does not require, that the member firm place a "Chinese Wall" between research departments and trading departments to prevent traders from obtaining and using advance knowledge of impending research reports.

#### **2d. TRADING AHEAD OF CUSTOMER MARKET ORDERS**

##### **Member Cannot Compete With Customer Market Orders**

The basic "idea" behind the Limit Order Protection (Manning) rule, covered in the previous chapter, is applied to market orders under this rule.

If a member holds a customer market order, the member cannot trade that security on the same side of the market for its own account, unless it immediately thereafter, executes the customer market order (up to the size and at the same price at which it traded for itself). Thus, customer market orders are filled first! In addition, the rule requires that the orders be filled at the inside market (NBBO - National Best Bid and Offer).

If a member holds multiple market orders on both sides of the market, it must cross them, before it can fill 1 side out of its inventory account.

The rule applies to trades of exchange listed and NASDAQ stocks (not to OTCBB or Pink Sheet issues).

#### **2e. INTIMIDATION / COORDINATION**

Based partly on the settlement reached between the Justice Department and NASDAQ market makers that were found to be engaging in a whole range of anti-competitive practices, each SRO issued interpretations relating to intimidation and coordination.

**Members Cannot Coordinate Prices** The interpretations state that members cannot coordinate prices with other members, including quotations; nor can firms direct or threaten other firms to alter a price or quotation.

**Members Cannot Threaten Other Members** Similarly, members cannot engage in any conduct that harasses, intimidates, or otherwise attempts to force another member to change or maintain a price or quotation. Such intimidation could take the form of threatening phone calls, refusal to trade, refusal to allow participation in underwriting syndicates, etc.

In other words, members must be able to set their own bid and ask quotes, spreads, and quotation size, freely.

## 2f. INTERPOSITIONING

**Interpositioning Prohibited Unless It Is Demonstrated That Better Execution Was The Result**

Each SRO prohibits a practice known as interpositioning. When your firm gets an order to buy or sell, the firm cannot go through a middleman firm who in turn goes to the market maker. Therefore, your firm cannot interposition another firm (who would earn a commission on top of your firm's commission) between itself and the market maker. Interpositioning is prohibited unless it can be demonstrated that the use of a middle firm allows for a better execution. Better execution means that the purchase price was lower, or the sale proceeds were higher, than the prevailing inter-dealer market.

**Correspondent Relationships Are Allowed**

The prohibition on interpositioning does not prohibit "correspondent" relationships that are common to the industry. For example, a small broker-dealer dealing primarily in Pink Sheet issues may not have NASDAQ terminals, and may use another larger member firm to handle NASDAQ trades, as part of a written trade and clearing agreement. Under these agreements, the clearing firm is paid out of the commission charged to the customer. There are no extra charges to the customer - nor are extra charges permitted under SRO rules, since that would be an "interpositioning" violation.

Regarding clearing arrangements, the following must be known:

**Clearing Agreement**

The clearing agreement between an introducing firm and its clearing agent must specify the responsibilities of each party. The clearing agreement might require that all trades of the introducing firm go to the clearing broker; or it can allow the introducing broker to execute trades through firms other than the clearing broker, with these trades being reported to the clearing broker for settlement and clearance. This might be specified by the introducing

firm when it wants the flexibility to direct a trade to a market maker that it feels is best qualified to handle the transaction.

### **Give Up Clearing Arrangement**

If the agreement allows the introducing firm to execute "away" from the clearing broker, this is termed a "give-up" clearing arrangement. When executing away, the introducing firm "gives up" the name of its clearing broker to each firm with which it enters orders. This alerts these firms that payment for purchases and delivery of securities sold will be handled by the clearing broker, not the introducing firm. The clearing broker in this case, is where the "prime brokerage account" is being maintained by the introducing firm.

### **Prime Brokerage Account**

In prime brokerage, any number of executing brokers can handle parts of a trade, but the entire trade will be cleared and settled by the prime broker. The terms "give-up" and "step-out" are used in prime brokerage arrangements, and their differences must be known for the exam.

#### **"Give-Up"**

In a "give-up," the executing broker-dealer provides the clearing number of the prime broker when reporting the trade for comparison and clearance. The executing broker "gives up" the name of the clearing prime broker when the trade is being reported.

#### **"Step-Out"**

In a "step-out," the executing broker provides the clearing number of the prime broker **after** the trade is reported for comparison and clearance. Thus, the executing broker "steps-out" of the reported trade for comparison and clearance purposes. A step-out is used to move a reported trade from the account of the executing member to the clearing member. It is a movement of position only.

## **2g. OTHER PROHIBITED ACTS**

Manipulation of the market is prohibited in any form. Various ways in which members have been found to manipulate the market, and thus are violations are:

### **Trading Pools**

Trading Pools: These are groups of traders who band together to trade a security at successively higher and higher prices. The "pool" participants take a long position in the security, and agree to rebate each other for losses incurred on the pooled transactions with each other. As the pool inflates the price of the issue and other investors see the frenetic trading activity, those outside investors



jump in and buy; at which point the pool members jump out at an artificially high price.

Each SRO prohibits members from participating in such pools, from providing credit to such pools and from managing such pools. To monitor member activity, each SRO requires that any member, prior to participating in any joint account, must file a report with the SRO including;

Name of account and each participant;

Purpose of account;

Name of member carrying and clearing the account;

Copies of written agreements relating to the account.

#### **Wash Trades**

Wash Trades: This is where a single member buys and sells a security, over and over, to create the appearance of trading activity with no actual change in ownership (so the trades are really a "wash" - hence the name). This is sometimes called "painting the tape," since a series of fictitious trades is being reported. Since false trades are being reported, this is a violation.

#### **Painting The Tape**

#### **Marking To Close Marking To Open**

#### **Marking To Close or Marking To Open:**

Marking to Close is trading at the close, or falsely reporting trades at the close, just to affect the stock's closing price.

Marking to Open is trading at the open, or falsely reporting trades at the open, just to affect the stock's opening price.

Each SRO has disciplined program traders for "marking the close" and "marking the open" violations. These firms attempt to arbitrage the difference between an index option's value (which can be based on market open or market close, depending on the index option) against the actual prices of the securities that are included in the index. The illegal practice was placing sequential orders at the open or close for the securities in the index to either move their price up (or down), so that the index arbitrage position would show a profit.

**Trade Shredding**

“Trade Shredding:” This is the practice of splitting large orders into multiple smaller orders for execution for the primary purpose of maximizing “payments for order flow,” is a prohibited practice. These payments could come in the form of credits, commissions, rebates of fees or any other payment of value.

**At The Market Offerings**

At the Market Offerings: A member cannot represent to a customer that a security is being offered “at the market, unless the member has reasonable grounds to believe that a market exists for the security, other than the market created by that member.

**Selling Dividends**

Selling Dividends: A member cannot induce a customer to buy a stock that is about to pay a dividend by claiming that he or she will “miss out” if the stock is not purchased before the ex-date. If the customer buys on the ex-date or after, the customer pays a price that has been reduced for the dividend that the customer will now no longer receive. Thus, from an economic standpoint, it makes no difference if the customer buys prior to the ex date or after the ex date.



## PROHIBITED TRADING PRACTICES SECTION EXAMINATION

1.

Interpositioning is:

- a. permitted without restriction
- b. permitted if it results in the same or better execution for a customer
- c. permitted if it results in a better execution for a customer
- d. prohibited in all circumstances

2.

Under SRO rules, member firms must create Chinese Walls between all of the following **EXCEPT**:

- a. Research Department and NASDAQ Trading Desk
- b. Investment Banking Department and NASDAQ Trading Desk
- c. Mergers and Acquisitions Department and NASDAQ Trading Desk
- d. Reorganization Department and NASDAQ Trading Desk

3.

The prohibition against increasing inventory in anticipation of the release of a bullish research report applies to:

- a. NASDAQ securities
- b. Listed securities traded in the Third Market
- c. Both of the above
- d. Neither of the above

4.

The prohibition against trading ahead of a known block order applies to:

- I Proprietary accounts
- II Employee accounts
- III Employee-related accounts
- IV Accounts where the member has discretion

- a. I only
- b. I and II only
- c. II and III only
- d. I, II, III, IV

5.

An institutional customer selects one firm to provide custody and financing of securities, while orders to buy or sell are placed with executing brokers. This is an example of a:

- a. wrap account
- b. give up (clearing) agreement
- c. prime brokerage account
- d. step out account

6.

The last trade in ABCD stock occurred at \$50 per share. An OTC Equity Trader effects multiple buy-sell trades in that stock for the firm's account at successive prices of \$40, \$45, \$50, \$55 and \$60 per share. These transactions are:

- a. wash trades
- b. matched sales
- c. boxed trades
- d. pattern day trades

7.

A proprietary trading desk trades ahead of a customer limit order placed with the firm's market making desk. This action is:

- a. permitted without restriction
- b. permitted as long as a Chinese Wall is in place
- c. permitted as long as the firm has a no-action letter from the SEC
- d. prohibited

8.

"Marking the Close" is best described as a:

- a. series of trades at or near the close
- b. series of trades at or near the close intended to down-tick the security
- c. series of trades at or near the close intended to up-tick the security
- d. series of trades at or near the close intended to either up-tick or down-tick the security

9.

A trader at a large market making firm calls a counterpart at another firm and strongly suggests that the firm raise its offer by 5 cents in order to allow his firm to reduce inventory. In return, the trader promises order flow. This action is

- a. permitted
- b. permitted if the agreement is documented in writing
- c. permitted with the approval of the general principal
- d. prohibited

10.

A member that has knowledge of a client order that has not been entered on a marketplace that could reasonably be expected to affect the market price of the security is prohibited from:

- I entering a proprietary order for the purchase or sale of that security
- II soliciting an order from another person for the purchase or sale of that security
- III informing any other person, other than in the necessary course of business of the client order

- a. I only
- b. I and II
- c. II and III
- d. I, II, III

## PROHIBITED TRADING PRACTICES EXAMINATION EXPLANATIONS

1. The best answer is c. Interpositioning a "middle-man" firm between a customer and the best available market is prohibited unless it can be demonstrated that the use of the "middle-man" firm will result in a better (not just the same) execution for the customer.
2. The best answer is d. EACH SRO requires its member firms to create "Chinese Walls" to stop the flow of information between the member firm's research department and its trading desk. This is to stop the trading desk from "trading ahead" of an impending research report - a prohibited practice. Similarly, member firms must place Chinese Walls between their investment banking department and their trading desk; and their mergers and acquisitions department and their trading desk; since it would be tempting to trade based on news of an upcoming investment banking or takeover deal. The reorganization department of a broker-dealer notifies existing shareholders of corporate reorganizations (such as bankruptcies). This department is dealing with "already released" news, so there is no need for a Chinese Wall between it and the member firm's trading desk.
3. The best answer is c. Purposefully increasing inventory in anticipation of the release of a bullish research report is termed "trading ahead of research" and is a violation of SRO rules. The rule applies to member firms who trade NASDAQ stocks; exchange listed stocks; and derivatives on these securities.
4. The best answer is d. Front running a block order is a prohibited practice. The prohibition on front running applies to member proprietary accounts; employee and employee-related accounts; and accounts where the member has been given discretionary authority.
5. The best answer is c. A prime brokerage account is one where a customer, generally an institution, selects one broker (the prime broker) to provide custody and financing of securities purchased, and other brokers (executing brokers) to buy and sell on behalf of the customer. Unlike a prime brokerage account which involves a customer, a give-up clearing arrangement is between two members. For example, member firm A agrees to settle and clear all trades entered by member firm B.
6. The best answer is a. Effecting a series of buy-sell transactions (these are wash trades, since they "wash" each other out) without any change of ownership is a "time-honored" manipulation known as "painting the tape" - it gives the appearance of active trading in a security when this is not the case. Note that Choice d is incorrect because only retail customers can be defined as "pattern day traders."
7. The best answer is b. This one is interesting. A member firm cannot "trade ahead" of, or front-run, a customer limit order. However, if the firm has a Chinese Wall in place between its proprietary trading desk and its market making desk, then each should have no knowledge of what the other is doing. In that case, there is no violation because the proprietary trading desk does not know about the customer limit order received by the firm's market making desk. On the other hand, if there were no Chinese Wall in place, this would be a clear violation.

8. The best answer is d. "Marking to close" refers to trading, at or near the close, to influence the closing price of the security, either up or down. This is a prohibited manipulative practice.

9. The best answer is d. This is a form of intimidation, which is prohibited under SRO rules.

10. The best answer is d. Consider this question to be a learning lesson in everything that is prohibited about "front running." Prior to entering a customer order that is likely to have market impact (meaning a big institutional order), a member firm cannot place an order in that security for the firm's account; cannot solicit others to place orders; and cannot inform others about the existence of the market-impact order so that they can "front run" it.



## SECTION 3: OPTIONS CLEARING CORPORATION RULES

### 3a. EXERCISE PROCEDURES

The Options Clearing Corporation allows "American Style" option contracts to be exercised by the member firm at any time prior to expiration. The exercise notice must be tendered to the O.C.C. between 9:00 AM and 7:00 PM Central Standard Time (the O.C.C. is based in Chicago) on any business day. The tender becomes irrevocable at 7:00 PM Central Standard Time on the date of tender.

If the exercise notice is to be tendered on the day prior to expiration (this would normally be the most active day for exercises), the O.C.C. requires more time to handle the exercise. On the day prior to expiration, the O.C.C. delivers a Preliminary Report to each member before 7:00 AM CST listing each expiring option contract for that member's account.

**Customer Exercise Cut Off Time:  
4:30 PM CST On Day Prior To Expiration**

The Exchanges have established an exercise "cut off" time of 4:30 PM CST (5:30 PM EST) on the business day prior to expiration. This is the latest time at which the member can accept exercise instructions from customers. Based upon this information, the member knows which contracts are to be exercised.

The member must indicate on the Preliminary Report which contracts, if any, that it wishes to exercise. The Preliminary Report must be returned to the O.C.C. by 9:00 AM CST on the expiration date.

By 2:00 PM CST on the expiration date, the O.C.C. will deliver a Final Exercise Report to each clearing member. It is the same report as the "Preliminary," but it now includes the member's exercise instructions.

**Automatic Exercise If Contract Is \$.01 In The Money**

The O.C.C. will exercise those contracts designated by the member and, in addition, if the Final Report is **not** returned, or if exercise instructions are not given on the report, the O.C.C. will:

exercise all option contracts that are "in the money" by \$.01 or more; and

**Options Expire At 10:59 CST**

all unexercised contracts will expire at 10:59 PM Central Standard Time (11:59 PM EST).

**CEA - Contrary Exercise Advice**

A special form called a "CEA" - Contrary Exercise Advice - must be used to stop the automatic exercise or to change the parameters of the automatic exercise. This instructs the OCC of the customer's "contrary intention." These are accepted for up to 2 hours after the 4:30 PM CST (5:30 PM ET) exercise cut-off (so they are accepted until 6:30 PM CST (7:30 PM ET) on the third Friday).

**3b. ASSIGNMENT OF EXERCISE NOTICES**

**O.C.C. Assigns Exercise Notices To Members On Random Basis**

Once an exercise notice has been accepted by the O.C.C., it is assigned to an open short position that day based upon a random selection program. Since the O.C.C. keeps all position records in the name of the clearing member firms, the member firm receives the exercise notice.

Exercise notices accepted by the O.C.C. are assigned on or before 7:00 PM CST on the following business day for regular way trades. If a cash trade in an option is effected, the contract can be exercised and assigned on the same day as the trade.

**Member Assigns Exercise Notices To Customers On Either FIFO or Random Basis**

Once the member firm receives the exercise notice, it must assign the notice to a specific customer that has that position with the member firm. It is allowed for the member firm to use either a "First In, First Out" (FIFO) selection basis or a random selection basis. The "random basis" used must be approved by the Exchange. Furthermore, members cannot change their allocation method unless this is approved, in advance, by the Exchange.

**Customer Informed In Writing Of Allocation Method**

Each member firm is obligated to inform its customers, in writing, of the method that it uses to allocate exercise notices to customers, explaining its manner of operations and the consequences of that system.

**Assignment Records Kept For 3 Years**

All work papers and documentary materials relating to the assignment procedure and allocation methods used by the firm must be retained for 3 years.

**3c. CLEARANCE PROCEDURES**

If a customer who is short a call is assigned an exercised notice, he is obligated to:

For Equity Options: Deliver the underlying security in good form "promptly." This is defined as no later than 12:00 Noon CST, 3 business days after exercise date. Please note that the assignment notice may come 1 or 2 days after

exercise, leaving the writer 1 or 2 business days to deliver within the definition of "promptly."

The assignment notice will specify the place of delivery, which can be to the O.C.C. or directly to offices of the member firm that exercised the contract. The Delivering Member pays all expenses of delivery. Partial deliveries must be accepted. The delivering firm can require payment in the form of a certified, cashier's or bank check.

**Exercise Of Call  
Prior To Ex Date With  
Settlement Occurring  
After Record Date  
Requires Due Bill**

If the exercise occurred prior to an "ex date," then the receiving firm is entitled to any dividend payments made on the underlying stock. If the exercise occurred on, or after an "ex date," then the delivering firm is entitled to any dividend payments made on the underlying stock. If exercise occurs before the ex date, and the stock is delivered **on or after the record date**, then the receiving firm will not be on the corporation's record books to get the dividend to which it is entitled. The corporation will issue the dividend check in the name of the delivering firm (which is still on the record books). In this case, the delivering firm must deliver the underlying securities with a "due bill check" in the amount of the dividend.

If a customer who is short a put is exercised, he is obligated to:

**For Equity Options:** Deposit the funds to buy the securities "promptly," as defined under Regulation T. In practice, the funds must be deposited no later than 12:00 Noon CST on the 3rd business day after exercise. If the customer purchases the security in a cash account, 100% of the aggregate exercise price must be deposited (plus any commission costs). If the customer purchases the security in a margin account, 50% of the aggregate exercise price must be deposited.

Regarding exercise settlement of index options, debt options, and foreign currency options, the following rules apply.

If a the writer of a call contract is exercised:

**For Index Options:** Deliver the "in the money" amount to the Options Clearing Corporation by the business day after exercise. The funds are due to the O.C.C. by 9:00 AM CST, and are credited by the O.C.C. to the clearing member's account at 10:00 AM CST that day.

For Treasury Bill Options: Deliver the contract amount of Treasury Bills (\$1,000,000 face amount) by Thursday of the week following exercise.

For Treasury Note and Bond Options: Deliver the contract amount (\$100,000 face) on the 2nd business day following exercise.

For World Foreign Currency Options: Deliver the "in the money" amount to the Options Clearing Corporation by the business day after exercise.

If the writer of a put contract is exercised for any of the above contracts, he or she must deposit 100% of the purchase amount for the contracts in a cash account, or the appropriate margin percentage to buy in a margin account no later than settlement date

### **3d. O.C.C. REPORTS**

The reports created by the O.C.C. are:

#### **Daily Position Report**

Daily Position Report: Every day, before 9:00 AM CST, the Options Clearing Corporation issues to its clearing members, a report that details:

All Exchange transactions by that member that will settle that day;

The amount of net premiums either due the member, or due to the O.C.C. as a result of those transactions.

Any net premium due must be paid to the O.C.C. no later than 10:00 AM CST that day. In addition, the report shows all exercises, and assignments for that day, so that the report really represents a complete activity report of all of the firm's transactions.

#### **Daily Margin Report**

Daily Margin Report: Every day, before 9:00 AM CST, the Options Clearing Corporation issues to its clearing members, a report that details:

The amount of margin required for the Clearing Member based upon that firm's outstanding short positions and exercised contracts;

The amount of margin on deposit by the member;

The amount of any margin excess or deficiency;

Any margin deficiency must be satisfied no later than 9:00 AM CST on the day the report is issued.



Note that both the Daily Position Report and the Daily Margin report are prepared by S.I.A.C (Securities Industry Automation Corporation) for the O.C.C..

If there is a margin excess, it may be applied against any net premiums due, as shown on the Daily Position Report.

|  |  |
|--|--|
| <b>Acceptable Margin Deposits</b>        | To satisfy a margin deficiency, the following are acceptable deposits from clearing members (not from retail customers):   |
| <b>Acceptable Margin Deposits</b>        | Cash;  |
|  | In lieu of cash, members are permitted to deposit negotiable Government securities, Letters of Credit from approved institutions, and marginable common stocks to meet margin calls;   |
|  | For open short call positions, exercised short call positions, and exercised long put positions - deposit of the underlying instrument, or properly executed escrow receipt;   |
|  | For open short put positions, exercised short put positions, and exercised long call positions - deposit of cash; or properly executed bank guarantee letter;  |
|  | For open short put positions, and exercised short puts, instead of depositing cash, the O.C.C. also allows the deposit of Treasury Bills with a currently market value equal or greater to the exercise settlement amount;   |
|  | For spread positions, the O.C.C. assumes that all positions in clearing member accounts are "unsegregated," that is, long and short positions are separately margined. The O.C.C. requires that the member firm specify those positions that shall remain "unsegregated." These unsegregated positions must be "bona-fide" spreads, are subject to the deposit of "spread margin" in cash. |
| <b>Depository Record (Escrow Report)</b> | Depository Record: Any bank or other depository that has an "escrow agreement" with the O.C.C. receives a report of the escrow deposits made to the O.C.C. This is sometimes called the "Escrow Report." This report is made daily, and details escrow deposits, escrow rollovers, and escrow releases due to contracts expiring.  |

### 3e. POSITION AND EXERCISE LIMITS

Position limits were covered in the options chapter, but this section of the exam goes into them in greater detail. We know that position limits are applied to each "side" of the market, with:

- the "upside" consisting of long calls and short puts;
- the "downside" consisting of long puts and short calls.

The actual position limits are based on the trading volume of the underlying stock, over the preceding 6 months. For the CBOE, these are:

| Limit             | Required Trading Volume |
|-------------------|-------------------------|
| 25,000 contracts  | None                    |
| 50,000 contracts  | 20 Million Shares       |
| 75,000 contracts  | 40 Million Shares       |
| 200,000 contracts | 80 Million Shares       |
| 250,000 contracts | 100 Million Shares      |

#### **Acting In Concert Prohibition**

The position limits are applied to both individuals and parties "acting in concert." The acting in concert prohibition applies when an individual makes the investment decisions for an account or accounts or materially influences the investment decisions of any person. The following are presumed to be "acting in concert:"

- all parties to a joint account;
- general partners in a partnership account;
- when an individual holds an ownership interest of 10% or more in an entity or shares in 10% or more of the profits or losses of an account;
- when accounts have common directors or management;
- when a person or entity has authority to execute transactions in an account (meaning that person has discretionary authority).

In addition, the Exchange can require aggregation of accounts if it finds similar trading patterns among separate entities; common supervision which extends beyond the "norm;" and the degree of contact and communication between the managers of separate accounts.

Exempted from the position limits are bona-fide hedge transactions. These include:

“Equity Hedges”

Long Stock / Long Put;  
Short Stock / Long Call  
Long Stock / Short Call  
Short Stock / Short Put

“Collars and Reverse Collars”

Long Put / Short Call vs. Long Stock Position  
Short Put / Long Call vs. Short Stock Position

“Box Spreads”

Long Call / Short Call and Long Put / Short Put (Diff. Strike Prices)

**Delta Neutral Positions**

Finally, the rules exempt “Delta Neutral Hedges” from the position limits. If a customer establishes a “delta neutral” stock position, then he or she is long and short the stock at the same time. Therefore, any movement in stock price will produce no gain or loss. A “delta neutral” hedge adds an option position to profit from something other than price movement. For example, the customer could sell call and put options that were getting close to expiration against the stock positions to profit from accelerating time decay. This would be exempt from the position limits.

**Exercise Limits**

Exercise limits are set by the CBOE at the same levels as the position limits. The holder of long options contracts cannot exercise in excess of 25,000, 50,000, 75,000, 200,000 or 250,000 contracts, as applicable, over 5 consecutive business days.

Regarding index option contracts, the position limits and exercise limits are set at different levels, depending on the popularity of the index option.

## OPTIONS CLEARING CORPORATION RULES SECTION EXAMINATION

1.

Which of the following options positions will be automatically exercised by the Options Clearing Corporation on expiration date?

- a. Equity options that are "in the money at least \$.01
- b. Equity options that are "in the money at least \$.02
- c. Equity options that are "in the money at least \$.03
- d. Equity options that are "in the money at least \$.05

2.

The latest time for a customer to exercise an equity option is:

- a. 4:30 PM Central Standard Time on the business day prior to expiration
- b. 4:30 PM Central Standard Time on expiration date
- c. 10:59 PM Central Standard Time on the business day prior to expiration
- d. 10:59 PM Central Standard Time on expiration date

3.

Assignment of exercise notices to customers by member firms is permitted on a:

- I First In, First Out Basis
  - II Random Selection Basis
  - III Last In, First Out Basis
  - IV Size Priority Basis
- a. II only
  - b. I or II only
  - c. I or III only
  - d. I, II, III, or IV

4.

Which of the following statements are true regarding the exercise of an equity put contract?

- I The holder is obligated to make delivery of the stock 3 business days after exercise date
  - II The holder can borrow the shares to make delivery by depositing 50% margin in cash
  - III The writer is obligated to take delivery of the stock 3 business days after exercise
  - IV The writer is obligated to pay 50% margin if the trade is effected in a margin account
- a. I and II only
  - b. III and IV only
  - c. I and III only
  - d. I, II, III, IV

5.

Which of the following are acceptable margin deposits to the O.C.C. from the writer of a put?

- I Cash
- II Treasury Bills
- III Underlying Stock

- a. I only
- b. II only
- c. I and II
- d. I, II, III

6.

Exercise settlement of index options takes place:

- a. on exercise date
- b. on the business day following exercise date
- c. 3 business days after exercise date
- d. on the Wednesday following the week of exercise



7.

Daily position reports issued by the Options Clearing Corporation will show:

- I All opening and closing purchases of puts and calls for that day
  - II Net premiums debited or credited to the member
  - III Net margin to be deposited by the member
  - IV Escrow positions held for the member
- a. I and II only
  - b. III and IV only
  - c. I, II, III
  - d. I, II, III, IV

10.

Which of the following positions is subject to position limits?

- a. Put-Protected Long Stock
- b. Collar
- c. Delta Neutral Hedge
- d. Short Stock / Long Put

8.

A customer exercises an equity put option on Monday, May 10th. The writer receives the exercise notice on Wednesday, May 12th. The writer is obligated to:

- a. deliver stock on Thursday, May 13th
- b. deliver stock on Monday, May 17th
- c. deliver cash on Thursday, May 13th
- d. deliver cash on Monday, May 17th

9.

Which of the following reports are prepared daily by the O.C.C.?

- I Position Report
- II Margin Report
- III Depository Record

- a. I only
- b. II only
- c. III only
- d. I, II, III

## OPTIONS CLEARING CORPORATION RULES SECTION EXAMINATION EXPLANATIONS

1. The best answer is a. The O.C.C. will automatically exercise any contracts for equity options that are in the money by \$.01 more as of the close of trading on the third Friday of the month.
2. The best answer is a. The last time for a **customer** to exercise an equity option is 4:30 PM Central Standard Time (5:30 PM Eastern Standard Time) on the Friday prior to expiration (unless that Friday is a legal holiday, in which case the last day to exercise the contracts would be Thursday).
3. The best answer is b. Member firms are permitted to assign exercise notices to customers on either a First In, First Out basis, or a random selection basis approved by the Exchange. The O.C.C. itself only assigns exercise notices to clearing members on a random basis.
4. The best answer is d. If an equity put contract is exercised, the holder is obligated to deliver the stock in 3 business days, and the writer must take delivery on that date. If the holder does not own the stock, he can borrow the shares and sell them short in a margin account. Short sales require the deposit of 50% margin under Reg. T. If the writer takes delivery in a cash account, he is obligated to deposit 100%; if he takes delivery in a margin account, he must deposit 50% under Reg. T.
5. The best answer is c. The Options Clearing Corporation accepts margin deposits of cash or Treasury Bills from clearing members that have short positions. If these contracts are exercised, the member is obligated to buy the stock. The Treasury Bills are essentially a "cash equivalent" and can be applied against required payment if exercised. The deposit of the underlying stock is **not** acceptable for short put positions, since, if exercised, the customer is obligated to buy **more** stock. The deposit of stock is only acceptable for short call positions (where if the contract is exercised, those shares will be delivered).
6. The best answer is b. The exercise of index options settles in cash on the business day following exercise.
7. The best answer is a. The Daily Position Report shows all options transactions and open positions, with premiums credited or debited to the member firm account, for that day. Net Margin would be shown on the Daily Margin Report; escrow positions would be shown on the Daily Depository Record Report.
8. The best answer is c. The writer of an equity put option is obligated to buy (pay cash) if exercised. Settlement takes place 3 business days after **exercise** date - the same as a regular way stock trade.
9. The best answer is d. All of the reports listed are prepared daily by the O.C.C. - the Position Report, Margin Report, and Depository Record.
10. The best answer is d. Speculative position limits do not apply to bona-fide hedge positions. A long put used to hedge a long stock position is therefore excluded, as is a collared long stock position (buy a put and sell a call against the stock). Delta neutral

hedges are excluded. A short stock / long put position is not excluded from the position limits because these are both on the "downside" of the market and do not offset (hedge) each other.

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## SECTION 4: SUPERVISORY RULES

### 4a. GENERAL SUPERVISORY RULES

|  |   |
|--|---|
| <b>Copy Of Written Supervisory Procedures Kept In Office Of Supervisory Jurisdiction</b> | Members must establish, maintain and enforce written supervisory procedures over the activities of all registered representatives and associated persons. It is the responsibility of the principal, in the designated Office of Supervisory Jurisdiction (or simply a designated supervisory office), to carry out the procedures. A copy of the written procedures must be kept in each OSJ.  |
| <b>OSJ Defined</b>   | An OSJ as an office where any of the following activities take place: <ul style="list-style-type: none"><li>Order execution and/or market making;</li><li>Structuring of new issue offerings;</li><li>Final approval of new accounts;</li><li>Review and approval of customer orders;</li><li>Review and approval of advertising/sales literature;</li><li>Responsibility for supervising activities at one or more branch offices.</li></ul>                         |
| <b>OSJ Reviews And Endorses All Orders</b>   | Every member is required to review and endorse, in writing, all transactions of registered representatives. This function must be performed by the registered principal.  |
| <b>OSJ Review Of Correspondence Sent And Received</b>                                    | Every member is required to review all incoming and outgoing correspondence of its registered representatives with the public (both written and electronic) that relates to its investment banking or securities business. Part of this review is the requirement to include procedures that identify and handle customer complaints.   |
| <b>Correspondence Compliance Procedures</b>  | If the member firm institutes a program that includes procedures to train representatives in the firm's procedures governing correspondence; and that audits these communications to insure compliance; then advance written approval of correspondence sent is not required. On the other hand, if the firm does not implement such a program, then written approval by a registered principal of each piece of correspondence sent by a representative is required. |

|  |   |
|--|---|
| <b>Periodic Account Inspection At Branches</b>         | Every member is required to review the activities of each branch office, including periodic inspections of customer account records, to detect irregularities.  |
| <b>Annual Reviews</b>                                  | <p>The supervisory rules require the following annual reviews</p> <p>Annual inspection of each OSJ;</p> <p>Annual review of the businesses in which the firm engages, designed to detect and prevent violations of securities laws and rules;</p> <p>Annual review with each registered representative and each registered principal of compliance matters relevant to that person's activities. This review can be performed individually or collectively; and can be done in person or remotely. The main requirement is that the review be "interactive."</p>  |
| <b>Review Of Each Applicant's Registration Via U-4</b> | For each registered representative hired by the member firm, the principal in the OSJ is responsible for investigating and ascertaining the applicant's:  |
|  | <p>Good character;</p> <p>Business Repute;</p> <p>Qualifications; and</p> <p>Experience.</p>  |
|  | <p>The principal's signature on the applicant's U-4 form (Uniform Securities Industry application) certifies that this occurred.</p>  |
| <b>Annual Firm Element Continuing Education</b>        | <p>In addition, the OSJ is responsible for preparing and delivering a Continuing Education program annually to all registered persons (except those that solely trade with other industry professionals). The annual training plan must consider compliance issues, recent regulations and products, customer complaints, and any other items that are deemed to be of importance.</p> <p>This annual "Firm Element" Continuing Education program must be documented in a written training plan. Delivery of the training to all participants must be documented, and some form of measurement of the participant's understanding of the training must be employed.</p> |

## 4b. ANTI-MONEY LAUNDERING (AML) RULES

### PATRIOT Act

After the September 11th World Trade Center bombing, Congress quickly passed the PATRIOT (Providing Appropriate Tools Required to Intercept and Obstruct Terrorism) Act. This Act requires securities firms and financial institutions to:

- establish written anti-money laundering programs;
- provide ongoing training to all employees in procedures to detect and prevent money laundering;
- report suspicious transactions and activity.

### High Risk Customers Or Transactions

Because of this, the "Suitability" rule now must consider the risk posed by particular customers or transactions. Thus, a higher level of scrutiny must be given to customers:

- whose home country is NOT a member of FATF - the Financial Action Task Force - an inter-governmental body of 29 countries that combats money laundering worldwide;
- who reside in, are incorporated, or operate from, foreign jurisdictions that have bank secrecy laws;
- who operate cash-intensive businesses.

### Verification Of Name/Address

When opening an account for a customer, the firm must independently verify the customer's name and address as given (most firms are now doing this by getting a photocopy of the customer's driver's license or other government issued identification).

### Non-Resident Alien Passport Number

For non-resident aliens, the firm must obtain the customer's passport number and all necessary U.S. tax forms. (Note that most firms are also getting a photocopy of the passport as well, to meet the requirement to independently verify the customer's name and address.)

### Matching To Terrorist Watch List

As part of the account opening procedure, the member firm must match the customer's name against a terrorist watch list maintained by the federal government - and if there is a match, the member firm cannot open the account and must notify the appropriate federal authorities. In addition, the customer must be given notice that this will occur.

### Suspicious Activity Reports (SARs) Within 30 Days

The Act requires broker-dealers to file SARs (Suspicious Activity Reports) with FinCEN within 30 days. FinCEN - Financial Crimes Enforcement Network - part of the Department of Homeland Security - acts as the central

collection point for these reports. FinCEN provides this intelligence information to the appropriate law enforcement groups.

#### **Potential Money Laundering Acts At Account Opening**

Some indicators of potential money laundering at the account opening stage are the customer:

having an unusual concern with the firm's compliance with government reporting requirements;

being reluctant to reveal information about his or her business activities;

furnishing unusual or suspect identification or business documents;

wishing to engage in transactions that lack business sense or that are inconsistent with the customer's investment strategy;

acting as agent for another entity but is evasive or reluctant about providing information about that entity;

having difficulty describing his or her business or lacking general knowledge of his or her industry.

#### **Potential Money Laundering Acts Related To Account Activity**

Some indicators of potential money laundering related to account activity are the customer:

attempting to make frequent or large deposits of currency or cash;

engaging in cash transactions structured to be under the \$10,000 reporting limit (cash transactions of over \$10,000 are required to be reported to FinCEN within 15 days);

engaging in multiple transfers of funds or wire transfers to countries that are considered to be non-cooperative by FATF and FinCEN;

engaging in sudden and unexplained extensive wire activity;

making a funds deposit followed by an immediate request that the funds be transferred to another party, without any apparent business purpose;

making a funds deposit for the purchase of making a long-term investment, followed shortly thereafter by a request to liquidate the position and transfer the proceeds out of the account;



having multiple accounts under single or multiple names with a large number of inter-account transfers, for no apparent business reason; engaging in excessive journal entries between accounts without an apparent business purpose;

depositing bearer bonds followed by an immediate request for the disbursement of funds;

exhibiting a total lack of concern regarding risks, commissions and other transaction costs.

In addition, the firm should monitor account activity, specifically looking for unusual:

wire transfer activity;

deposits of cash aggregating in excess of \$10,000;

deposits of cash, cashier's checks, money orders and travelers checks, to detect structuring of such deposits.

Each SRO has created a specific rule to deal with money laundering issues. These require that each member firm:

establish and implement policies and procedures to detect and report suspicious transactions;

provide for independent testing for compliance to be conducted by member personnel or a qualified outside party;

designate a principal responsible for implementing and monitoring day-to-day operations and internal controls of the program;

provide for ongoing training of appropriate personnel.

The rule on creating a firm's AML (Anti-Money Laundering) policy is quite generic, however industry interpretations include the following:

**AML Program Should Include Risk-Based Know Your Customer (KYC) Evaluations**

The AML Policy should include "KYC" (Know Your Customer) procedures that permit the firm to make a reasonable risk-based determination as to its customers, its customers' sources of income, and expected activity. In doing so, the firm must assess the special risks that different types of accounts present and base the nature and amount of account documentation and ongoing account monitoring on this.

The AML Policy should break down types of suspicious activity into 3 areas for monitoring - wire transfers; deposits; and monetary instruments. It should centralize its systems for filing SARs (Suspicious Activity Reports); and should designate a person to determine whether an activity is reportable and for maintaining SARs.

#### 4c. PORTFOLIO MARGINS

The "standard" method of computing margin requirements is "strategy based." This means that a prescribed percentage margin is applied, as set by Regulation T for initial margins, and each SRO, such as the CBOE or FINRA, for minimum maintenance margins. These margin requirements do not take into account the actual "risk" of loss involved in each security position taken, and are very conservative, resulting in high margin requirements.

Large institutional customers, such as hedge funds that have international operations, found that margin requirements in offshore markets such as London are much lower, and started to move their trading overseas. Concerned about losing market share, the NYSE and CBOE asked the SEC to approve a different method of computing margins for institutional customers and sophisticated wealthy individual customers. The result is "portfolio margin," approved in mid-2007.

##### Risk-Based Margin

Portfolio margins assess the "risk" involved with a securities position to establish the margin requirement.

For example a customer that buys 100 shares of ABC stock in a margin account at \$50 per share and who buys a protective ABC 50 Put @ \$5 would be required to deposit 50% of the stock position and 100% of the put option premium under Regulation T for a deposit of  $\$2,500 + \$500 = \$3,000$ .

However, this customer cannot have a loss greater than \$500 on this position (the stock that was purchased at \$50 can be sold via the put at \$50, so the only loss is the \$500 premium paid). This would be the margin requirement under portfolio margin.

##### Reduced Margin For Hedged Stock Positions

The most dramatic effect of portfolio margin is to reduce the margin requirement for stock positions that are hedged by options positions, since the margin becomes the maximum potential loss, as in the example above. In contrast, portfolio margins have no benefit for long options positions or spread positions, where the margin requirement already is the maximum potential loss.

**Portfolio Margin  
Not Permitted  
For Bond Positions**

Initially, portfolio margins were only used for options positions and stock positions hedged by options. However, the SEC approved expansion of the program, and allows portfolio margins to be used for equity securities as well. Note that portfolio margin can only be used for equities and options/derivatives positions used as hedges. It cannot be used for bond positions.

The basis for the margin requirement is to "stress test" securities positions by applying probability-based loss percentages, based on historical volatility of both the security itself and the overall market. Based on this, portfolio margins generally result in overall lower margin requirements and greater leverage.

For example, for most equities, the maximum portfolio margin is 15%, as opposed to 50% under Regulation T. If the position is deemed to be "concentrated" - too large a percentage of the portfolio in a single security, the margin is doubled to 30%. (Note, do not be concerned about memorizing these percentages; only the general concept must be known for the exam.)

**Only Sophisticated  
Investors Qualify**

Only sophisticated customers are eligible for these dramatically lowered margin requirements.

**\$100,000 Equity For  
Individual Accounts**

Individual customers must maintain minimum account equity of \$100,000.

**\$500,000 Equity For Prime  
Brokerage Accounts**

Prime brokerage accounts must maintain minimum account equity of \$500,000.

**\$5,000,000 for Accounts  
Carrying Unlisted  
Derivatives Or Day  
Trading Accounts**

Customers who are not broker-dealers or futures firms that wish to carry unlisted derivatives or conduct day trading must maintain minimum account equity of \$5,000,000.

**Prior Approval Of  
SRO To Offer  
Portfolio Margin**

Any brokerage firm that wishes to offer portfolio margins must get approval of its SRO to do so, and must demonstrate that it has the sophisticated computer systems in place necessary to compute and monitor these margin requirements on a real-time, intra-day basis.

**Margin Deficiency  
Be Paid In 3 Business  
Days**

If a portfolio margin account has a margin deficiency at the end of the day, each SRO requires that payment to meet the margin call be received within 3 business days (this contrasts with Regulation T that requires "prompt" payment, but no later than 5 business days).

#### 4d. LEVERAGED ETF MARGINS

**Leveraged ETFs  
"Multiply" Returns  
Through The Use  
Of Derivatives**

**Minimum Margin  
Requirement Is  
Multiplied By The  
ETF's Leverage**

Leveraged ETFs (Exchange Traded Funds) are a subset of traditional ETFs that are designed to generate multiples (e.g., 200%, 300%.) of the performance of the underlying index that they track. Some of these are "short" or inverse ETFs, because they seek to deliver performance that is exactly opposite to the index they track. Leveraged ETFs use derivatives, including options, futures and swaps to multiply their returns, but this means that their price movements also have multiplied volatility as compared to the benchmark index.

The SRO's concern is that the increased volatility associated with these products means that traditional strategy based margins are not sufficient to provide an adequate buffer against a daily market movement wiping out an investor. The basic thrust of the margin rule is that a 200% leveraged ETF should have 2 times the normal margin requirement; a 300% leveraged ETF should have 3 times the normal margin requirement; etc.

Note that the SRO applies these "multiples" to both strategy based margins (traditional margin accounts) and risk based margins (portfolio margin accounts).

#### STRATEGY BASED MARGIN EXAMPLES

For example, a customer is long 100 shares of ABC ETF at \$28 per share. The ETF has 200% leverage. The normal minimum maintenance margin is 25% of \$2,800 = \$700; but because of the 200% leverage, the minimum maintenance margin becomes 200% of \$700 = \$1,400. Note that this happens to be the same as the Regulation T initial margin, meaning that if the customer bought this position, the initial margin requirement would be the same \$1,400 and this would also be the minimum requirement.

For example, a customer is long 100 shares of ABC ETF at \$28 per share. The ETF has 300% leverage. The normal minimum maintenance margin is 25% of \$2,800 = \$700; but because of the 300% leverage, the minimum maintenance margin becomes 300% of \$700 = \$2,100. Note that this is more than the Regulation T initial margin, meaning that if the customer bought this position, the customer must deposit \$2,100 and this would also be the minimum requirement.



## RISK BASED MARGIN EXAMPLE

For example, a customer has a portfolio margin account with a portfolio market value of \$1,000,000 and a stress range of -15%/+15%. The margin requirement would be 15% of \$1,000,000 = \$150,000. If the portfolio consisted entirely of ABC ETF with 200% leverage, then the margin requirement becomes 200% of \$150,000 = \$300,000.

### 4 e. ORDER TAKING, TRADE REPORTING AND ERRONEOUS TRADE RULES

All orders are now entered electronically. The NASDAQ system is called "OATS" - Order Audit Trail System; the options exchanges' system is called "COATS" - Consolidated Options Audit Trail System.

#### Systematized Order Entry

COATS requires that all orders be "systematized" - meaning that the order must be entered electronically. An order that is sent to the exchange "non-electronically," such as telephonically, must be entered into the exchange's electronic order system on receipt, before the order can be represented on the trading floor.

The minimum information required for a market order is:

- Option symbol;
- Expiration month;
- Expiration year;
- Strike price;
- Buy or sell;
- Call or put;
- Number of contracts;
- TPH (Trading Permit Holder) identifier.

The time of execution must be recorded. If the order is canceled prior to execution, the time of cancellation must be recorded.

Note that these order recording rules do not apply to accommodation liquidations (close-out of worthless contracts at an aggregate \$1 premium); nor do they apply to orders for FLEX (flexible) options, since these are custom negotiated contracts.

#### Order Priority

Orders are filled on the CBOE floor (and all other markets) based on the following priority rules:

Priority of Bids / Offers

The highest bid price has priority. If there are 2 or more high bids at the same price, and one represents a displayed customer limit order, the customer limit order is filled first. If there is more than 1 public customer order (bid) at the best price (high bid), the customer orders are filled FIFO.

The lowest offer price has priority. If there are 2 or more low offers at the same price, and one represents a displayed customer limit order, the customer limit order is filled first. If there is more than 1 public customer order (offer) at the best price (low offer), the customer orders are filled FIFO.

Orders from non-customers (Floor Brokers, DPMs (Designated Primary Market Makers), OBOs (Order Book Officials), PAR Officials and Market Makers are filled based on best price first (high bid or low ask); if the orders are at the same price, they are filled in sequence in which they are made (FIFO). If the sequence of multiple orders made at the same price cannot be determined, then the fill is apportioned equally among all orders at that price.

#### **Firm Quote Rule**

The CBOE has adopted its version of the "firm quote" rule required under SEC Rule 11ac1-1. It requires that quotes of market makers be firm for the minimum number of contracts set by the CBOE (usually 10 contracts). If a market maker receives an executable order, it must be filled within 30 seconds. If the order is larger than the displayed quote, the market maker has the choice of either filling the entire order; or it can fill the portion of the order equal to the quote size and immediately revise its bid or offer.

Note that if a market maker has revised its quote and communicated this to the exchange, but the revised quote has not yet been displayed, then the market maker is not obligated to honor the "old" quote. If the market maker is in the process of executing an order at the displayed quote and receives another order, it can either fill it at the "old" price; or it may revise its quote and fill it at the revised price.

Note that the firm quote rule does not apply during "fast" markets, where 2 Floor Officials agree that trading activity is so rapid that the exchange cannot process quote changes in real time; and does not apply during the opening rotation.

**Transaction  
Reporting**

All transactions are required to be reported to the Clearing Corporation (OCC for options; NSCC or DTC for equities) for settlement and reporting. The CBOE requires that transactions be reported within 90 seconds of execution.

While each side must report the trade to the Clearing Corporation for matching, clearance and settlement, for trade reporting purposes, only the sell side reports (thus the "tape" will not show a double report of the same trade). Also note that any options transactions effected off the exchange floor must also be reported. If the transaction is reported after 90 seconds, it must be reported as late. (In contrast, equity trades effected on NASDAQ or OTC are required to be reported to the tape within 30 seconds by the executing member. Note that the SROs differ on this point.)

For options trades, the buyer and seller must immediately record the following information:

Assigned broker code and clearing firm;  
Name of contra-TPH (Trading Permit Holder)  
Symbol of underlying security;  
Type, expiration month and exercise price of option;  
Transaction price;  
Transaction time;  
Number of contracts.

The sell side must report the trade to the tape (within 90 seconds of execution) and must use best efforts to make sure that the DPM or OBO is aware of the transaction and price.

**Trade Adjustment  
Or Nullification**

All trades are binding on both parties, however the SROs provide for nullification or adjustment of transactions for what the CBOE calls "obvious errors," while NASDAQ calls these "clearly erroneous trades."

The CBOE rule sets theoretical options prices using options pricing models and minimum variance from this price to establish an obvious error. It also sets a larger variances that define a "catastrophic error."

Where both parties to the trade are CBOE market makers, the erroneous transaction will be adjusted to the theoretical price by Floor Trading Officials net of an "adjustment penalty," unless both parties agree to adjust the transaction to a different price or to bust the trade within 15 minutes of being notified of the obvious error.

Where one party to the trade is a non-broker-dealer customer and the other party is a CBOE market maker, the non-broker-dealer customer can request

that the price be adjusted, with no adjustment penalty, within 15 minutes of being notified by a Trading Official of the obvious error, unless both parties agree to adjust the transaction to a different price or to bust the trade.

(Where one party to the trade is a non-broker-dealer customer and the other party is a non-CBOE market maker, the same rule as above applies, but the 15 minute window is extended to 30 minutes.)

Also note that the CBOE will nullify options trades for disruptions or malfunctions of exchange systems and for erroneous quotes or transaction prices disseminated for underlying instruments.

Any TPH (Trading permit Holder) that participated in a transaction which it believes should be adjusted or nullified must notify a Trading Official no later than 15 minutes after execution. The Trading Official is obligated to review the transaction and make an initial determination within 60 minutes and give verbal notice to the participants of his decision.

If either party disagrees with the determination, an appeal may be made to the "Obvious Error Panel." The request must be made within 30 minutes of receipt of the Trading Official's decision.

If either party disagrees with the Obvious Error Panel's decision, an appeal may be made to a CBOE Appeals Committee. Its decision is binding and no further appeals are permitted.

#### **Error In Trade Reporting Is Not Binding**

Note that these procedures do not apply to erroneous trade reports; they only apply to erroneous executions. If a trade was executed properly, but reported improperly, the price of the trade is still binding.

#### **Unmatched Trade Report**

Each day, the CBOE matches the trade information submitted by Trading Permit Holders (TPH) and issues an Unmatched Trade Report to each Clearing TPH. It contains a list of the trades for which the exchange did not receive matching trade data from that Clearing TPH. Promptly upon receipt of the report, the TPH must reconcile all unmatched trades and report the reconciliations and corrections to the CBOE.

If an unmatched option trade remains unresolved after trade date, it must be resolved no later than 15 minutes prior to opening the next business day.

#### 4f. SETTLEMENT RULES

|   |   |
|---|---|
| <b>Regular Way</b>  | "Regular Way" settlement of stock, corporate bond, and municipal bond trades is 3 business days after trade date.   |
| <b>Regular Way Options / Treasurys</b>  | "Regular Way" settlement of U.S. Government bonds and listed options is next business day.  |
| <b>Cash</b>   | "Cash" settlement is same day settlement, before 2:30 PM EST. Prices that sellers receive for cash settlements are typically lower than for regular way settlements because of the difficulty of arranging the settlement on that day.  |
| <b>Seller's Option</b>  | "Seller's Option" settlement is used when the seller needs more time to deliver than "regular way" (3 business days) settlement allows. Settlement will be made when the seller gets the securities, but not before the 4th business day after trade date. The seller gives the buyer 1 day's notice, and settlement takes place the next business day. "Buyer's Option" settlement is also available for a buyer who can't pay by the regular way settlement date. |
| <p>Some general rules on settlements:</p> <p>If a security is delivered prior to the agreed settlement date, the buyer has the choice of either accepting or rejecting the shipment.</p> <p>On settlement, the buyer must accept the securities. If a partial delivery is received; or if no delivery is received, the buyer must set up a "fail to receive" on its books.</p> <p>If a security is available in "book entry" form, there is no physical delivery of securities. The member must use a securities depository such as DTCC (Depository Trust and Clearing Corporation) for book-entry settlement.</p> <p>If the security is not available in book entry form, then there must be a delivery of the physical certificates. Certificates must be delivered in "good form." The basic rules covering good delivery follow.</p> |   |
| <b>Good Delivery Conditions</b>   | For good delivery, the following conditions must be met:  |
| <b>Assignment</b>   | Registered securities must be endorsed on the back by the registered owner in exact name. This endorsement is called an "assignment." Often, securities are not endorsed on the certificate itself, but rather on a "stock power" or "bond power." In this case, the brokerage firm is  |

registered as the owner of the security, and has transferred ownership with the "stock power" to the customer. If the customer signs the "power," the security can now be transferred with a new "stock power" to another customer. In this way, the certificate doesn't have to be canceled and replaced after each trade.

**Signature  
Guarantee  
By Medallion  
Member**

The signature is not acceptable to the transfer agent unless it is guaranteed. Signature guarantees can be made by financial institutions that participate in the Medallion Signature Guarantee Program. Medallion members can be commercial banks, savings banks, credit unions and broker-dealers. (Note that before the Medallion program existed, the only acceptable guarantors were NYSE member firms and commercial banks.) If the signature turns out to be counterfeit, any loss is the guarantor's problem.

Registered to principal bonds must have a proper assignment and a signature guarantee. These bonds have bearer coupons attached, and since only the face amount is registered, all unpaid coupons must be attached. Certain older municipal bonds fall into this category.

**All Unpaid  
Coupons Attached**

Bearer bonds must be delivered with all unpaid coupons attached (even if the bond is in default). No assignment or signature guarantee is required since the bonds are held by the "bearer."

**Units Of Delivery**

Stock certificates must be delivered in round lots of 100 shares, or multiples of 100 on one certificate. If certificates of less than 100 are used, they must add up to units of 100.

For example, for a 400 share trade, 1 certificate of 400 shares is good, 4 certificates of 100 shares are good, 8 certificates of 50 shares are good (two 50s = 100), 10 certificates of 40 are not good since  $40 + 40 = 80 + 40 = 120$ .

Registered bonds must be delivered in \$1000 minimum face amount or multiples of \$1000, up to a maximum of \$100,000 per bond.

**Mutilated Securities  
Are Not Good Unless  
Validated**

Securities cannot be accepted if mutilated unless they are accompanied with a validation letter from the transfer agent or issuer stating that the securities will be accepted.

## SUPERVISORY RULES SECTION EXAMINATION

1.

Which of the following are duties or requirements of an Office of Supervisory Jurisdiction?

- I Maintenance of required records
  - II Periodic and frequent inspection of customer account records in the branches
  - III Review and approval of all customer transactions and review of sales related correspondence
  - IV Submission to an annual inspection by the member to ensure compliance
- a. I only  
b. II and III only  
c. I, II, III  
d. I, II, III, IV

2.

All of the following are ascertained when an individual applies to be registered with a member firm **EXCEPT:**

- a. The good character of the applicant
- b. The business reputation of the applicant
- c. The business experience of the applicant
- d. The educational history of the applicant

3.

Which one of the following customer actions could be an indicator of money laundering?

- a. Depositing \$50,000 of registered stock into the account and directing that it be transferred into street name
- b. Buying a security in advance of the ex-date and selling after the record date in order to receive a cash dividend
- c. Buying and selling the same security over a short period of time, incurring significant commission costs
- d. Buying a security and selling short an equivalent convertible security to lock in a price difference

4.

At the account opening stage, which of the following customer actions would **NOT** be an indicator of potential money laundering?

- a. Concern regarding the firm's government reporting requirements
- b. Difficulty describing his or her work or lack of industry knowledge
- c. Uncertainty about his or her investment objectives and needs
- d. Ordering transactions that are inconsistent with his or her stated objectives

5.

The AML program established by a FINRA member must:

- I Establish and implement policies and procedures to detect and report suspicious transactions
  - II Provide for annual independent testing for compliance to be conducted by member personnel or a qualified outside party
  - III Designate a principal responsible for implementing and monitoring day-to-day operations and internal controls of the program;
  - IV Provide for ongoing training of appropriate personnel
- a. I and II only
  - b. III and IV only
  - c. I, II, III
  - d. I, II, III, IV

6.

Portfolio margining:

- I is based on the rules of Regulation T
  - II is based on probable loss potential
  - III generally results in lower margin requirements and greater leverage than standard margin calculations
  - IV generally results in higher margin requirements and lower leverage than standard margin calculations
- a. I and III
  - b. I and IV
  - c. II and III
  - d. II and IV

7.

The minimum equity requirement for a portfolio margin account that will trade unlisted derivatives is:

- a. \$100,000
- b. \$1,000,000
- c. \$5,000,000
- d. \$10,000,000

8.

A customer buys 200 shares of XXX Leveraged ETF at \$50 (300% leverage ratio). The FINRA minimum maintenance margin requirement is set at 25%. The customer must deposit:

- a. \$2,500
- b. \$5,000
- c. \$7,500
- d. \$15,000

9.

All of the following information is required on an options order ticket **EXCEPT**:

- a. Option expiration
- b. Option style
- c. Option type
- d. Option strike price

10.

Two orders for a listed option are received at the same time and at the same price. One represents a limit order from a customer; the other order represents a limit order from a non-customer. Which statement is **TRUE**?

- a. The customer order will be filled first
- b. The non-customer order will be filled first
- c. Both orders will be filled on a pro-rata basis at the same time
- d. The priority of filling the orders will be established by random selection

**11.**

For clearance purposes, who reports the transaction to the Options Clearing Corporation?

- a. Buy side
- b. Sell side
- c. Both buy side and sell side
- d. Executing member

**15.**

If a Trading Permit Holder wishes to have a trade with an obvious error adjusted or nullified, it must report the error within:

- a. 30 seconds of execution
- b. 60 seconds of execution
- c. 15 minutes of execution
- d. 60 minutes of execution

**12.**

For trade reporting purposes, who reports the transaction to the Options Exchange?

- a. Buy side
- b. Sell side
- c. Both buy side and sell side
- d. Executing member

**13.**

A securities trade takes place at 10:00 AM on Monday, July 10th for "cash." Settlement takes place:

- a. before 2:30 PM on July 10th
- b. before 2:30 PM on July 11th
- c. during business hours on July 15th
- d. during business hours on July 17th

**14.**

Which is **NOT** a good delivery for a 300 share trade of stock?

- a. One 300 share certificate
- b. Three 100 share certificates
- c. Ten 30 share certificates
- d. Thirty 10 share certificates

## SUPERVISORY RULES SECTION EXAMINATION EXPLANATIONS

1. The best answer is d. The OSJ is required to maintain required records of the firm's written supervisory procedures; must inspect customer account records periodically to detect abuse; must review and approve all customer transactions and review sales related correspondence; and must go through an annual inspection by the member.
2. The best answer is d. When an individual applies for registration, a principal must ascertain the good character, business reputation, qualifications and experience of that person. There is no requirement to obtain that person's educational history, however.
3. The best answer is c. A potential money laundering indicator is buying and selling the same security over a short time frame, while incurring significant commission costs - after all, why would a logical person do this?
4. The best answer is c. It is normal for a customer to be uncertain of his or her investment objectives and needs - it is the guidance of the registered representative that the customer is counting on to select the appropriate strategy. The other 3 choices could all be indicators of potential money laundering.
5. The best answer is d. An AML (Anti-Money Laundering) program must be established by each FINRA member firm. The AML program must:
  - establish and implement policies and procedures to detect and report suspicious transactions;
  - provide for annual independent testing for compliance to be conducted by member personnel or a qualified outside party;
  - designate a principal responsible for implementing and monitoring day-to-day operations and internal controls of the program; and
  - provide for ongoing training of appropriate personnel.
6. The best answer is c. Portfolio margin is a "risk" based margin method that gives substantially lower margin requirements for lower risk positions. It recognizes that if positions are hedged, such as a stock position hedged by the purchase of a put, then the loss potential of the combined position is much lower. Portfolio margin produces a much lower margin requirement for such a hedged position (the margin is basically equal to the maximum loss) than the separately calculated margins for each position that Regulation T would require. Lower margin requirements mean that customers who use portfolio margin get greater leverage. Also note that portfolio margin can only be used by institutional or wealthy sophisticated individual customers.
7. The best answer is c. The minimum equity requirement for a portfolio margin account that will trade unlisted derivatives is \$5,000,000.
8. The best answer is c. The normal minimum maintenance requirement for equities, including ETFs, is 25% of the market value = 25% of \$10,000 = \$2,500. However, because this ETF is 300% leveraged, the minimum requirement is 3 times \$2,500 = \$7,500.

9. The best answer is b. Option style (American or European) is not part of the information recorded on an options order. Also note that any commission charged is not part of the recorded information either, since this is not known until after execution.
10. The best answer is a. The basic rule is that any standing customer orders at a given price are filled first, prior to orders for non-customers (e.g. market makers) at the same price. Note, however, that if the non-customer order is at a better price, it would have been filled first.
11. The best answer is c. For clearance purposes, both the buy and sell side report to the clearing corporation, so the trade can be matched and settled. For tape reporting purposes, only the sell side reports, to stop a "double report" of the same trade.
12. The best answer is b. For tape reporting purposes, only the sell side reports, to stop a "double report" of the same trade.
13. The best answer is a. Cash settlement is same day settlement, before 2:30 PM.
14. The best answer is c. To be a good delivery, certificates must be in round multiples of 100 shares on one certificate or must be delivered in certificates that add up to 100 share units. Certificates of 30 shares each are not good because  $30 + 30 = 60$ . No addition of 30 share certificates will equal 100 shares. Also not good for delivery are  $60 + 30 = 90$  and  $90 + 30 = 120$ . A round lot of 100 shares cannot be created from these units.
15. The best answer is c. If a TPH (Trading Permit Holder) wishes to have a trade with an obvious error adjusted or nullified, it must notify a Trading Official within 15 minutes of execution.

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## SECTION 5: PERSONNEL RULES

### 5a. REGISTRATION OF PERSONNEL

Registration is required for any person that is a(n):

- Officer of the broker-dealer (principal);
- Sales supervisor or branch manager;
- Sales employee (representative); or
- Securities trader.

#### Registered Representative

A representative is defined as any person who solicits or conducts business in securities for the member. Persons whose duties are solely clerical do not have to register. Foreign associates who deal exclusively outside the U.S. do not have to register.

Regarding representatives, the actions on the part of an individual that require registration are:

- Making a recommendation to a customer;
- Accepting an order from a customer, whether solicited or unsolicited; and
- Performing a suitability determination.

#### Series #7

Registered representatives that deal with all types of securities and take and pass the Series #7 General Securities exam.

The performance of clerical functions does not require registration. Such clerical functions include reporting completed trades to customers; taking client information and messages (but not orders); and responding to client inquiries, such as questions about account status and order execution status.

#### Series #55 For FINRA Regulated Traders

Regarding securities traders, the rules of the exchanges were inconsistent. It used to be that traders were not required to be registered because they did not deal with clients. After NASDAQ suffered a market making scandal in 1995, where market makers were colluding to widen spreads, the regulators realized that they did not even know who the traders were!. They required registration of OTC equity traders and required them to be licensed with the Series #7 General securities exam and the Series #55 OTC Equity trader exam. Even more importantly, part of the

licensing process is a fingerprint and background check requirement, so that "bad boys" could no longer be equity traders. Note that this licensing rule only covered OTC Equity traders, and did not cover the options markets.

In 2009, the SEC found that the options markets and regional exchanges were inconsistent in their rules on whether a trader needed to be licensed - some required it; others did not. The SEC felt that traders needed to know the regulatory framework and that a uniform licensing test was required. The existing Series #7 exam stressed the client-side, so it covered many areas not relevant to traders, hence the creation of the new Series #56 proprietary trader exam.

**Series #56 For  
CBOE, ISX and NSX  
Proprietary  
Traders**

Note that the exam is required for proprietary traders only; and it is only required by the CBOE, the ISE (International Securities Exchange - an all electronic options market); and the NSX (National Securities Exchange - another electronic marketplace). It is not required by FINRA for its member firms, since FINRA already has the Series #55 license for its traders. Note, however, that FINRA administers the test for these exchanges and maintains all of the registration records for these individuals.

**TPH - Trading  
Permit Holder  
NOT Doing Public  
Business Must Take  
Series #56**

The CBOE has a category of registration called a "TPH" - Trading Permit Holder. Any TPH that was not registered and that does **NOT** conduct a public business is now required to register and pass the Series #56 exam (individuals that conduct public business already were required to pass the Series #7 exam).

**U-4 Form  
Uniform Securities  
Application**

To register as either representative or principal, a U-4 (Uniform Securities Application) must be completed and filed with FINRA. Registration continues with the firm unless that person leaves the firm. All of the registration information is maintained by FINRA in CRD - the Central Registration Depository. This is the electronic record of all registered persons in the U.S. This record is retained by FINRA for the other SROs (Self-Regulatory Organizations under SEC oversight as well, such as the CBOE and ISE).

**Wait Period  
If Exam Is Failed**

Registration is not effective until the appropriate exam(s) are passed. If an individual fails an exam, 30 days must elapse before a new attempt is permitted. If an individual fails the same exam 3 successive times, a reattempt is not permitted until 180 days elapse. If the individual fails in any additional reattempt, another 180 days must elapse before each successive attempt is permitted.

**Exam Content  
Is Confidential**

Also note that the SROs explicitly state that exam content is confidential. It is prohibited for any person who takes an exam to divulge the content of that exam to anyone else.

The SRO can (and will) take disciplinary action against any individual that divulges exam content; any individual that uses such information when taking an exam; and their supervisors.

**Information  
On U-4 Form**

Information required on the U-4 Form includes:

Applicant's Name and Address;

Broker-Dealer Name and Address;

Name and Address of "Old" Broker-Dealer if the registrant is transferring from another firm;  
5 Year Consecutive Residence History;

10 Year Consecutive Employment History;

Any Other Businesses In Which The Registrant Is  
Currently Engaged;

Any Other Names By Which The Registrant Is  
Known;

Disclosure By The Applicant Of Any Arrest,  
Conviction, Charge, involving investments, fraud,  
bribery, forgery, etc.

**Changes - Prompt  
Amendment**

If any of this information changes, the U-4 filing must be amended promptly.

**Statutory  
Disqualification**

An individual's registration to be denied under the "statutory disqualification" provisions of the Exchange Act of 1934 if that individual:

has been suspended or expelled from any other Self Regulatory Organization, either domestic or foreign;

is the subject of an SEC order suspending or revoking registration;

by his conduct while associated with a firm has caused that firm's suspension or expulsion;

willfully filed a false or misleading application or has omitted to state material facts in the application; has been convicted of any securities or "money" related offense (such as embezzlement) within the past 10 years. Therefore, if you are good for 10 years and 1 day after being convicted, you can become a member again!; or

has been temporarily or permanently enjoined from engaging in the securities business.

Note that the U-4 questionnaire asks about arrests, convictions, etc., to see if the applicant will be subject to "statutory disqualification." The questionnaire asks about convictions for "any felony," which would include such things as Driving Under the Influence (DUI), possession of a controlled substance, assault, or manslaughter.

**Individuals  
Convicted Of  
Non-Securities  
Felonies Can Be  
Registered**

The SEC permits the SRO to approve these individuals who have such "Other Felony" convictions on a case-by-case basis. Approval is based on the proposed supervision of the person applying for registration, any subsequent disciplinary actions after the event that caused statutory disqualification and the overall merits of the case. The basic question behind the review is this: "Is this person a risk to investors?"

**Continuing  
Education**

The SROs impose continuing education requirements ("CE") for all registered persons. There are 2 parts:

**Regulatory Element**

Regulatory Element: Requires that a computerized training session that reviews various regulations and procedures be completed on the registrant's 2nd anniversary of registration; and every 3 years thereafter.

**If Regulatory Element  
Is Not Completed,  
License Goes "Inactive"  
Without Pay**

If the Regulatory Element is not completed within the required time period (120 days of notice), that person's registration becomes "inactive" until it is completed. During the "inactive period," this person cannot perform any of the functions of a registered representative and this person cannot be paid (giving him or her a very good incentive to complete the training).

**Firm Element**

Firm Element: Requires that an annual training plan be prepared and implemented by member firms to cover relevant products, regulations, and compliance issues.

**If Called For  
Military Duty Then  
Registration  
Becomes "Inactive"  
But Can Be Paid**

If a registered representative is called-up or volunteers for active military duty, that person is classified as being "inactive" and their CE obligations (both Regulatory and Firm elements) are suspended. The employing broker-dealer must send a letter to CRD (the Central Registration Depository, which keeps all registration and disciplinary information on registered individuals) giving the registered representative's name and CRD number and the date the firm received notification of the call-up from the representative.

**Upon Return,  
Registration  
Status Resumes At  
Same Point**

Once the representative is discharged from military service, a copy of the discharge notice must be sent to CRD so that the individual can resume active registered status, basically starting from the point where he left off. The

**Can Return To  
Another  
Broker-Dealer**

SROs have stated that it makes no difference if the individual returns to his or her "old" broker-dealer or if they associate with another broker-dealer upon return to civilian life - the SRO will reactivate that person's registration status.

**Can Have Another  
Broker At Same  
Firm Service  
Clients And Share  
Commissions**

Also note that the firm can pay the individual while he or she is on military duty, including payments for commissions earned prior to being called-up for military service. While that individual is away in the military, he or she can arrange for another representative at the same firm to service his or her customers and can share commissions with that representative.

**Must Reassociate  
Within 90 Days**

Finally, the SROs require that individual to reassociate with a member firm within 90 days of return to civilian life, otherwise registration is terminated.

**U-5 Form  
Termination Of  
Registration  
File In 30 Days**

If a person is terminated, a U-5 form must be filed with FINRA (remember that FINRA is responsible for CRD - the Central Registration Depository) within 30 days of termination. In addition, a copy of the U-5 must be made available to the terminated person. The person's registration is not reinstated until another firm registers that person through a new U-4.

**Amend The U-5  
Filing Within 30  
Days Of Discovery  
For Subsequently  
Discovered  
Information**

If information becomes known about the individual that was not included on the U-5 filing (such as, the member firm discovers 8 months after an individual was terminated, that he or she was doing a little embezzling), the member must amend the U-5 filing within 30 days. This obligation to amend U-5 filings for subsequently discovered information is an ongoing obligation that has no cut-off date.

**After 2 Years, Must  
Requalify By Exam**

After 2 years without being associated with a firm, that person must requalify by taking the appropriate exam(s).

**"Hanging" Licenses  
Is Prohibited**

The SROs explicitly prohibit an individual from "hanging" his or her license with a broker-dealer to keep registration current (and therefore not having to retake exams) after leaving the business.

**SRO Retains  
Jurisdiction For 2  
Years If Terminated**

Once a person is terminated, if a customer complaint is filed, the SRO retains jurisdiction over that person for 2 years. Also, please note that each SRO does not permit termination of registration via a U-5 if there is any complaint or action being taken against that person. Only after the issue is resolved does the U-5 take effect, and the 2 year period start counting.

**"Reportable  
Events"**

The SROs require that the member firm file a written report if it appears that the firm itself, or an associated person, has gotten into trouble. Note that these reports are

**Notify The SRO  
Promptly But  
No Later Than 30  
Days After Event**

required as the event is happening - even if there is no proof or conviction. The SRO assesses the severity of the information in the report in order to decide whether it needs to take further action.

Each SRO requires that it be notified in writing promptly, but no later than 30 calendar days, after the member firm knows or should have known, if the firm itself or any registered employee is:

found to have violated any provision of any securities law;

subject of a written customer complaint alleging theft, misappropriation of funds, or forgery;

named as a defendant or respondent in any legal proceeding alleging violations of the Securities Acts brought by a regulatory authority;

denied registration or is expelled, suspended, or disciplined by any self regulatory organization;

indicted, convicted, or pleads guilty to any criminal offense (except traffic violations and DUIs);

associated with any broker-dealer, investment company, investment advisor, or insurance company which was suspended, expelled or had its registration denied; or which was convicted of, or pleaded no contest, to any felony or misdemeanor;

a defendant or respondent in any securities or commodities related civil litigation or arbitration settled for an amount exceeding \$15,000 (this limit is raised to \$25,000 if the settlement involved that member firm itself);

subject to statutory disqualification, as listed on page 3 of this section;

the subject of disciplinary actions by their firm involving suspension, termination, withholding of commissions, or imposition of fines in excess of \$2,500.

(Also note that while "all felonies" must be reported on a person's U-4 filing to become registered, the events that must be reported thereafter exclude reports of criminal traffic violations or DUIs. This is the case because these events are not viewed as indicating that the individual has the potential to harm investors.)



In addition, the rule requires that each member firm report to the SRO under the same time frame if the member firm has concluded that an associated person, or the firm itself, has violated any securities-, insurance-, commodities-, financial- or investment-related law - either domestic or foreign.

#### **FINRA BrokerCheck Website**

FINRA maintains a website called "BrokerCheck" where the general public can get information on a broker or member firm. The website uses the U-4 and U-5 information to give the broker's:

##### **Broker's Employment History**

10-year employment history, both in and outside the securities industry, taken from the U-4 Form;

##### **Broker's Licenses**

securities licenses and state registration(s);

##### **Broker's Complaint And Disciplinary Record**

disciplinary record, which includes both complaints and allegations that have not yet been resolved; as well as a record of any disciplinary or settlement actions taken.

BrokerCheck includes information on both representatives that are currently working in the securities industry and representatives that have left the business. It allows the public to get a profile of each member firm, with its disciplinary record. This file also excludes previously registered member firms that have shut their doors. Finally, if a customer does not have web access, the BrokerCheck information is available from a FINRA toll-free phone number.

## **5b. CONDUCT OF REGISTERED PERSONNEL**

As a general rule, all of the SROs require that registered personnel act in an ethical fashion; and that they do not do anything that is detrimental to the public or to the exchange.

##### **Cannot Guarantee Customer Against Loss**

A registered representative is prohibited from guaranteeing a customer's account against loss. Note that repurchase agreements, where the underlying securities are exempt, are not considered to be a prohibited guarantee against loss. However, if a repurchase agreement uses non-exempt securities (such as common stock) as the underlying collateral, this is a violation.

##### **Cannot Share In Gain/Loss Of Customer Account Unless "At Risk"**

A registered representative is prohibited from sharing in the gain and loss of a customer account. However, registered representatives are allowed to open joint accounts with customers with written approval of the employer. Each SRO requires that, in such accounts, profit

and loss be shared in direct proportion to the capital contributed.

**Must Share In Proportion EXCEPT For Immediate Family Member Account**

An exception to the "sharing in direct proportion to capital invested" requirement is given to accounts of the immediate family of associated persons. Immediate family for this requirement is defined as parents, children, spouses, in-laws, or any person supported by the member.

**"Hedge Fund Rule"**

Another exception to the sharing in proportion requirement is given for an account that meets all of the following tests:

The account is opened with at least \$750,000 of customer funds, by a customer with a net worth of at least \$1,500,000.

The member enters into a prior written agreement with the customer, with the compensation arrangement approved by the firm.

The agreement covers both gains and losses for a period of at least 1 year.

The member has disclosed any potential conflicts of interest to the customer.

Basically, this rule allows hedge fund managers and representatives invested in the fund to share profits with their wealthy customers that are invested in the fund. (Hedge funds typically charge "2 and 20" - a 2% annual management fee plus 20% of profits.)

**Cannot Lend To Or Borrow From A Customer Unless Immediate Family Member Or Lending Institution**

A registered representative cannot borrow money from a customer; nor can he or she lend money to a customer. However, this rule does not apply if the customer is a member of the registered representative's immediate family (such as a husband working at a broker-dealer as a registered representative and his wife having her own individual account at that broker-dealer - the rep can borrow money from the wife or lend money to the wife at will). The prohibition also does not apply if the customer is a lending institution.

**If Firm Approves, Can Lend To Or Borrow From "Significant Others"**

The rule then goes on to permit, but **only** with prior approval of the member firm, lending or borrowing between:

2 representatives at the same member firm;

a representative at a member firm and a customer with whom the representative has a personal relationship (e.g., a representative and her "live-in" boyfriend); and

**Gift Limit = \$100**

a representative at a member firm and a customer with whom the representative has a business relationship.

Registered representatives are prohibited from giving or accepting gifts valued in excess of \$100 per person per year, where the gift is related to their activities as a broker.

Note that the gift limit does not preclude business entertainment as long as this is not too excessive or too frequent.

**Business Entertainment Is Not Subject To The \$100 Gift Limit**

For example you can take a customer to dinner and spend \$300 at a high-end restaurant; you cannot give a customer a \$300 gift certificate to his or her favorite high-end restaurant.

**Firm Must Have Written Policies Covering Entertainment**

Each SRO has implemented a rule requiring member firms to create written policies and procedures covering business entertainment. The member firm must train its employees about these procedures; and must audit employee expenses for compliance.

The gift limit also does not apply to gifts based upon a personal relationship rather than a business relationship. For example, if a registered representative is invited to the wedding of a friend who happens to be registered, he or she can give a wedding present valued at over \$100. Similarly, the limit does not apply to "logo" gifts such as a desk paperweight given by a mutual fund to a registered representative that is engraved with the logo of the mutual fund sponsor.

**Paying For Work Is Permitted**

The gift limit does not prohibit the member from paying someone to work as long as:

There is a written agreement spelling out the work to be performed and the compensation to be paid.

The agreement is approved in writing by the principal of the firm before it takes effect.

If such an agreement is made, the firm is obligated to keep a separate record of such agreement, with any payments made, for 3 years.

**Outside Work - Registered Rep. Must Notify Firm**

Each SRO prohibits registered persons from being employed by anyone other than the member firm, unless he or she provides prompt written notice to the member and follows any instructions of the employer.

**Member Employees  
Cannot Take Other  
Work Without  
Employer Approval**

The SROs require that, if an employee of a member wishes to:

- be engaged in any other business;
- be employed or compensated by any other person;
- serve as an officer or director, partner or employee of another business organization;
- own stock in any **other** broker-dealer that is not publicly traded;
- take a control position in the stock of a broker-dealer that is publicly traded;

then, this person must give written notice to his employer, and must receive prior written consent of the employer.

**Disputes Handled  
Through Binding  
Arbitration**

Each SRO requires that any disputes between registered representatives and their firms be handled by binding arbitration (with the sole exception of employment discrimination claims, including sexual harassment), which cannot be appealed. Customer disputes may be handled through the arbitration process only if the customer consents. Consent is given when the customer signs a Predispute Arbitration Agreement upon opening the account.

### **5c. DISCIPLINARY PROCEEDINGS**

Any person associated with a member or a TPH (Trading Permit Holder) who is alleged to have violated any rule under the Exchange Act of 1934 or any rule of the SRO is subject to the disciplinary jurisdiction of the SRO.

If a complaint is filed against a person associated with member or a TPH, that person must appear in front of the SRO and testify and must respond in writing to any questions asked and must furnish any documentation requested. For example, for a claim of customer "front running," the SRO might require all of the member's trading records for a specified time period and these must be produced.

The SRO can require that the person appear at a hearing or can use a "summary proceeding" if that person fails to respond to requests for information. If the SRO finds that a violation occurred, it must give a written report of its investigation to that person and that person has 15 days to



submit an answer and can make a written statement as to why no disciplinary action should be taken.

At any time during a disciplinary proceeding, the respondent can make an offer of settlement. In this case, the respondent admits guilt and agrees to specified sanctions and fines. The SRO does not have to accept the offer. It can also modify the terms of the offer and return it, explaining that it would accept the modified offer of settlement. If the respondent resubmits the modified offer, it must be accepted.

For violations, the SRO has the power to censure that individual, suspend or expel that individual; can fine the individual and can strip that individual's licenses. The SRO has no power to send an individual to prison, but it can refer a case to the federal authorities if it believes that criminal actions occurred.

If the respondent does not agree with the SRO's action, the respondent can appeal to the SEC. If the respondent does not agree with the SEC's action, an appeal can be made to Federal court.

#### Code of Arbitration

If there is a trade practice dispute, or a customer dispute where the customer has signed an arbitration agreement, then arbitration is mandatory. In this case, there is no rule violation. For example, arbitration is used to settle pay disputes between representatives and their employers; it is used to settle "gray area" claims by customers of unsuitable recommendations; it is used to settle monetary claims from one member firm to another over the price at which a trade occurred; etc.

Arbitration is mandatory to settle claims between:

Member firm vs. member firm;

Member firm vs. associated person;

Associated person vs. associated person;

Customer vs. associated person or member firm, if the customer previously signed an arbitration agreement.

Note that it is not used to settle complaints made by SROs against either member firms or associated persons for rule violations. This is handled under each SRO's disciplinary rules covered previously.

Decisions of arbitration panels are binding and non-appealable.

**Code of Mediation**

Instead of arbitration, both parties involved in a dispute can agree to mediation to attempt to resolve the issue. Mediation is completely voluntary and either side can terminate mediation at any time. Decisions of a mediator are not binding. If either side disagrees with the mediator's decision, then the case will be scheduled for an arbitration hearing.

## PERSONNEL SECTION EXAMINATION

1.

A potential new hire candidate discloses to the branch manager that he was in a horrible car accident and that he was convicted of involuntary manslaughter. This individual:

- a. is not required to disclose the information on the U-4 application
- b. must disclose the information on the U-4 application and will be subject to statutory disqualification
- c. must disclose the information on the U-4 application and will be allowed to be registered
- d. cannot be hired as a registered representative

2.

A registered representative is called-up for active military duty. During the time period that the individual is on military leave, that person's registration is:

- a. terminated
- b. suspended
- c. inactive
- d. active

3.

Membership will be denied to which of the following?

- I A person who has been suspended by the Chicago Board Options Exchange
  - II A person who had been convicted of securities fraud 5 years ago
  - III A person who is enjoined from engaging in the securities business
  - IV A person who is convicted of a traffic misdemeanor in the last 3 years
- a. II only
  - b. I and III only
  - c. I, II, III
  - d. I, II, III, IV

4.

Under SRO rules, if an individual fails the appropriate licensing exam 3 successive times:

- a. no reattempt is permitted
- b. 30 days must elapse between each subsequent reattempt
- c. 90 days must elapse between each subsequent reattempt
- d. 180 days must elapse between each subsequent reattempt

**5.**

If a registered individual is terminated, FINRA must be notified with a U-5 Form within:

- a. 1 business day
- b. 5 business days
- c. 10 business days
- d. 30 calendar days

**8.**

If a registered person fails to complete the Regulatory Element of the Continuing Education requirement within the allotted time, that person:

- a. may request an extension from FINRA
- b. will have their license suspended, but can still be compensated by the member firm
- c. will have their license suspended and cannot be compensated by the member firm
- d. must be terminated within 30 days

**6.**

A registered representative is fined \$5,000 in withheld commissions by a member firm for violating firm policies and procedures. Which statement is true?

- a. This is not required to be reported to the SRO
- b. A report must be filed with the SRO within 10 business days
- c. A report must be filed with the SRO within 15 business days
- d. A report must be filed with the SRO promptly, but no later than 30 calendar days

**9.**

An individual that has been registered as a representative for 9 years:

- a. is exempt from the Regulatory Element of the Continuing Education requirement
- b. must complete the Regulatory Element of the Continuing Education requirement every 2 years
- c. must complete the Regulatory Element of the Continuing Education requirement every 3 years
- d. must complete the Regulatory Element of the Continuing Education requirement every 5 years

**7.**

If there is a customer complaint, the SRO retains jurisdiction over a resigned member for:

- a. 30 days
- b. 6 months
- c. 2 years
- d. 3 years



## 10.

A potential new hire candidate discloses to the branch manager that he was in a horrible car accident and that he was convicted of involuntary manslaughter. This individual:

- a. is not required to disclose the information on the U-4 application
- b. must disclose the information on the U-4 application and will be subject to statutory disqualification
- c. must disclose the information on the U-4 application and will be allowed to be registered
- d. cannot be hired as a registered representative

## 11.

A registered representative in your office has been called-up for active military duty in the Persian Gulf for 1 year, during which time his Regulatory Element CE was scheduled to be completed. The registered representative returns from active duty to resume his civilian career. Which statement is true?

- a. The registered representative's registration must be terminated by filing a U-5 with CRD within 30 days of the individual's return to civilian status because the CE obligation was not completed
- b. The registered representative's registration became "inactive" during the period of military service and the CE obligation was suspended until the individual returned to his civilian career
- c. The registered representative's registration would have been terminated when the CE obligation was not completed and that individual must complete an updated U-4 filing to re-register
- d. The registered representative's registration status and CE obligation were unaffected by his call-up for military service

## 12.

A Series 7 licensed registered representative has been called up for active duty in Afghanistan. The representative wants his Series 11 licensed registered sales assistant to service his clients while he is away, and agrees to pay the sales assistant a weekly salary for this, out of commissions earned. This arrangement is:

- a. permitted under SRO rules
- b. prohibited because a sales assistant is not Series 7 licensed
- c. prohibited because sales assistants cannot earn commissions
- d. is prohibited because representatives that are called up for active duty cannot be compensated while they are "out of the business"

## 13.

BrokerCheck information is available for:

- I currently registered representatives that are active in the securities industry
- II previously registered representatives no longer active in the securities industry
- III currently registered broker-dealer firms that are active in the securities industry
- IV previously registered broker-dealer firms that no longer active in the securities industry

- a. I and II only
- b. III and IV only
- c. I and III only
- d. I, II, III, IV

14.

Which of the following are violations of SRO rules?

- I Sharing in the profits and losses of a customer's account without contributing proportional capital
  - II Selling exempted securities to a customer with a written agreement to buy back the securities at a later date
  - III Orally guaranteeing to buy back customer securities at a preset price
- a. I only
  - b. I and III
  - c. II and III
  - d. I, II, III

16.

An account is opened by a registered representative where the customer and the representative agree to share in profits. All of the following statements are true **EXCEPT:**

- a. This arrangement is allowed for close family members with prior written approval of the firm
- b. This arrangement is permitted if sharing is in direct proportion to the capital contributed and the firm gives prior written approval
- c. The arrangement is permitted if the account is restricted to principal transactions that are approved jointly by both owners of the account
- d. The arrangement is permitted if the account is opened with at least \$750,000 of customer funds by a customer with a minimum net worth of \$1,500,000 and the firm gives prior written approval.

17.

Disputes between a registered representative and the member firm involving all of the following are subject to binding arbitration **EXCEPT:**

- a. work attendance
- b. bonus payments
- c. sexual harassment
- d. regulatory compliance

18.

Which gift valued at more than \$100 could be accepted by a registered representative?

- a. One gift of \$100 value per person per year
- b. Unlimited number of gifts of \$100 value per person per year
- c. One gift of \$200 value per person per year
- d. Unlimited number of gifts of \$200 value per person per year

- a. Dinner voucher received from a long standing client for the representative's excellent work
- b. Wedding present received from a family member that is a client
- c. Tickets to a ball game from a client seeking a large IPO allocation
- d. Transportation by limousine service to and from a conference held 70 miles away



19.

A suspended individual associated with a member is permitted to:

- a. effect securities trades for customers during the suspension period
- b. be compensated for effecting securities trades for customers during the suspension period
- c. be compensated for trades effected for customers prior to the suspension period
- d. perform clerical duties within a member firm

20.

Arbitration is mandatory for all of the following disputes **EXCEPT**:

- a. member against member
- b. member against clearing corporation
- c. member against customer who has not signed an arbitration agreement
- d. member against customer who has signed an arbitration agreement

## PERSONNEL RULES SECTION EXAMINATION EXPLANATIONS

1. The best answer is c. Any felony conviction must be disclosed on the U-4 Form, as well as arrests, indictments, etc. However, if the offense does not involve securities, money, theft, etc., (where the individual would be a risk to investors), that person can be registered. The key is that the information is disclosed.
2. The best answer is c. If a registered individual is called-up for military duty, his or her registration becomes "inactive" and basically sits there in suspense until he or she returns to the securities business. Then it simply picks up where it was left off.
3. The best answer is c. Each SRO will deny membership to any person that has been suspended or expelled by another self-regulatory organization; to any person that has been convicted of a securities or money related offense within the past 10 years; or a person who has been enjoined from engaging in the securities business. Each SRO does not consider traffic misdemeanors to be offenses serious enough to deny membership.
4. The best answer is d. Each SRO requires that 30 days must elapse after a licensing exam is failed before a reattempt is permitted. However, after failing 3 successive times, 180 days must elapse between each subsequent reattempt.
5. The best answer is d. If an individual is terminated, FINRA must be notified by the firm within 30 days of termination on a U-5 form so that the registration can be terminated in CRD; and a copy of the form must be made available to the ex-employee.
6. The best answer is d. One of the "reportable events" that requires prompt filing with the SRO is if a registered representative has been fined more than \$2,500 by the member firm.
7. The best answer is c. A resignation from an SRO is not effective for 30 days. However, if there is a customer complaint, the SRO retains jurisdiction for 2 years.
8. The best answer is c. If a registered individual fails to complete the Regulatory Element of the Continuing Education requirement within the 120-day window that he or she is given, this person's registration is suspended and the member firm is prohibited from paying that individual. This is a very good incentive for each person to complete his or her Regulatory Element CE.
9. The best answer is c. Any registered individual must complete the Regulatory Element of the Continuing Education requirement on the 2nd anniversary of registration and every 3 years thereafter.
10. The best answer is c. Any felony conviction must be disclosed on the U-4 Form, as well as arrests, indictments, etc. However, if the offense does not involve securities, money, theft, etc., (where the individual would be a risk to investors), that person can be registered. The key is that the information is disclosed.
11. The best answer is b. If a registered representative is called-up for active military duty, FINRA classifies that person as being "inactive" and his or her CE obligations are suspended. The employing broker-dealer must send a letter to CRD giving the registered representative's name and CRD number and the date the firm received notification of the call-up from the representative. Once the representative is discharged from military

service, a copy of the discharge notice must be sent to CRD so that the individual can resume active registered status, basically starting from the point where he or she left off.

12. The best answer is a. A registered representative that has been called up for active duty in a foreign country can arrange for another representative at the same firm to service his or her customer account while away; and can share commissions with that representative. Notice that this sharing is only permitted with a representative at the same broker-dealer, not another broker-dealer. A sales assistant is registered, but cannot be compensated with commissions. The arrangement given in the question has the sales assistant earning a salary for servicing the representative's accounts, so this is permitted.

13. The best answer is d. BrokerCheck information is available from FINRA for representatives that are currently active in the securities industry and for representatives that have left the industry. BrokerCheck also allows the general public review the profile and disciplinary record of member firms, both those currently registered and those that have ceased operations.

14. The best answer is b. A registered representative cannot guarantee a customer's account against loss or share in the account unless he opens a joint account with the customer; contributes capital proportional to any sharing agreement; and obtains the approval of a principal for the account. Selling exempted securities with a written agreement to buy them back at a later date, which defines a "repurchase" agreement, is allowed.

15. The best answer is a. Each SRO limits gifts that are related to one's activities in the securities industry to a maximum of \$100 per person per year.

16. The best answer is c. There is no provision for sharing in a customer account if it is limited to principal transactions. This makes no sense! Sharing is permitted with prior written approval of the firm for accounts of close family members; accounts where the representative contributes capital; and for extremely large accounts opened by wealthy customers.

17. The best answer is c. When a registrant signs a U-4 Form, he or she signs away all rights to sue the employing member firm and must submit all disputes to binding arbitration - except for claims of sexual harassment and discrimination.

18. The best answer is b. Regarding the gift limit, the \$100 limit does not apply to gifts of a personal nature - such as a wedding gift or gift upon the birth of a child; and does not apply to promotional items that display the offerer's logo, such as golf balls, shirts, etc.

19. The best answer is c. A suspended SRO member cannot retain **any** position in a member firm and cannot perform transactions during the suspension period, nor be compensated for these transactions. There is no prohibition on paying a suspended individual monies owed on work performed prior to the suspension period.

20. The best answer is c. Arbitration is required to settle disputes between members, and between members and clearing corporations. A customer complaint will **only** be handled by arbitration if he signed an arbitration agreement. If this is the case, the customer must agree to submit to arbitration to handle the complaint.

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## SECTION 6: RECORDKEEPING RULES

### 6a. SEC RULES 17a-3/4 - RECORDKEEPING

Rule 17a-3 states which records must be kept by a broker-dealer; while Rule 17a-4 details the retention periods for these records. In addition, requirements for keeping records "current" are set in these rules.

The easiest way to remember the recordkeeping rules is to categorize the records into those kept for:

- The life of the firm;
- 6 years; and
- 3 years.

Once the life and 6 year records are memorized, everything else is a 3 year record.

#### Life Records

Articles of Incorporation or Partnership Agreement; Minutes of Board Meetings or Partnership Meetings.

These records must be kept for the life of the firm. The last 2 years' records must be kept readily accessible for audit.

#### Records To Be Kept For 6 Years

|                            |   |
|----------------------------|---|
| <b>General Ledger</b>      | General Ledger.                                 |
| <b>P &amp; S Blotter</b>   | Purchase and Sales Blotters ("P & S").          |
| <b>Cash Blotter</b>        | Cash Receipts and Disbursement Blotters.        |
| <b>Stock Blotter</b>       | Stock Received and Deliver Blotters.            |
| <b>Customer Statements</b> | Customer Account Records (Customer Statements). |
| <b>Stock Record</b>        | Stock Record.                                   |

The 3 blotters that must be kept are the "daily transaction records" of the firm. (The term blotter refers to the "good old days" when entries were made manually by quill pen and blotted dry.) Other blotters are prepared by brokerage firms, but need not be kept for 6 years. For example, a firm

is only required to keep subsidiary blotters of fails to deliver and fails to receive for 3 years.

These records must be kept for 6 years, with the last 2 years' records kept readily accessible for audit.

## **Records To Be Kept For 3 Years**

Everything Else! For example:

Copies of order memoranda (order tickets);  
Trial balances;  
Customer confirmations;  
Correspondence;  
Bank account records;  
E-Mails and IMs.

Subsidiary records such as:

Fail to receive blotters;  
Fail to deliver blotters;  
Interest and dividend blotters.

Other 3 year records are:

U-4 forms (employment questionnaires) for associated persons and fingerprint records must be kept for 3 years after employment is terminated.

There are numerous other 3 year records that are not listed. In all cases, the last 2 years' records must be kept readily accessible for audit.

Finally, also note that SEC Rule 17a-8 requires broker-dealers to keep records of currency and foreign transactions if the firm falls under the Currency and Foreign Transaction Reporting Act of 1970.

## **6b. SEC RULE 17a-5 - REQUIRED REPORTS FROM BROKER-DEALERS**

Rule 17a-5 places a number of reporting requirements on broker-dealers. Only a few of these must be known for the exam.

### **Annual Audit**

It is required that all broker-dealers submit to an annual audit by a certified public accountant. The FOCUS report (Financial and Operational Combined Uniform Single report) serves as the financial statement to be audited. Unaudited FOCUS reports also are required to be submitted

**Customers Sent  
Audited Balance  
Sheet and Net  
Capital Footnote  
105 Days After  
Year End**

periodically to the designated examining authority (DEA), such as FINRA.

**Unaudited Semi-  
Annual Balance  
Sheet and N/C To  
Customers**

Each clearing firm must then report its financial condition as disclosed in the audited FOCUS report to its customers. Customers must be sent an audited balance sheet and the audited computed amount of Net Capital no later than 105 days from the firm's fiscal year end. For a firm that has a December 31 year end, this translates into a customer mailing no later than April 15th of the next year.

**Definition of  
Customer**

In addition, the firm must send a semi-annual unaudited balance sheet and unaudited computed amount of Net Capital to its customers no later than 65 days after its mid-year point.

For purposes of required customer disclosure, a "customer" is defined as any person that has cash or securities in custody of the firm; and anyone who has effected a securities transaction through the firm in the month before or after the balance sheet is issued. The definition of "customer" does not include partners or subordinated lenders to the firm.

**6c. SEC RULE 17f-1 - REPORTING OF LOST  
OR STOLEN SECURITIES**

Rule 17f-1 established a central computer file of lost or stolen securities. The rule requires that every broker-dealer check with the computer file to insure that every security that comes into its possession is not reported as lost or stolen. This would be an onerous requirement, but the exceptions to the rule make it more reasonable.

The central file is maintained by the Securities Information Center (SIC), located in Massachusetts. For purposes of the exam, the SIC is the "designee of the SEC" for reporting lost or stolen securities.

**Exceptions To  
Required Reports**

The rule states that inquiry must be made of the SIC as to whether a security received by a broker-dealer or bank is reported as lost or stolen **EXCEPT:**

securities received directly from the issuer (new issues).

securities received from a Federal Reserve Bank or Branch.

securities received directly from another firm that is required to inquire (thus once the security enters

the "loop" from broker-dealer to broker-dealer, no inquiry is required).

securities received from a customer of the firm, where:

the securities are registered in the name of that customer or;

the securities were previously sold to the customer as verified by the internal records of the firm.

the amount of the transaction is \$10,000 or less.

**Applies To All Deliveries Of Securities**

**Anyone Can Inquire For Any Reason**

This rule applies to **all** securities deliveries, whether the securities are exempt or non-exempt. In essence, the rule only requires inquiry if securities are received from a customer in bearer form; or if securities are received from a customer who cannot produce records of the original purchase. Of course, any firm can make an inquiry at any time for any reason

The rule requires "reporting institutions" to report to the SIC if securities are suspected to be lost or stolen, or if securities received are counterfeit. The rules are:

**Stolen/Counterfeit Securities:**

**Report To SIC; Transfer Agent;**

Securities That Are Stolen or Counterfeit: The securities must be reported to the:

Securities Information Center;  
Transfer Agent;

within 1 day of discovery.

**Notify FBI Promptly**

In addition, the Federal Bureau of Investigation (FBI) is to be notified promptly.

**Missing Securities:**

Securities That Are Missing: Where no criminal activity is suspected, the missing securities must be reported to the:

**Report to SIC; Transfer Agent**

Securities Information Center;  
Transfer Agent;

The report is due within 1 day after the securities have been missing for 2 days.

**Recovery Report**

If securities that are reported as lost or stolen are found, everyone must be informed of the discovery within 1 day.

#### 6d. SEC RULE 17f-2 - FINGERPRINTING

This rule requires that all partners, directors, officers, and employees of a broker-dealer, clearing agency, or transfer agent be fingerprinted **EXCEPT** persons who:

**Persons Who  
Do Not Have To  
Be Fingerprinted**

Are not engaged in the sale of securities;

Do not have access to the keeping, handling or processing of securities, monies, or the books or records relating to securities or monies;

Have direct supervisory responsibility for the above mentioned persons.

Basically, this boils down to all officers, directors, sales employees, accounting employees, securities processing employees and their supervisors must be fingerprinted. This rule dates to the early 1970's, and at that point in time, there was no licensing rule for securities traders, so there was no fingerprinting requirement!

When a U-4 Form is completed for registration, a copy of that person's fingerprints is required. Thus, while Rule 17f-2 originally excluded securities traders from the fingerprinting requirement, because these individuals must now be registered (Series #55 for FINRA firms enacted in 1997; Series #56 for non-FINRA firms enacted in 2011), they must be fingerprinted.

Clerical personnel need not be fingerprinted.

## RECORDKEEPING RULES SECTION EXAMINATION

1.

Securities are suspected to be stolen.  
All of the following will be informed  
**EXCEPT:**

- a. SRO
- b. Transfer Agent
- c. Local Authorities (FBI)
- d. SIC

2.

Which of the following must be sent  
to customers?

- I Annual audited balance sheet
- II Annual unaudited balance sheet
- III Semi-annual audited balance sheet
- IV Semi-annual unaudited balance sheet

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

3.

Which of the following employees  
must be fingerprinted under SEC Rule  
17f-2?

- I Registered representative
- II Cage clerk
- III Accounting supervisor
- IV Human resources supervisor

- a. I only
- b. II and III only
- c. I, II, III
- d. I, II, III, IV

4.

Fingerprint records of associated  
persons must be retained for how  
many years after that person leaves  
the employ of a broker-dealer?

- a. 1 year
- b. 3 years
- c. 6 years
- d. indefinitely

5.

If securities are believed to be stolen,  
the first agency to be called is the:

- a. Financial Industry Regulatory Authority
- b. Securities Information Center
- c. Federal Bureau of Investigation
- d. Transfer Agent

## RECORDKEEPING RULES SECTION EXAMINATION EXPLANATIONS

1. The best answer is a. If securities are stolen, there is no requirement to report to the SRO (e.g., the CBOE or FINRA). The SIC (Securities Information Center), transfer agent, and local authorities (FBI) must all be notified.
2. The best answer is b. Clearing broker-dealers are obligated to send their customers an annual audited balance sheet and net capital footnote no later than 105 days after year end. In addition, the firm must send a semi-annual unaudited balance sheet and net capital footnote to its customers.
3. The best answer is c. SEC Rule 17f-2 requires that all officers, directors, sales employees, as well as all persons who handle cash, securities, and the books and records of original entry (and their supervisors) be fingerprinted. Thus, a human resources employee would not fall under this requirement.
4. The best answer is b. Fingerprint records must be retained for 3 years after an associated person leaves the employ of a broker-dealer.
5. The best answer is c. If securities are suspected to be stolen, the FBI must be called promptly; while the Securities Information Center and the Transfer Agent must be notified within 1 business day of discovery that the securities are missing.

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## TRADING SYSTEMS (5)

|  | PAGES   |
|--|---------|
| <hr/>  |         |
| SECTION 1: NASDAQ MARKET MAKING                                | 1 - 34  |
| 1a. MARKET MAKER REGISTRATION.....                             | 1 - 2   |
| 1b. MARKET MAKER WITHDRAWAL.....                               | 2 - 3   |
| 1c. QUOTATION RULES.....                                       | 3 - 9   |
| 1d. ORDER ENTRY PARAMETERS.....                                | 10 - 13 |
| 1e. OATS - ORDER ENTRY /<br>ACT - TRADE REPORTING SYSTEMS..... | 13 - 17 |
| 1f. ADF / TRACS.....   | 17      |
| 1g. NASDAQ CROSSES.....  | 17 - 20 |
| 1h. TRADING HALTS.....   | 20 - 21 |
| 1i. FINRA CONDUCT RULES.....                                   | 21 - 23 |
| 1j. NASDAQ MARKETWATCH.....                                    | 23 - 24 |
| NASDAQ MARKET MAKING EXAMINATION.....                          | 25 - 29 |
| NASDAQ MARKET MAKING<br>EXAM EXPLANATIONS.....                 | 30 - 34 |
| <hr/>  |         |
| SECTION 2: CBOE TRADING  | 35 - 54 |
| 2a. ORDERS ACCEPTED.....                                       | 35 - 39 |
| 2b. CBOE MARKET MAKING.....                                    | 39 - 43 |
| 2c. ORDER BOOK OFFICIALS.....                                  | 43 - 44 |
| 2d. TRADING ROTATIONS.....                                     | 44 - 45 |
| 2e. TRADING HALTS / FAST MARKETS.....                          | 45 - 46 |
| 2f. TRADE REPORTING / MATCHING.....                            | 47 - 48 |
| CBOE TRADING EXAMINATION.....                                  | 49 - 52 |
| CBOE TRADING EXAMINATION EXPLANATIONS.                         | 53 - 56 |
| <hr/>  |         |

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## SECTION 1: NASDAQ TRADING

### Market Makers In NASDAQ Securities Register With FINRA

### New Market Maker Registers Upon FINRA's Written Approval

### Next Day Market Maker Registration

### Same Day Market Maker Registration

### MPID - Market Participant ID

### Multiple MPIDs

### 1a. NASDAQ MARKET MAKER REGISTRATION

First, let us consider the general requirements. FINRA requires that any market maker in a NASDAQ security register with FINRA. To register, the firm must be a FINRA member in good standing and must meet minimum net capital standards.

If a firm has never registered as a market maker before, it must file with FINRA for the securities in which it wishes to make a market and await written approval. FINRA gives notice to NASDAQ upon approval, so that the member firm can begin making a market in that issue.

If a firm is already a NASDAQ market maker, and wishes to register in additional issues, registration is generally effective on the business day following the request.

However, if the firm is currently registered as a NASDAQ market maker, additional registration requests are effective the same day:

if a security in which the market maker is currently registered receives a merger or acquisition offer, then immediate registration is granted to make a market in the issuer making the offer; or

for a newly authorized issue when the issue starts trading on NASDAQ, as long as the request is made within 5 business days' of the issue's inclusion; or

for additional issue offerings (secondary offerings) where the market maker is the manager or co-manager of the underwriting syndicate.

Each registered market maker is assigned a unique MPID (Market Participant Identifier), which is a 4-letter symbol. For example, the MPID for Knight Trading, one of the largest NASDAQ market makers, is "NITE."

The same firm can request "multiple" MPIDs from NASDAQ in stocks in which they are actively registered and quoting with a Primary MPID. This allows different trading desks at the same firm to be tracked uniquely.

For example, a firm may use separate MPIDs for its:

Proprietary trading desk;

|   |   |
|---|---|
|   | Index arbitrage trading desk;<br>Prime brokerage trading desk.  |
| <b>Up To 10 MPIDs</b>   | NASDAQ allows a firm to have up to 10 supplemental displayable MPIDs, aside from its Primary MPID - called the "P-MPID."  |
| <b>Anonymous MPID<br/>= NSDQ</b>  | NASDAQ also allows a market maker to post quotes anonymously. In this case, a generic MPID called "NSDQ" is shown. By doing so, a market maker can keep its true trading interest hidden from other market participants.  |
| <b>1b. NASDAQ MARKET MAKER WITHDRAWAL</b>   |   |
| <b>Excused<br/>Withdrawal<br/>For 5 Business Days</b>                               | If a market maker wishes to withdraw a quote, FINRA can allow this for up to 5 business days for circumstances beyond the firm's control. This is termed an excused withdrawal and can be based on:   |
|   | jury duty;  |
|   | equipment malfunction;  |
|   | scheduled vacations;  |
|   | religious and legal holidays;   |
|   | involuntary failure to maintain a clearing agreement; and   |
|   | requirements of Regulation M (covered in a previous chapter, if a member firm is part of an underwriting group in a secondary offering, it may not be able to act as a market maker in that issue during the 20-day cooling off period).  |
| <b>Legal Requirements<br/>Can Give Excused<br/>Withdrawal For<br/>Up To 60 Days</b> | In addition, legal requirements may force a market maker to seek an excluded withdrawal. For example, if a market maker comes into possession of material non-public information about an issuer in whose securities it makes a market, then trading on that information could be a violation of the insider trading rules. In a situation like this, FINRA can grant an excused withdrawal that is longer than the regular 5 business days - up to 60 calendar days. |
|   | Excused withdrawal is not permitted due to pending news announcements, a sudden influx of orders, or because of competitive reasons.  |

**Voluntary Termination - Out For 20 Business Days** A market maker can voluntarily terminate registration by withdrawing its quotes, but then is prohibited from re-registering in that security for 20 business days.

**Involuntary Termination Of Registration** FINRA retains the right to suspend or terminate a market maker's registration for not meeting eligibility standards or for non-payment of NASDAQ fees. If a security is delisted from NASDAQ, the market maker can no longer post quotes on NASDAQ, but it can still make a market in the issue in the OTCBB - covered later in this section.

FINRA can also suspend, limit, prohibit, or terminate a market maker's registration for rule violations.

For example if a market maker fails to enter quotes within 5 business days after registration is effective, registration will be terminated by FINRA.

**Issuer Cannot Pay Member To Become Market Maker In Its Securities** Member firms cannot accept payments or consideration of any kind from an issuer in connection with that firm registering as a market maker in that issuer's securities. This prohibition includes "affiliates" and "promoters" connected with the issuer.

For example, a "finder" that finds a company that wishes to go public and introduces it to an underwriter cannot pay other FINRA member firms to start making a market in the issue once the IPO is completed. Payment here includes not only cash, but also stock, options, or reimbursement of a member's expenses.

Note, however, that payments to members to reimburse them for expenses normally paid by issuers (as opposed to expenses paid by underwriters), are not prohibited. For example, if a market maker pays the NASDAQ listing fees for an issuer, and the issuer reimburses the market maker for this, there is no problem because the listing fees were the issuer's expense in the first place.

### 1c. QUOTATION RULES

**Must Maintain Firm 2-Sided Quote During Regular Market Center Hours** As a NASDAQ market maker, a dealer must maintain firm 2-sided quotes continuously during the "regular" hours that the market is open (9:30 AM - 4:00 PM ET).

The NASDAQ Market Center maintains the following hours:

|                       |                      |
|-----------------------|----------------------|
| Premarket Hours:      | 7:00 AM - 9:30 AM ET |
| Regular Market Hours: | 9:30 AM - 4:00 PM ET |
| Aftermarket Hours:    | 4:00 PM - 8:00 PM ET |

A market maker may elect to stay open for either the "Premarket" or "Aftermarket" session, but is not required to do so. If the market maker chooses to stay open during these sessions, the firm quote rule still applies.

**Quotes For 100 Shares** If there is no size indicated on a quote, it is only good for 100 shares. If a market maker is displaying a greater size than 100 shares, either for its own account or for a customer limit order, it must honor that quote size.

**Quotes Reasonably Related To Market And Competitive** All NASDAQ quotes must be "firm," meaning that "backing away" (not honoring the quote) is prohibited and each quote must be:

reasonably related to the prevailing market and;  
reasonably competitive.

If a market maker's quotes are not reasonably related to the prevailing market, NASDAQ/FINRA may require the firm to re-enter the quotes. If it fails to do so, NASDAQ/FINRA may suspend the market maker's quotes in one or all securities in which it is registered.

**Bona-Fide Quotes** All published quotes must be "bona-fide" - meaning that the member actually intends to trade at those prices. Fictitious quotes or quotes pulled from "thin air" are prohibited. Similarly, FINRA requires that all published trades be bona-fide as well.

**No Automated Quote Updating To Keep Quote Away From Inside Market** FINRA prohibits the use of computer generated quote updates that track changes in market prices and automatically generate quotes to keep the market maker's quote away from the best market.

**Automatic Updating Exceptions** However, automated updating of quotes is permitted when:

- the update is in response to an execution that partially fills the market maker quote size;
- the update reflects the receipt, execution or cancellation, of a customer limit order; or
- the update is to assure that the market maker maintains the same bid/ask quote as shown in another trading system.

**NASDAQ AQR Permits Automated Quote Updating** Note that the NASDAQ automated trading platform, does have an "AQR" - Automatic Quote Refresh feature that does allow for automated quote updating in compliance with this exception. It is called the NASDAQ Market Center Execution System and also is known by the name "SingleBook."

**Cannot Enter Quote That Will** Market makers are prohibited from entering quotes into the NASDAQ system that will "lock" or "cross" the market.

**Lock Or Cross Market** The inside market for each security must have a higher inside ask than the inside bid - with the inside market consisting of the highest bid and lowest ask for the issue.

**Locked Market - Same Inside Bid/Ask**

A locked market is one where the "inside" bid and ask are the same. A "crossed" market is one where the inside ask is lower than the inside bid. In this case, any dealer could buy the stock at the inside ask and have an immediate profit by selling that stock at the higher inside bid.

**Crossed Market - Inside Bid Higher Than Inside Ask**

To illustrate normal, locked and crossed markets, assume that NASDAQ shows the following for ABCD stock:

(Note: This illustration is the "old" NASDAQ system, where crossed and locked markets could occur. The current NASDAQ Single Book System, aka NASDAQ Market Center Execution System - will not allow crossed or locked markets. However, crossed and locked markets are tested on the exam.)

### NASDAQ Level III Screen

|                | Bid  | Ask   |
|----------------|------|-------|
| Raymond James  | 9.50 | 10.25 |
| Morgan Stanley | 9.25 | 10.15 |
| UBS Cap. Mkts  | 9.40 | 10.00 |
|                |      |       |

The current inside market for ABCD stock is the highest bid and lowest ask. Therefore, the inside market is:

### NASDAQ Level III Screen

|                | Bid  | Ask   |
|----------------|------|-------|
| Raymond James  | 9.50 | 10.25 |
| Morgan Stanley | 9.25 | 10.15 |
| UBS Cap. Mkts  | 9.40 | 10.00 |
|                |      |       |

#### Inside Market

The best price to buy the stock is at UBS Capital Market's ask price of \$10. The best price to sell the stock is at Raymond James' bid price of \$9.50. The inside market is \$9.50 - 10.

Assume that a new market maker wishes to enter quotes for ABCD stock in the NASDAQ system. Following is the first quote that this firm enters:

### NASDAQ Level III Screen

|                  | Bid  | Ask   |
|------------------|------|-------|
| Raymond James    | 9.50 | 10.25 |
| Morgan Stanley   | 9.25 | 10.15 |
| UBS Cap. Mkts    | 9.40 | 10.00 |
| New Market Maker | 9.15 | 9.90  |

After entering this quote, the new inside market becomes:

**NASDAQ Level III Screen**

|                  | Bid  | Ask   |
|------------------|------|-------|
| Raymond James    | 9.50 | 10.25 |
| Morgan Stanley   | 9.25 | 10.15 |
| UBS Cap. Mkts    | 9.40 | 10.00 |
| New Market Maker | 9.15 | 9.90  |

**Acceptable Quote**

The best price to buy the stock is at the new market maker's ask price of \$9.90. The best price to sell is at Raymond James' bid of \$9.50. The inside market becomes \$9.50 - \$9.90. There is a normal bid/ask spread on the inside market, and so the entry of the new quote is acceptable.

Assume that the new market maker entered the following quote instead:

**NASDAQ Level III Screen**

|                  | Bid  | Ask   |
|------------------|------|-------|
| Raymond James    | 9.50 | 10.25 |
| Morgan Stanley   | 9.25 | 10.15 |
| UBS Cap. Mkts    | 9.40 | 10.00 |
| New Market Maker | 9.15 | 9.50  |

The inside market now becomes:

### NASDAQ Level III Screen

|                  | Bid  | Ask   |
|------------------|------|-------|
| Raymond James    | 9.50 | 10.25 |
| Morgan Stanley   | 9.25 | 10.15 |
| UBS Cap. Mkts    | 9.40 | 10.00 |
| New Market Maker | 9.15 | 9.50  |

#### Locked Market

The inside bid and ask are the same - \$9.50 Bid / \$9.50 Ask. There is no spread between the quotes. This is a "locked market." Therefore, the quote of the new market maker **cannot** be entered into the system (with some very limited exceptions).

Finally, assume the new market maker enters this quote:

### NASDAQ Level III Screen

|                  | Bid   | Ask   |
|------------------|-------|-------|
| Raymond James    | 9.50  | 10.25 |
| Morgan Stanley   | 9.25  | 10.15 |
| UBS Cap. Mkts    | 9.40  | 10.00 |
| New Market Maker | 10.25 | 10.50 |

The inside market becomes:



### NASDAQ Level III Screen

|                  | Bid   | Ask   |
|------------------|-------|-------|
| Raymond James    | 9.50  | 10.25 |
| Morgan Stanley   | 9.25  | 10.15 |
| UBS Cap. Mkts    | 9.40  | 10.00 |
| New Market Maker | 10.25 | 10.50 |

#### Crossed Market

In this case, the best price to buy is from UBS Capital Markets at \$10. Any firm that buys from UBS can realize an immediate profit by selling the stock to the new market maker at his bid of \$10.25. The new market maker is going to find that he will be buying a lot of stock at his bid! The market is "crossed." The inside ask is lower than the inside bid. Therefore, the new market maker cannot enter the quote that crossed the market - again with limited exceptions.

#### Before Entering A Quote That Locks/Crosses - Execute Against All Such Quotes

There is a way that a quote can be entered that might lock or cross the market. Before entering a quote that would lock or cross the market, a market maker must make a reasonable effort to avoid doing such by executing transactions with all market makers whose quotes would be locked or crossed if that firm entered its desired quote.

For example, if a market maker has an "ask" price of \$10; before a bid can be placed at \$10; the firm should take all of the shares being offered by that market maker at \$10. This will force the market maker to raise its ask - and now, a bid placed at \$10 by this firm, will not lock the market.

Basically, the FINRA rule here is an attempt to force the ask price up; or the bid price down; when a market maker wishes to enter a quote that would serve to cross or lock the market. Also note that this is only permitted under exceptional circumstances.

## 1d. NASDAQ ORDER ENTRY PARAMETERS

### Market Or Limit Orders On NASDAQ

NASDAQ orders can either be Market or Limit orders. Market makers must accept market orders. They can choose to accept limit orders, but are not obligated to do so.

NASDAQ Limit orders can be placed as:

#### Day

Day: Canceled at end of day if not filled.

#### GTC

GTC: Good-Til Cancel - Canceled at end of 1 year if not filled.

#### IOC

IOC: Immediate or Cancel - Fill in part or full immediately and cancel the balance of the order.

#### MQ

MQ: Minimum Quantity Order - Fill order for entire amount or immediately cancel order - thus, this must be an IOC order.

### Primary Peg

Pegged: Order that tracks the same side of the "inside market," also called a "Primary Peg."

A primary pegged buy order is placed at the inside bid and dynamically tracks the inside bid as the market moves.

A primary pegged sell order is placed at the inside ask and dynamically tracks the inside ask as the market moves.

(Note that as most of the trading on NASDAQ is automated, the use of pegged orders that "track" market movements based on computer algorithms is increasing greatly.)

### Market Peg

Reverse: Order that tracks the opposite side of the "inside Pegged market," also called a "Market Peg."

A reverse pegged order to buy order tracks the inside ask minus \$.01.

A reverse pegged order to sell order tracks the inside bid plus \$.01.

As the "inside" prices move, these order prices are dynamically adjusted to match.

### Pegged Capped

Pegged: The same as a pegged order but there is a limit on Capped the dynamic price adjustment as the inside market moves. Once the "cap" is reached, the order becomes a limit order at the cap price.

**Discretionary**

**Discret:** A discretionary order is displayed on the book at one price, but also includes a more aggressive "discretionary price" that is not displayed. The undisplayed discretionary price can only be a maximum of \$.99 higher than the displayed bid; and \$.99 lower than the displayed ask.

The "passive" discretionary price is not displayed and only becomes active as an IOC order when shares are available within the discretionary range.

An incoming market order will execute against the display price. An incoming limit order that is not executable at the display price, but is within the discretionary range, executes at the limit price.

**Auto-Ex:** Automated execution against all quotes/orders that do not charge access fees (many ECNs charge access fees).

**No All Or None Orders**

NASDAQ prohibits "All or None" orders (an order that if not filled in one shot, then subsequent attempts are permitted). Note, in contrast, that the CBOE will accept an AON order. This is covered in the next section.

**No Minimum Acceptable Quantity (MAQ) Orders**

NASDAQ prohibits "Minimum Acceptable Quantity" orders, which, when routed to a market maker, would give that market maker discretion as to whether to fill for the entire quantity or to reject the order. (Note, in contrast, that "MQ" - Minimum Quantity - orders are permitted. As long as the market maker's displayed size is sufficient to fill the entire order, it would be filled. Otherwise, it is canceled. The market maker has no discretion over this.)

**Limit Orders - May Be Partially Filled**

NASDAQ limit orders can be partially filled - e.g., an order for 500 shares at a limit price might get 300 shares filled; the balance remains as an unfilled limit order for 200 shares.

Previously, NASDAQ Market Center hours were shown as:

**Premarket Hours:** 7:00 AM - 9:30 AM ET

**Regular Market Hours:** 9:30 AM - 4:00 PM ET

**Aftermarket Hours:** 4:00 PM - 8:00 PM ET

Orders can be entered as either:

**Market Hours Order**

**Market Hours:** An order entered for execution between 9:30 AM and 4:00 PM - Regular Market hours. This order

would be entered as either "Market Day" or Market GTC."

**System Hours Order**

**System Hours:**

An order entered for execution between 7:00 AM and 8:00 PM - the hours that the NASDAQ Market Center is open. This order would either be entered as "System Day" or "System GTC."

**Time In Force (TIF)**

NASDAQ uses the term "Time In Force" to describe these order qualifiers. For example, an order entered as "System Hours Day - IOC" can be filled, in part or in full, anytime between 7:00 AM and 8:00 PM that day. Any unfilled portion of the order is canceled.

**Pegged And Discretionary Orders Must Be "Market Day"**

Note that most trading is concentrated in the Regular Market Hours trading session. Trading in both the Premarket Hours and Aftermarket Hours trading sessions is thinner and price movements are more volatile. Because of this, pegged and reverse pegged orders that track the inside market's movements can only be entered for execution during the regular trading session with a "TIF" of Market Day. The same is true for discretionary orders.

When orders are entered into Single Book, there is a choice of order routing algorithms. With the implementation of Regulation NMS - Rule 611, commonly known as the trade-through rule, NASDAQ had to create order routing methods that were "Rule 611 compliant."

Rule 611 requires that marketable orders for NMS securities (either NYSE, AMEX or NASDAQ listed issues) must be executed in 1-second by the market that receives them; or they must be routed to any other market that is posting the same (or better) price. This means that all markets for NMS securities must be electronically linked. It also means that the market that receives an order has an inherent advantage, because it simply has to match the best price of any market to fill the order itself.

The main order algorithms offered by NASDAQ are:

**SCAN Routing**

**SCAN:** First attempts to execute the order against the NASDAQ Single Book at a price equal to, or better than NBBO. If the order cannot be filled at the best price, it is routed to the better priced market (e.g., an ECN, third market maker or another exchange). If the order is not completely filled in the better priced market, the unexecuted portion posts to Single Book. If the order is subsequently locked or crossed by another market, it will not route to that market.

**STGY Routing**

STGY: Behaves the same as SCAN, except if the order is subsequently locked or crossed by another market, it will route to that market.

Because exchanges now pay for orders, the more orders that are executed on a single market, the greater the payment that the order entry firm will get. With SCAN routing, orders posted to Single Book after attempting a fill in another market are "passive" - they wait there for another market to access that order in Single Book under the rule. This means the order will be filled on NASDAQ, maximizing the order entry firm's payments for order flow received from NASDAQ. With STGY, the unfilled order on NASDAQ's book will be routed to the other market, so an order entry firm that does not have sufficient order flow to receive payments for order flow might choose this option.

NASDAQ competes with the NYSE (and AMEX), trading NYSE and AMEX listed issues primarily via its captive ECN (INET). Variations on SCAN and STGY routing are available for orders for NYSE-listed issues, called DOT (as in SuperDOT - the old NYSE automated trading system) routing.

**DOTA Routing**

DOTA: After 9:30 AM (NYSE opening), the routing behaves as SCAN. Before 9:30, the order is sent to the NYSE for the opening.

**DOTM Routing**

DOTM: After 9:30 AM (NYSE opening), the routing behaves as STGY. Before 9:30, the order is sent to the NYSE for the opening.

**1 e. ORDER ENTRY SYSTEM (OATS) AND TRADE REPORTING SYSTEM (ACT)**

**OATS - Order Audit Trail System**

OATS, FINRA's Order Audit Trail System, provides for the electronic capture of order information for NASDAQ equity securities. Each Reporting Member must, immediately following receipt or origination of an order, record the details of the order in OATS. Also required to be recorded are the details of any order modification, cancellation and execution.

**OATS Reports For NASDAQ, OTCBB And Pink Sheet Issues**

The details of both electronic orders and manual orders must be captured and reported via OATS. NASDAQ market Makers, NASDAQ Order Entry Firms and ECNs are subject to OATS rules. Non-members of FINRA are not subject to the rule. OATS reports are required not only for orders for NASDAQ issues, but also for orders for OTCBB and Pink Sheet issues.

This information is used to match the order details to the trade execution that results via the ACT - Automated Confirmation of Trade System (covered next).

#### ACT System

The Automated Confirmation of Transactions Service ("ACT") is a NASDAQ system that provides reporting and dissemination of last sale information on equity securities traded "over-the-counter." The market venues that must report trades to ACT are:

NASDAQ (both Global Market and Capital Market);

OTCBB and Pink Sheets;

Third Market (OTC trades of listed equities);

Fourth Market (ECNs).

Unlinked ECNs that are not NASDAQ participants that effect trades through the ADF (Alternate Display Facility) report their trades through another system called TRACS (Trade Reporting and Comparison Service). TRACS is covered later in this section.

The ACT system:

is open from 8:00 AM - 8:00 PM ET. Also note that this is different than NASDAQ System Hours of 7:00 AM - 8:00 PM ET);

compares trade information entered by ACT participants and submits "locked-in" trades to the National Securities Clearing Corporation (NSCC - a division of DTCC - Depository Trust and Clearing Corp.) for clearance and settlement;

provides participants with the ability to enter pre-negotiated priced trades (for example, a trade used to establish the price of a security for purposes of making a gift);

sends transaction reports to the National Trade Reporting System;

provides participants with the ability to monitor and review their trades in the System; and

provides clearing firms with the ability to monitor and manage risk.

NASDAQ officially became a registered stock exchange in the last quarter of 2006, and one of the requirements to achieve "exchange" status was to completely separate its trade execution services from its trade reporting facilities.

The ACT system, because it both compared trade information as well as reported completed trades, had to be legally "broken apart." To do this, NASDAQ created the "TRF" - Trade Reporting Facility, which operates as part of the ACT platform.

**Trade Reporting Facility (TRF)**

The "TRF" reports completed trades for NASDAQ stocks and for exchange listed stocks traded OTC (Third Market trades). These are the securities for which the NASDAQ Stock Market has registered to trade as an exchange with the SEC.

**Over The Counter Reporting Facility (ORF)**

The NASDAQ Stock Market no longer has any responsibility for OTCBB or Pink Sheet trades - this oversight is given over to FINRA. Trades of OTCBB and Pink Sheet issues, as well as foreign issues that are not listed and reported over another exchange, are reported to the "ORF" - Over The Counter Reporting Facility that is also run by ACT.

The operation of the TRF and ORF is embedded within the existing ACT architecture and is transparent to ACT users. Essentially, the TRF is broken down into 4-feeds with similar rule sets. These are the:

**NASDAQ TRF:** Reports of trades of NASDAQ listed issues

**NYSE TRF:** Reports of trades of NYSE-listed issues that occur OTC between 2-Third Market makers (this was covered in the previous section)

**ORF:** Reports of trades of OTCBB and Pink Sheet issues

**ADF/TRACS:** Reports of trades of NASDAQ and NYSE listed issues that occur on ECNs and ATSs (Alternative Trading Systems)

**Trades Reported Within 30 Seconds**

As a general rule, ACT participants must report trades within 30 seconds of execution. Transactions not reported within this time frame are designated as "late." If FINRA finds a pattern of unexcused late trade reporting, the member firm may be found in violation of FINRA rules.

Reports of trades into ACT can be made either by:

ACT Market Makers; or

ACT Order Entry firms.

**Executing Member Reports Trade**

Only the "executing member" side of the trade is required to report to ACT. ACT sends this report to the contra-party to the trade to either be accepted or declined. All trade

reports are priced excluding mark-ups, mark-downs, commissions, and any other related charges.

**ACT Display Of  
Trade Detail -  
Confirmed Within  
20 Minutes**

The reporting party enters its record of the trade into ACT; and the contra-party is obligated to review the trade report on-line; and accept or decline; within 20 minutes. Thus, unmatched trades, that are time-consuming and costly to resolve, are minimized.

ACT displays modifiers next to each trade for trades reported outside of the Regular Market session:

“.T” - designates that the trade took place outside of Regular Market hours but was reported that day.

“as/of” - designates that the trade took place outside of Regular Market hours but was reported the next day.

The following schedule shows the reporting rules for both regular and “after-hours” trading:

| <b>Time of Trade</b> |
|----------------------|
| 12 Mid. - 8:00 AM    |
| 8:00 AM - 9:30 AM    |
| 9:30 AM - 4:00 PM    |
| 4:00 PM - 8:00 PM    |
| 8:00 PM - 12 Mid.    |

| <b>Reporting</b>             | <b>Designation</b> |
|------------------------------|--------------------|
| 8:00 AM - 8:15 AM (That Day) | “T”                |
| 30 seconds                   | “T”                |
| 30 seconds                   | None               |
| 30 seconds                   | “T”                |
| 8:00 AM - 8:15 AM (Next Day) | “as/of”            |

All transactions in NASDAQ listed issues must be reported within 30 seconds of execution during the regular operating hours of NASDAQ - 9:30 AM-4:00 PM ET.

In addition, the 30 second reporting rule is applied to NASDAQ trades occurring during ACT's operating hours, which are 8:00 AM - 8:00 PM ET.

When trades are reported within the required 30 second limit, there is no time of execution required in the report. However, trades that are not reported within the required time frames must be noted as such.

**.Z - Late Trade Report  
Occurring Between  
9:30 AM - 4:00 PM**

If a trade that took place during regular market hours (9:30 AM - 4:00 PM) is reported after the 30 second limit, it is designated as a “late” trade report with the modifier .Z

**.U - Late Trade Report  
Occurring Outside Of  
Regular Market Hours**

.U for late reports of trades occurring outside of normal market hours. The actual time of the trade must be included in the report.

(Note: NASDAQ changed its opening to 7:00 AM from the previous 8:00 AM for the Premarket trading session, yet

ACT has not changed its opening to match. Also note that the CBOE trade reporting rules, covered in the next section, are completely different.

### 1f. REPORTS OF TRADES OCCURRING ON THE ADF VIA TRACS

The NASD (now FINRA) created the ADF because the ECNs were concerned that SuperMontage (the NASD's first fully automated order book and execution system) was being created (circa 2003) to "kill" the ECNs - which had gobbled up about 60% of NASDAQ trading volume at that point. Most ECNs chose not to participate in SuperMontage, and by complaining loudly to the SEC, the SEC forced the NASD to establish the ADF - Alternate Display Facility - to show quotes from ECNs that were not linked (that is, not posting quotes) in SuperMontage.

ADF

TRACS

**Trades Reported Within 30 Seconds Between 8:00 AM - 6:30 PM**

Some of these unlinked ECNs had captive broker-dealer subsidiaries, and they would post their quotes in the ADF (but not in NASDAQ Single Book, the 2007 successor to SuperMontage). If a trade resulted, the trade must still be reported, but this is done through an "ADF-only" system called TRACS - Trade Reporting and Comparison Service.

TRACS operates from 8:00 AM - 6:30 PM, during which trades must be reported within 30 seconds of execution. For trades that occur after 6:30 PM, reporting occurs within 15 minutes of TRACS opening the next day.

Note that if a market maker in the ADF is also a NASDAQ market maker, it has the option of reporting the trade either through TRF or TRACS, unless the trade was effected through a NASDAQ system that "locks-in" the trade such as Single Book (which would automatically report the trade to the TRF anyway).

### 1g. NASDAQ CROSSES

**Trade Or Move Message Replaced By "Opening Cross"**

Determining the opening price of a NASDAQ stock has always been a messy affair. NASDAQ used to have a procedure where market makers, in the 10 minute window prior to market opening, could post quotes that would cross or lock the market. NASDAQ obligated the market maker to send a message to the other market makers whose quotes might be locked or crossed to "Trade or Move."

The market maker receiving the message either had to trade at the locked or crossed price - which would tend to move the market back to a normal bid-ask spread - or move his quote so that it would no longer result in a lock or

cross. This mechanism for "discovering" the appropriate opening price has been replaced by an automated process called the "Opening Cross."

### **Opening Cross**

The Opening Cross Procedure is as follows:

Starting at 7:00 AM, NASDAQ accepts quotes from market makers. These include:

#### **MOO Order**

"MOO" orders - Market On Open Orders - that can only be filled at the opening price;

#### **LOO Order**

"LOO" orders - Limit On Open Orders - that specify a limit on the price and can only be filled during the opening cross at that limit price or better;

#### **OIO Order**

"OIO" orders - Opening Imbalance Only Orders - that specify a limit on the price and that can only be executed against MOO and LOO orders (and early regular hours orders) during the opening cross. These are liquidity improving orders that will execute only to the extent that there is offsetting liquidity.

(Note: Sometimes these orders are abbreviated "MO," "LO," and "IO" instead of "MOO," "LOO," and "OIO.")

MOO, LOO, and OIO orders can be entered, canceled and corrected between 7:00 AM and 9:28 AM without restriction.

#### **No New MOO Orders After 9:28 AM**

After 9:28 AM, new MOO orders cannot be entered, nor can existing MOO orders be canceled.

#### **No New LOO Orders After 9:28 AM**

After 9:28 AM, new LOO orders cannot be entered and existing orders cannot be canceled and can only be changed to improve the price or increase the order size.

#### **New OIO Orders Accepted Until 9:30 AM**

After 9:28 AM, existing OIO orders cannot be canceled and can only be changed to improve the price or increase the order size. However, new OIO orders are still accepted between 9:28 AM and the 9:30 AM open.

Also note that any "regular" market orders entered prior to 9:28 AM are eligible to participate in the cross - these are termed "early regular hours orders." After 9:28 AM, orders that are entered will not participate in the cross (with the exception of new OIO orders).

**At 9:25 AM, Locking  
Or Crossing Quotes  
Are Filled At Best  
Bid Or Offer**

The quotes "go live" at 9:25 AM (5 minutes prior to market open at 9:30 AM) and are shown in time priority. To prevent locked or crossed markets, any such quotes are held in a separate queue. Prior to the opening cross, the "in queue" orders are executed against the best bid or best offer.

Starting at 9:28 AM until market open, NASDAQ displays an Order Imbalance Indicator that is updated every 5 seconds that indicates the current "Match Price," number of shares paired at the "Match Price" based on accumulated MOO, LOO, OIO, and early regular hours orders entered, and the size of the imbalance. This is done to attract more buyers if there are too many sellers; and vice-versa.

Note that starting at 9:28 AM until the 9:30 AM open, only new OIO orders can be accepted; no more MOO or LOO orders are permitted, nor are early regular hours orders permitted.

Based on the accumulated orders on the buy side and sell side, an opening price is set to maximize the number of MOO, LOO, OIO, and early regular hours orders filled (this is the "Clearing Price").

**Reported As ".T" Trades**

These orders are cleared in one sweep at 9:30 AM - the Opening Cross. This is an automated process and the resulting trades are reported to the NASDAQ tape with the modifier ".T," which indicates that this is not a "current trade price." - at which point regular trading commences.

A simplified summary of the Opening Cross Timeline follows:

7:00:00 AM: MOO, LOO, OIO, and early regular hours market orders accepted.

9:25:00 AM: Quotes go "live" and any locking or crossing quotes are matched against the highest bid or lowest offer and filled (this prevents locked or crossed markets)

9:28:00 AM: Order Imbalance Indicator is displayed every 5 seconds to attract offsetting trades.

MOO orders no longer accepted;  
Early regular hours market orders no longer accepted; new LOO orders no longer accepted and existing orders can only be modified if size

or price is improved; New OIO orders still accepted; existing OIO orders can only be modified to improve size or price.

9:30:00 AM: Clearing Price is set to fill the maximum number of MOO, LOO, OIO, and early regular hours market orders and the orders are crossed. The market now opens.

#### **Closing Cross**

NASDAQ has also implemented a similar "Closing Cross" to create an automated orderly process for determining the closing price each day at 4:00 PM. One difference is that "OC" orders - On Close orders are accepted 10 minutes prior to market close (instead of 2 minutes prior to market opening for the acceptance of new "OO" On Open orders for the Opening Cross).

To effect the closing cross, NASDAQ accepts;

Market On Close (MOC);  
Limit On Close (LOC); and  
Imbalance Only (IO) orders.

#### **Closing Cross Starts At 3:50 PM ET**

The Closing Cross starts at 3:50 PM ET and is finished at the market close of 4:00 PM. During this time window, NASDAQ reports the following every 5 seconds:

the near and far clearing prices;  
current reference price; and  
imbalance quantity.

#### **Post-Closing Cross**

The "Crosses" have been so successful that NASDAQ has also implemented a Post-Closing Cross at 4:30 PM 3 Intraday Crosses for institutional orders, so that they can execute large orders without moving the market. These crosses are anonymous and cover stocks in the NASDAQ 100 and S & P 500 Indexes.

#### **IntraDay Crosses**

#### **Trading Halt Procedure For Important Corporate News Announcements**

### **1h. TRADING HALTS**

NASDAQ has the power to halt trading in any NASDAQ issue if it believes that it is necessary to protect investors and it is in the public interest. NASDAQ companies must promptly notify the public through the press of any material information that may affect prices of the issuer's securities. Prior to the release of the information, the company is obligated to notify NASDAQ MarketWatch with the news.



**No Trading In  
ANY Market If A  
Halt Is Imposed**

After consulting with the company and evaluating the impact of the news, NASDAQ can halt trading prior to release of the announcement. NASDAQ usually maintains the halt for 1/2 hour until the news is digested. During this period, the NASDAQ screen is "blacked out" for that stock with the word "HALT" and the letter "T" (as in Trading Halted) with the following modifiers:

**Trading Halt  
Indicators -  
T.1; T.2; T.3**

- T.1: Trading is halted, news pending
- T.2: Trading is halted, news is released
- T.3: Trading is halted, news has been released; and 2 times are shown - the time when quotes will start being displayed; and the time when trading will resume (5 minutes later, known as the "5 minute window").

Furthermore, if a trading halt is in place, FINRA members cannot trade this security in any market, including overseas markets.

Also note that FINRA has the power to halt trading of securities in any market that it oversees - e.g., OTCBB trades, Pink Sheet trades or Third Market trades.

**1i. FINRA CONDUCT RULES RELATING TO  
TRADING AND MARKET MAKING**

**Requirement To  
Find Best  
Available  
Market**

When executing an order for a customer, the member must obtain the best available price in the market (the "inside" market). Among the factors to be considered in finding the best market are:

The character of the market for that security (price; volatility; liquidity).

The size and type of transaction.

The number of markets checked.

Location and accessibility of customer's broker-dealer to primary markets and quotations sources.

**For Non-NASDAQ  
Or Thinly Traded  
OTCBB Issues -  
Must Get 3 Quotes**

Regarding the requirement to check a number of markets, if:

an order is for a security not included on NASDAQ or the OTCBB with at least 2 firm quotes displayed (basically either a "Pink Sheet" issue, or a very thinly traded OTCBB issue), quotes must be obtained from at least 3 dealers to find the best market.

### **Interpositioning Prohibited**

FINRA prohibits a practice known as interpositioning. When your firm gets an order to buy or sell, the firm cannot go through a middleman firm who in turn goes to the market maker. Therefore, your firm cannot interpose another firm (who would earn a commission on top of your firm's commission) between itself and the market maker. Interpositioning is prohibited unless it can be demonstrated that the use of a middle firm allows for a better execution.

### **Correspondent Relationships Are Allowed**

The prohibition on interpositioning does not prohibit "correspondent" relationships that are common to the industry. For example, a small broker-dealer dealing primarily in Pink Sheet issues may not have NASDAQ terminals, and may use another larger FINRA firm to handle NASDAQ trades, as part of a written trade and clearing agreement. Under these agreements, the clearing firm is paid out of the commission charged to the customer. There are no extra charges to the customer - nor are extra charges permitted under FINRA rules, since that would be an "interpositioning" violation.

### **Bona Fide Quotes**

Any quotes published by market makers must be "bona-fide." Reports of trades must represent actual trades. Fictitious or deceptive quotes are fraudulent. Any nominal quotes must be identified as such.

### **No Backing Away**

Market makers are expected to trade normal trading units (100 shares) at their quotes unless a larger size is specified or required. Backing away from quotes is a prohibited practice with the following exceptions if the market maker:

### **Backing Away Exceptions**

has entered a revised quote into NASDAQ that, due to system slowness, does not yet show, the market maker does not have to fill orders at the non-updated display price; or

is effecting a trade at the display price at the time that a new order is received and intended to update its quote before filling any subsequent orders.

### **Liability Order**

An execution error is not a permitted reason for "Backing away." For example, assume that a customer enters an executable order to be filled within 3 minutes; and due to a sudden influx of orders, this order expires prior to execution. The market maker is obligated to fill this order. This known as a "liability order" - that is, the market maker is obligated (liable) for the proper execution of the order.

### **No Front Running**

Market makers, upon receipt of a customer order that is likely to have a market impact (a "so-called" block order, generally for 10,000 shares or more) are prohibited from

"front running" that order - either in the firm's trading account or in an employee-related account.

**No Trading Ahead  
Of Research**

If a firm's research department is going to issue a report on that company that is likely to affect the market price of the issue, the firm's market making desk cannot alter its pre-existing inventory position in that issue based on advance knowledge of the recommendation. Once the recommendation is disseminated, the firm is not bound by this restriction.

**1j. MARKETWATCH**

**NASDAQ  
MarketWatch**

The NASDAQ MarketWatch Department analyzes the trading patterns of every security listed on NASDAQ. NASDAQ's SWAT (StockWatch Automated Tracking) system creates an individual "profile" for every security, based on its historical price and volume information, industry-wide trends, and the publicly disseminated news on that company. When SWAT discovers abnormal activity or deviations from that "profile," market analysts are notified and, if appropriate, an investigation may begin to determine the reasons behind the abnormal market movement.

**Receives Material  
Corporate News  
Announcements And  
Can Halt Trading**

In addition, MarketWatch is responsible for receiving material corporate news announcements from NASDAQ-listed issuers to determine whether a trading halt should be imposed; and is the department that receives reports of clearly erroneous trades for review and resolution.

**Clearly Erroneous  
Trade Resolution**

Should a member want to have a trade cleared through ACT (Automated Confirmation of Trade system) nullified or adjusted based on an obvious error in number of shares or price, the member must notify NASDAQ MarketWatch and provide the relevant details within 30 minutes of execution.

The member filing the complaint must provide NASDAQ MarketWatch with the relevant details of the trade, including the name of the contra-broker and the executing NASDAQ system.

In turn, NASDAQ will notify the contra-broker, giving it 30 minutes to provide details on its record of the trade. After review of all information, NASDAQ makes a written determination and communicates its decision to both parties - either nullifying the trade, adjusting the trade, or declining to act - that is, confirming 1 side's view of the trade.

**Appeal to "MORC"**

Either side can appeal NASDAQ's written determination within 30 minutes of receipt. The appeal is made to the Market Operations Review Committee ("MORC"). Their decision is final and binding.



## NASDAQ MARKET MAKING SECTION EXAMINATION

1.

Same day registration is permitted if a market maker wants to register in a newly authorized NASDAQ issue, as long as the request is made within:

- a. 2 business days of the issue's inclusion
- b. 5 business days of the issue's inclusion
- c. 7 business days of the issue's inclusion
- d. 10 business days of the issue's inclusion

2.

All of the following are legitimate reasons for seeking an excused withdrawal as a NASDAQ market maker **EXCEPT**:

- a. sudden illness
- b. scheduled vacations
- c. sudden price changes
- d. religious holidays

3.

In order to voluntarily terminate its registration as a NASDAQ market maker, a member firm:

- a. makes a written request of NASDAQ
- b. withdraws its quotes from NASDAQ
- c. files Form MMV with NASDAQ
- d. moves its quotes away from the prevailing market

4.

A member firm is permitted to accept which of the following from an issuer in order to make a market in the issuer's stock?

- a. Cash
- b. Stock
- c. Loans
- d. None of the above

5.

Except when displaying a customer limit order, the minimum quotation display size of a Capital Market stock is:

- a. 1 x 1
- b. 2 x 2
- c. 5 x 5
- d. 10 x 10

6.

A member receives an order to buy a non-NASDAQ stock quotes in the Pink Sheets. Under FINRA rules, in order to determine the prevailing market, the member must contact a minimum of:

- a. 2 dealers
- b. 3 dealers
- c. 4 dealers
- d. 5 dealers

7.

Any quotes for NASDAQ securities entered prior to market open that would lock or cross the market are filled at the best bid or offer starting at:

- a. 9:20 AM ET
- b. 9:25 AM ET
- c. 9:28 AM ET
- d. 9:30 AM ET

8.

An excused withdrawal may be granted to a NASDAQ market maker for which of the following reasons?

- I The market maker comes into possession of material non-public information on the issuer
  - II The market maker involuntarily fails to maintain a clearing agreement
  - III There is a pending news announcement about the issuer
  - IV The market maker experiences an equipment malfunction
- a. II and III only
  - b. III and IV only
  - c. I, II, III
  - d. I, II, IV

9.

A market maker MPID in the NASDAQ Market Center shows as "NSDQ." this means that:

- a. the market maker's quote is not firm
- b. the market maker's identity is not being shown
- c. the market maker is only registered in NASDAQ stocks
- d. the market maker is posting a reserve quote

10.

A limit order entered into the NASDAQ Market Center as "Market Day" is to be filled at the:

- a. market price between the hours of 7:00 AM and 8:00 PM ET
- b. market price between the hours of 9:30 AM and 4:00 PM ET
- c. limit price or better between the hours of 7:00 AM and 8:00 PM ET
- d. limit price or better between the hours of 9:30 AM and 4:00 PM

11.

An order entered into the NASDAQ Market Center execution system as "system hours" is to be executed between:

- I 7:00 AM
  - II 9:30 AM
  - III 4:00 PM
  - IV 8:00 PM
- a. I and III
  - b. I and IV
  - c. II and III
  - d. II and IV

12.

A primary peg order to buy tracks the:

- a. national best bid
- b. national best offer
- c. opening bid
- d. opening offer

13.

Pegged orders can be entered into NASDAQ with a "TIF" of:

- a. 7:00 AM - 4:00 PM
- b. 7:00 AM - 8:00 PM
- c. 9:30 AM - 4:00 PM
- d. 9:30 AM - 8:00 PM

14.

All of the following orders can be entered into NASDAQ EXCEPT:

- a. Day
- b. IOC
- c. GTC
- d. MAQ

15.

If a market maker's quotes are not reasonably related to the prevailing market, FINRA may:

- a. immediately terminate the market maker's registration
- b. immediately suspend the market maker
- c. require the market maker to re-enter its quotes
- d. require the market maker to seek an excused withdrawal

16.

The inside market for ABCD is 10.25 - 10.50. The entry of which of the following quotes would result in a locked market?

- I 10.10 - 10.25
- II 10.35 - 10.63
- III 10.50 - 10.75
- IV 10.25 - 10.63

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

17.

Failing to honor a stated quote is a rule violation known as:

- a. interpositioning
- b. backing away
- c. front running
- d. trading behind

18.

A crossed market is one where the:

- a. inside bid is lower than the inside offer
- b. inside bid is the same as the inside offer
- c. inside bid is the same or higher than the inside offer
- d. inside bid is higher than the inside offer

19.

Under SEC Rule 11Ac1-1 (Regulation NMS Rule 602), backing away would NOT apply if:

- a. prior to the time an order is received, the market maker has entered a revised quote into NASDAQ
- b. at the time an order is received, the market maker was effecting a trade, and on completion, immediately enters a revised quote in to NASDAQ
- c. Both of the above
- d. Neither of the above

20.

NASDAQ Single Book fills orders based on:

- a. Price/Time priority
- b. Price/Size/Time priority
- c. Price/Time With Access Fee Consideration priority
- d. Time/Price priority

21.

A T.1 modifier appearing next to a security symbol over NASDAQ Workstation indicates that trading:

- a. has been halted pending receipt of information requested by the NASDAQ
- b. has been halted pending a news announcement
- c. has been halted and the news announcement has already been disseminated to the public
- d. will resume in 5 minutes

**22.**

An inter-dealer trade in a Global Market stock effected between 4:00 PM and 8:00 PM ET must be reported to the Trade Reporting Facility for NASDAQ:

- a. within 30 seconds of execution as a "t" trade
- b. between 8:00 AM - 8:15 AM ET the next business day
- c. between 8:00 AM - 8:00 PM ET the next business day
- d. as an "as/of" trade prior to 4:00 PM ET on the next business day

**23.**

Inter-dealer transactions in which of the following securities are reported through the FINRA NASDAQ TRF (Trade Reporting Facility)?

- I NASDAQ Global Market stocks
- II NASDAQ Capital Market stocks
- III NYSE-listed stock trades effected over-the-counter
- IV OTC Bulletin Board Stocks

- a. I and II only
- b. III and IV only
- c. I, II, III
- d. I, II, III, IV

**24.**

Under ACT/TRF rules, all trades occurring between 8:00 AM - 8:00 PM ET must be reported within:

- a. 30 seconds of execution
- b. 60 seconds of execution
- c. 90 seconds of execution
- d. 120 seconds of execution

**25.**

Which of the following trade reports to the Trade Reporting Facility (TRF) must be designated as an "as/of" transaction?

A trade executed between:

- a. 8:00 AM - 9:30 AM ET
- b. 4:00 PM - 8:00 PM ET
- c. 8:00 PM - 12:00 Midnight ET
- d. 12:00 Midnight - 8:00 AM ET

**26.**

In an interdealer trade of a NASDAQ listed issue, responsibility for reporting to the Trade Reporting Facility (TRF) rests with the:

- a. buying party
- b. selling party
- c. executing party
- d. initiating party

**27.**

A report to the Trade Reporting Facility (TRF) which includes a .Z modifier indicates that the report:

- I has been made within the required 30 seconds
- II has been made after the required 30 seconds
- III is for a trade occurring during Regular Market Hours
- IV is for a trade occurring outside of Regular Market Hours

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

28.

BD1 receives a customer order to sell 500 shares of ABCD at \$42.50. The order is routed through ACES to BD2 who places the order in SingleBook. The order is executed when BD3 enters a market order to buy 1000 shares of ABCD into SingleBook. Who reports to the TRF?

- a. BD1
- b. BD2
- c. BD3
- d. SingleBook

29.

A member firm, wishing to have a clearly erroneous trade nullified, must make the request to NASDAQ MarketWatch:

- a. within 30 minutes of the transaction
- b. within 1 hour of the transaction
- c. no later than 4:00 PM ET on the day of the transaction
- d. no later than 8:00 PM ET on the day of the transaction

30.

The Trade Reporting Facility for NASDAQ:

- I requires reports of trades of NASDAQ listed issues within 30 seconds during ACT operating hours
  - II immediately disseminates reported last sale information to the NASDAQ ticker
  - III provides on-line access to real-time trade reporting information
- a. I only
  - b. I and II only
  - c. II and III only
  - d. I, II, III

## NASDAQ MARKET MAKING EXAMINATION EXPLANATIONS

1. The best answer is b. If a firm is currently registered as a NASDAQ market maker, additional registration requests are effective the same day for newly authorized issues when the issue starts trading on NASDAQ, as long as the request is made within 5 business days of the issue's inclusion.
2. The best answer is c. Excused withdrawal status may be granted for the following reasons: religious holidays, sudden illness, scheduled vacations, jury duty, equipment malfunction, the requirements of Rule 103 under Regulation M, and failure to maintain a clearing agreement. Seeking an excused withdrawal due to an impending news announcement or sudden price change is not permitted.
3. The best answer is b. To voluntarily terminate its registration in a NASDAQ stock, the market maker simply has to withdraw its quotes from NASDAQ. Prior permission is not required. Note, however, that the market maker will not be permitted to re-register in that stock until 20 business days elapse.
4. The best answer is d. Member firms cannot accept any form of consideration from an issuer in return for making a market in that issuer's stock.
5. The best answer is a. If no size is stated for any NASDAQ quote, that quote is only good for 100 shares.
6. The best answer is b. When receiving a customer order to buy a "non-NASDAQ" Pink Sheet stock for a customer, FINRA requires that at least 3 dealers be contacted (or as many dealers as there are, if there are fewer than 3) to determine the prevailing market price. Note that this rule also applies to OTCBB issues for which an "inside market" does not exist. An inside market is deemed to exist if there are at least 2 market makers posting firm 2-sided quotes.
7. The best answer is b. As part of the Opening Cross Process, any orders that have been entered prior to market opening that would lock or cross the market are placed "in queue" and, starting at 9:25 AM, these orders are automatically executed against the best bid or offer. Thus, when the market opens at 9:30 AM, no locking or crossing quotes will be present since all of them will have been executed.
8. The best answer is d. Excused withdrawal is not permitted for a pending news announcement, a sudden influx of orders, or a sudden price change. Receipt of material non-public information about an issuer, which makes that firm an "insider" is a reason for seeking an excused withdrawal; as are failure to maintain a clearing agreement and equipment malfunction.
9. The best answer is b. NASDAQ permits a market maker to enter quotes anonymously by using the "NSDQ" MPID (Market Participant ID).
10. The best answer is d. Orders must be entered into the NASDAQ Market Center with a "TIF" indicator. The "Time In Force" for a "Market Day" order is the regular NASDAQ trading session hours of 9:30 AM - 4:00 PM ET. Do not confuse this with a market order! The question states that this is a limit order, so it is to be filled at the limit price or better, between the hours of 9:30 AM and 4:00 PM ET.

11. The best answer is b. Orders must be entered into the NASDAQ Market Center with a "TIF" indicator. The "Time In Force" for a "System Day" order encompasses the 3 NASDAQ trading sessions for which the "system" is open - the Premarket (7:00 AM - 9:30 AM), Market (9:30 AM - 4:00 PM) and Aftermarket (4:00 PM - 8:00 PM) trading sessions.
12. The best answer is a. A "primary peg" order is tied to the same side of the NBBO - National Best Bid and Offer (inside market). Thus, a primary peg order to buy is tied to the inside bid. A primary peg order to sell is tied to the inside ask. In contrast, a market peg order (a reverse peg order) is tied to the opposite side of the NBBO. Thus, a market peg order to buy is tied to the inside ask. A market peg order to sell is tied to the inside bid.
13. The best answer is c. Pegged orders are tied to the NBBO (inside market) and track the movements of the NBBO. These can only be entered with a "TIF" (Time In Force) of 9:30 AM - 4:00 PM (the Regular Market Hours trading session). Pegged orders are not permitted in the Premarket and Aftermarket sessions, since trading is thin and market price movements are more volatile.
14. The best answer is d. Orders can be entered into NASDAQ as Day orders, GTC orders (good for 1 year if not canceled), IOC orders (fill the order immediately in full or in part and cancel any unfilled portion), and MQ orders (minimum quantity - either fill the order for the entire minimum quantity specified, or cancel the order). MAQ order (minimum acceptable quantity), which allow the market maker that receives the order to decide whether to accept or reject the order, are not accepted.
15. The best answer is c. If a market maker's quotes are not reasonably related to the prevailing market, FINRA may require that the firm re-enter its quotes. If it fails to do so, FINRA may then suspend the market maker's quotes in one or all securities.
16. The best answer is a. A locked market is one where the bid and the ask on the "inside" are the same. The entry of Choice I results in an inside market (high bid, low ask) of 10.25 - 10.25, which is a locked market. Choice II results in an inside market of 10.35 - 10.50. Choice III results in an inside market of 10.50 - 10.50. Choice IV results in an inside market of 10.25 - 10.50.
17. The best answer is b. Failure to honor a firm quote is a rule violation known as "backing away." Interpositioning is another rule violation covered in a later chapter, where a member interpositions another firm between itself and a market maker. Front running a customer order is another violation - customer orders must be filled before an equivalent proprietary order can be filled. Trading behind is meaningless.
18. The best answer is d. A crossed market is one where the inside bid is higher than the inside ask. A locked market is one where the inside bid is the same as the inside ask.
19. The best answer is c. Under SEC Rule 11Ac1-1 (now renamed Rule 602 of Regulation NMS), quotes must be firm and must be honored. There are 2 exceptions to this rules, however. First, if prior to the time an order is received, the market maker has entered a revised quote; and Second, if at the time an order is received, the market maker is effecting a trade, and immediately upon completion, enters a revised quote.
20. The best answer is a. NASDAQ Single Book fills orders using "Price/Time" priority.

21. The best answer is **b**. The trading halt modifiers on NASDAQ that are used for news announcements are:

- T.1: Trading is halted, news pending;
- T.2: Trading is halted, news is released;
- T.3: Trading is halted, news has been released; and 2 times are shown. These are the time when quotes will start being displayed and the time when trading will resume (5 minutes later).

22. The best answer is **a**. The following schedule summarizes the reporting rules to the Trade Reporting Facility of ACT for both regular and "after-hours" trading:

| Time of Trade         | Reporting                  | Designation |
|-----------------------|----------------------------|-------------|
| 12 Midnight - 8:00 AM | 8:00 AM - 8:15 AM that day | "T"         |
| 8:00 AM - 9:30 AM     | 30 seconds that day        | "T"         |
| 9:30 AM - 4:00 PM     | 30 seconds that day        | None        |
| 4:00 PM - 8:00 PM     | 30 seconds that day        | "T"         |
| 8:00 PM - 12 Midnight | 8:00 AM - 8:15 AM next day | "as/of"     |

A "T" trade is one that is executed outside of the regular Market trading session hours of 9:30 AM to 4:00 PM, but which is reported that day. This trade occurred between 4:00 PM and 8:00 PM ET, so the trade must be reported within 30 seconds with the designation "T" and the time of the trade.

23. The best answer is **a**. Trades of all NASDAQ stocks (both Global Market and Capital Market) are reported through the NASDAQ "TRF" (Trade Reporting Facility). Trades of NYSE listed issues are reported through the NYSE TRF. OTCBB and Pink Sheet trades are reported through the ORF (Over The Counter Reporting Facility).

24. The best answer is **a**. The following schedule summarizes the rules for reporting to the TRF (Trade Reporting Facility) during both regular and "after-hours" trading:

| Time of Trade         | Reporting                  | Designation |
|-----------------------|----------------------------|-------------|
| 12 Midnight - 8:00 AM | 8:00 AM - 8:15 AM that day | "T"         |
| 8:00 AM - 9:30 AM     | 30 seconds that day        | "T"         |
| 9:30 AM - 4:00 PM     | 30 seconds that day        | None        |
| 4:00 PM - 8:00 PM     | 30 seconds that day        | "T"         |
| 8:00 PM - 12 Midnight | 8:00 AM - 8:15 AM next day | "as/of"     |

Since ACT/TRF is open from 8:00 AM - 8:00 PM ET, all trades occurring during this time window must be reported within 30 seconds of execution.

25. The best answer is **c**. The following schedule summarizes the rules for reporting to the TRF (Trade Reporting Facility) during both regular and "after-hours" trading:

| Time of Trade         | Reporting                  | Designation |
|-----------------------|----------------------------|-------------|
| 12 Midnight - 8:00 AM | 8:00 AM - 8:15 AM that day | "T"         |
| 8:00 AM - 9:30 AM     | 30 seconds that day        | "T"         |
| 9:30 AM - 4:00 PM     | 30 seconds that day        | None        |
| 4:00 PM - 8:00 PM     | 30 seconds that day        | "T"         |
| 8:00 PM - 12 Midnight | 8:00 AM - 8:15 AM next day | "as/of"     |

The "as/of" designation means that the trade occurred after ACT's closing time of 8:00 PM and is being reported on "T + 1." In contrast, a "T" trade is one executed outside of normal trading hours, but the trade is being reported that day.

26. The best answer is c. As a general rule, TRF rules require that in a transaction between 2 members, the executing party report the transaction. If a transaction is between a member and a customer, then the member reports. Finally, if the transaction is done over the telephone (OTCBB issue) with extensive haggling so that there is no clear "executing party," then the sell side reports.
27. The best answer is c. The .Z modifier next to a trade reports means that the report has been made "late" (after the required 30 seconds) for a trade that took place during Regular Market Hours (9:30 AM - 4:00 PM ET). If the trade took place outside of Regular Market Hours and is reported late while ACT is still open (ACT is open from 8:00 AM - 8:00 PM ET), then it is reported as late with the modified .U.
28. The best answer is b. Trades are reported by the executing party, which is BD2, since it maintained the order in SingleBook that was filled. BD2 must file a tape report showing the trade with BD3; and it also must file a non-tape report identifying BD1 as the seller in the transaction.
29. The best answer is a. Under FINRA rules, a member firm must contact NASDAQ MarketWatch within 30 minutes of an execution that it believes to be erroneous. NASDAQ will give a written determination and can nullify the trade, adjust the terms of the trade or do nothing. Either side can appeal the written determination within 30 minutes of receipt to MORC - the Market Operations Review Committee. All decisions made upon appeal are binding and final.
30. The best answer is d. The NASDAQ TRF (Trade Reporting Facility) is operated on the ACT platform. It requires that trades that occur in NASDAQ issues be reported within 30 seconds of execution during ACT operating hours (8:00 AM - 8:00 PM). Trade reports received by the TRF are immediately disseminated to the NASDAQ ticker and the news media through NASDAQ's "TDDS" - Trade Data Dissemination Service. Members have on-line access to real-time trade reporting information though the TRF's "Time and Sales" feature.

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## SECTION 2: CBOE TRADING

(Note: Some of the information in this section was covered previously, however this section adds more detail.)

### 2a. ORDERS ACCEPTED

The CBOE defines a broad range of orders that will be accepted. These are:

#### Market Order:

An order to buy or sell a stated number of option contracts at the best price obtainable. Market orders do not specify a price and are filled before all other orders.

#### Not Held Order:

An order that gives discretion over price and time of execution, also called a market-not held order or a "take time" order. Such an order must be filled that trading day.

#### Limit Order:

An order to buy or sell a stated number of option contracts at a stated price or better.

A limit order to buy is to be filled at the limit price or lower and is placed on the display book at a price that is lower than the current market.

A limit order to sell is to be filled at the limit price or higher and is placed on the display book at a price that is higher than the current market.

#### Contingency Order:

A market or limit order that is contingent on a condition being satisfied. There are 4 defined types of contingency orders - a Market-If-Touched order, a Stop order, a Stop Limit order and a Market On Close order.

**Market-If-Touched (MIT) Order:** If the market price for an option moves to a specified price, this order becomes a market order.

An MIT order to buy is placed below the current market. If the market moves to

that price, the order becomes a market order to buy. Unlike a buy limit order (also placed below the current market), there is no maximum execution price - the order will be filled at the market.

An MIT order to sell is placed above the current market. If the market moves to that price, the order becomes a market order to sell. Unlike a sell limit order (also placed above the current market), there is no minimum execution price - the order will be filled at the market.

**Stop (Stop-Loss) Order:** If the market price for an option moves to a specified price, this order becomes a market order.

A stop order to buy is placed above the current market. If the market moves to that price, the order becomes a market order to buy. The order is used to stop an ever-increasing loss on a short position in a rising market, since once the order is triggered, the position will be bought in at the market. Note that a buy stop order is placed above the current market, while a buy MIT order is placed below the current market.

A stop order to sell is placed below the current market. If the market moves to that price, the order becomes a market order to sell. The order is used to stop an ever-increasing loss on a long position in a falling market, since once the order is triggered, the position will be sold at the market. Note that a sell stop order is placed below the current market, while a sell MIT order is placed above the current market.

A variation on a stop loss order is a "stop limit" order. This order is placed the same way as a stop order, but once triggered, becomes a limit order to either buy or sell. This means that, once triggered, if the market moves away from the limit price (above the limit price for a buy order; below the limit price for a sell order), then the order will not be executed.

**Market-On-Close (MOC) Order:** An order to be filled as close to the closing price as possible or it is canceled. Note that if trading is halted due to the imposition of circuit breakers, then this



order will be canceled because there was no "close." On the other hand, if the market is "fast" (meaning that trading is extremely rapid and unruly) at the close, this does not affect the order's status and it will be filled.

**Spread Order:** An order that creates an options spread. To create a spread, the same number of options contracts are bought and sold on the same class of option, either with different strike prices (vertical spread); different expirations (horizontal spread); or both are different (diagonal spread).

Vertical spread example:

Buy 1 ABC Jan 50 Call  
Sell 1 ABC Jan 60 Call

Horizontal spread example:

Buy 1 ABC Jan 50 Call  
Sell 1 ABC Dec 50 Call

Diagonal spread example:

Buy 1 ABC Jan 50 Call  
Sell 1 ABC Dec 60 Call

**Straddle Order:** An order that creates an options straddle. A long straddle consists of the purchase of a call and the purchase of a put on the same underlying asset with the **same strike price and expiration**. A short straddle consists of the sale of a call and the sale of a put on the same underlying asset with the **same strike price and expiration**.

Long straddle example:

Buy 1 ABC Jan 50 Call  
Buy 1 ABC Jan 50 Put

Short straddle example:

Sell 1 ABC Jan 50 Call  
Sell 1 ABC Jan 50 Put

**Combination Order:** An order that creates an options combination, also commonly called a "strangle." A long combination consists of the purchase of a call and the purchase of a put on the same underlying asset with either **different strike prices or different expirations**. A short combination consists of the sale of a call and the sale

of a put on the same underlying asset with either different strike prices or different expirations.

Long combination (strangle) example:

Buy 1 ABC Jan 50 Call  
Buy 1 ABC Jan 45 Put

Short combination (strangle) example:

Sell 1 ABC Jan 50 Call  
Sell 1 ABC Jan 45 Put

**Ratio Order:** A spread, straddle or combination order that is not "1 for 1." On the CBOE, the maximum order ratio that will be taken is 3:1 (or vice-versa).

Ratio Spread Order Example

Buy 5 ABC Jan 50 Calls  
Sell 10 ABC Jan 60 Calls

(Note that is spread order is at a 1:2 ratio, and thus is permitted).

**One Cancels the Other (OCO) Order:** Two or more orders treated as a unit. The execution of any one of the orders causes the other(s) to be canceled.

**All Or None (AON) Order:** An order to be filled in its entirety; a partial fill is not permitted. Furthermore, if the order cannot be filled, subsequent reattempts are permitted.

**Fill Or Kill (FOK) Order:** An order to be filled in its entirety; a partial fill is not permitted. If the order cannot be filled, subsequent reattempts are not permitted, so the order is "killed."

**Immediate Or Cancel (IOC) Order:** An order to be filled in part or in full immediately; any portion not filled is canceled. It is like a FOK order, but it permits a partial execution whereas an FOK order does not.

**Attributable Order:** A market or limit order which displays the user firm ID. The use of attributable orders is voluntary on the CBOE.

**Intermarket Sweep Order (ISO) Order:** An order that will electronically "sweep" the exchange's limit order book. An ISO is a limit order sent to a particular exchange when another market center is posting better quotes. The

recipient exchange (the CBOE in this case) is alerted by the "ISO" that the trader will also be sending the ISO to the other options exchanges in an attempt to access their better-priced orders. That way, the first exchange (the CBOE) does not have to re-route the order to the "better priced" market as would be required under the best execution rules and can attempt a fill, subject to "best execution" requirements.

**CBOE-Only Order:** An order to be filled in whole or in part on the CBOE without routing the order to another market center. If routing would be required (which would occur if the other market center is posting a better price), the order is canceled. Thus, the firm that entered the order is responsible for routing the order to the best priced market.

**Reserve Order:** A limit order that has both a displayed size and an additional non-displayed size. Both sizes are available for execution against incoming orders. As fills occur against the displayed size, once the displayed size becomes "0," the system replenishes the display size to the original amount from the reserve. This allows market makers to show a smaller size than their true trading interest. Also note that the reduction of displayed quote size that occurs after each automated fill is called "decrementation."

#### Complex Order Book

Aside from these order types, the CBOE runs a separate automated "Complex Order Book." The Complex Order Book (COB) will accept:

- Spread Orders;
- Straddle Orders;
- Combination / Strangle Orders;
- Ratio Orders;
- Butterfly Spread Orders;
- Box Spread Orders;
- Collar Orders.

Such orders are exposed to an automated auction process for filling.

#### 2b. CBOE MARKET MAKING

The CBOE operates a "hybrid" system that allows for both manual trade executions and automated trade executions. The automated system has a maximum permitted order entry and execution size for each option class.

#### Cannot Split Orders

An order that is too large for automated execution may not be split up (called "unbundling") so that it meets system

size limits. Thus, orders that are too large for the system are handled manually.

To stop the automated system from being overloaded, Trading Permit Holders cannot enter multiple orders on the same side of the market for an options class within any 15 second period for the same account or accounts with the same beneficial owner.

All bids and offers accepted are expressed in dollars per unit of the underlying security. For example, a bid of 7 means a bid of \$700 for a 100 share option contract.

**Minimum Bid  
Increments**

Minimum bid increments accepted are as follows:

|                           |        |
|---------------------------|--------|
| Options priced under \$3: | \$ .05 |
| Options priced over \$3:  | \$ .10 |

For options contracts that are part of the "penny pilot program" that is testing trading of options in \$.01 increments, the minimum bid increments accepted are:

|                           |        |
|---------------------------|--------|
| Options priced under \$3: | \$ .01 |
| Options priced over \$3:  | \$ .05 |

Also note that for the most active index options included in the penny pilot program, such as the QQQQ and SPY, the \$.01 increment is applied to all contracts.

**Firm Quote Rule**

As required by the firm quote rule, all bids and offers on the CBOE floor must be firm for the displayed size. The minimum quote size for each option contract is set by the CBOE and is generally 10 contracts. If a dealer receives an order that is greater than its displayed size, it must either:

execute the entire order; or

execute that portion of the order equal to its display size and immediately revise its bid or offer.

**Firm Quote  
Exceptions**

This firm quote rule does not apply:

if 2 Floor Officials determine that the market is "fast" - meaning that the level of trading activity is unusually high and the exchange is incapable of collecting, processing and making available quotations vendors' bids, offers and quotation sizes in a manner that accurately reflects the state of the market on the floor; or

during a trading rotation.

When quotes are not firm (as in the above 2 cases), each dealer or broker must report its bids or offers on a "best

efforts" basis and the Exchange will disseminate a message stating that the displayed quotes are not firm.

**Quote Updating Exception**

Finally, remember that if a broker or dealer has revised its quote, but the exchange system does not yet reflect the change; or if a broker or dealer has effected a trade at its published quote and is in the process of updating its quote; then the "old" quote is no longer valid.

**Market Maker Obligations**

Market makers are obligated to:

- maintain a fair and orderly market in listed options;
- compete with other options market makers to improve markets (remember that the CBOE uses a system of competing market makers);
- maintain a bid-ask quote that will be honored in accordance with the firm quote rule; and
- update market quotes in response to changed market conditions and assure that any market quote disseminated is accurate.

Market makers are not permitted to:

- congregate in a particular class of options;
- dominate the market in options of a particular class; or
- effect options trades in an unreasonable or disorderly manner.

**Quote Risk Monitor**

Any market maker that is quoting electronically may use a CBOE system to limit risk. Under the Quote Risk Monitor Mechanism (QRM), the market maker may specify a maximum number of contracts that can be traded within a specified time period. If this limit is exceeded, the QRM mechanism will cancel all electronic quotes for that market maker until the quotes are refreshed.

An individual or firm that is a DPM - Designated Primary Market Maker - takes on functions similar to a stock exchange specialist - acting both as a market maker and handling the book of public options orders.

**DPM Obligations**

The DPM:

must provide continuous accurate electronic quotes in 100% of each assigned options series that is singly-listed; and 90% of each assigned options series that is multiply-listed;

must honor quotes for the displayed price and size, as required by the firm quote rule (generally 10 contracts);

must comply with maximum bid/ask spread differentials set by the CBOE. These are:

| Premium | Amount | Maximum | Spread |
|---------|--------|---------|--------|
| \$0     | -\$2   |         | \$ .25 |
| \$2     | -\$5   |         | \$ .40 |
| \$5     | -\$10  |         | \$ .50 |
| \$10    | -\$20  |         | \$ .80 |
| Over    | \$20   |         | \$1.00 |

must trade in all securities assigned to the DPM only in the capacity of DPM and not in any other capacity;

must ensure that the trading rotation is initiated promptly following the opening of the underlying security;

must not initiate transactions for the DPM's own account that would elect a stop or stop-limit order on the DPM's book (these must be elected through the filling of customer orders against the orders on the book);

cannot execute orders as agent or Floor Broker in its assigned options classes.

#### **Trade Through Rule Applies To Options Exchanges**

All market makers and DPMs must comply with the "trade through rule." Even though the rule was originally written to apply only to NMS securities (NYSE, AMEX and NASDAQ stocks), the options exchanges have adopted the same rule. Remember that this rule requires each market center to fill marketable orders at the best price shown in all markets within 1 second, otherwise the order must be routed to the better priced market for a fill.

#### **Trade Through Rule Exceptions**

The CBOE adds that this rule does not apply:

if an order that was routed to a better priced market is not responded to within 1 second (as required by the rule), then the CBOE will notify the non-responding market immediately and can fill the order itself;

during a trading rotation;

if the transaction that constituted the Trade-Through occurred when there was a crossed market;



if the transaction that constituted the Trade-Through was an ISO (remember that, in this case, it is the responsibility of the firm entering the order to comply with the Trade-Through rule);

if the transaction that constituted the Trade-Through was a stopped order (an order filled at a previously guaranteed price).

**Cannot Lock Or Cross Market**

Just like NASDAQ rules, CBOE rules prohibit market makers or DPMs from entering quotes that will lock or cross a market.

**Liquidity Rebates**

CBOE rules encourage market makers to add liquidity to the market. Market making firms (MMs, LMMs and DPMs) can earn so-called "liquidity rebates" based on the depth and quality of markets made. These take of the form of fee reductions offered up by the CBOE to these market makers. This reduces the profitability of the CBOE itself, but increases the profitability of the market making firms that earn the rebates.

**Payment For Order Flow**

Also remember that all markets, including the CBOE, permit payments for order flow. Market making firms are allowed to "pay" order entry firms for routing their orders to that market maker. This puts profit pressure on the market making firms that make such payments; and these reduced profits can be offset by liquidity rebates paid by the exchanges. (The disclosure rules surrounding payment for order flow were covered in the first chapter of this text.)

## **2c. ORDER BOOK OFFICIALS (OBOs)**

The OBO is an exchange employee that manages an electronic order book of public orders. The OBO does not have a market making function. Orders placed on the book can be traded against by Registered Options Traders, Market Makers and Designated Primary Market Makers. Note that the orders on the book are public customer orders - market maker quotes are not found here.

The orders accepted on the electronic book are market orders that will participate in an opening rotation and limit orders. Once the opening rotation has been completed, market orders can no longer be accepted by the OBO - they will be filled immediately based on best execution rules.

The OBO must display the orders constituting the high bid with aggregate size and the orders constituting the lowest ask price with aggregate size from the limit order book throughout the trading day. This is the options equivalent

of the NBBO (National Best Bid and Offer) shown on NASDAQ. During unusual market conditions, the OBO can make these quotes available orally rather than displaying them.

The OBO is not obligated to disclose the complete depth of the book to market participants. However, the CBOE does state that any TPH (Trading Permit Holder) can request the price and number of contracts bid below or offered above the displayed book information, and as long as the request does not interfere with the operation of the book, the OBO may disclose this information. Translated, this means that only the best bid and offer is displayed routinely by the OBO - the additional depth of orders on the book is available only on request.

## 2d. TRADING ROTATIONS

The purpose of the opening rotation is to insure that all opening trades in each options series occurs at the same price. The OBO, LMM or DPM starts trading each options series in order. It begins when the underlying security opens for trading in its primary market. The options with the nearest expiration and lowest strike prices are opened first and then the OBO, LMM or DPM "rotates" through each options series, ending with those with the highest strike prices and longest expirations.

While calls and puts are being opened in order during the rotation, no other options orders can be filled - even orders for options already opened. General trading does not start until the opening rotation is completed for all options series.

The advantage of the opening rotation is that all options orders present for a given options series in the rotation are filled at a single price. If, for example, at the opening rotation, a customer places an order to sell 10 calls at a premium of \$5.50 and the only opening sell order received for this series is for 30 calls at \$5.50, then the DPM will buy the remaining 20 contracts at \$5.50, establishing the opening price of \$5.50. The disadvantage is that any order that misses the opening rotation deadline must wait until all contracts have been rotated through and general trading starts - and this can take 15 minutes or so, during which time prices can move sharply.

### Daily Opening Rotation

While an opening rotation is done every day, a closing rotation is only done routinely on the last trading day prior to expiration, when trading can be especially heavy. This helps to insure an orderly close.

**Closing Rotation  
On Friday Prior  
To Expiration**

The closing rotation is conducted right after the market close on the third Friday of the month (3:00 PM CT; 4:00 PM ET for equity options; 3:15 PM CT; 4:15 PM ET for index options). Remember that listed options for that month expire on the Saturday following the third Friday of the month.

**Trading Rotation  
Can Also Be Used  
In A Fast Market Or  
After A Trading  
Halt**

In addition, if a "fast" market is declared, then an intra-day rotation may be used to re-establish an orderly market. Finally, if trading options has been halted, typically due to a trading halt in the underlying security, then to insure an orderly re-opening, a rotation is completed before all options series reopen for trading.

**HOSS - Hybrid  
Opening System**

The CBOE has adopted an automated opening rotation system called "HOSS" - the Hybrid Opening System. Based on the standing orders placed for the opening rotation, the system publishes an Expected Opening Price (EOP) at which each series is likely to open. As more orders are received prior to the opening rotation, the system updates the EOP. Based on the balance of buy and sell orders, the system establishes a clearing price that matches the majority of the orders at a single price. Once this is completed, the options series opens for general trading. Note that this procedure is very similar to the NASDAQ Opening Cross.

As the opening price is determined for each series, the system disseminates the opening quote and opening trade price via OPRA (if any, because there may be no orders for a particular options series to match at the opening).

**OPRA - Options Price  
Reporting Authority**

OPRA stands for the Options Trade Reporting Authority. It is a "securities information processor" that publishes a Consolidated Tape of options trades that are effected in all options markets in the U.S. The exchanges that participate include the CBOE, AMEX, ARCA, NASDAQ, PHLX, ISE, BATS and the BSE (Boston Stock Exchange). In addition to publishing last sale reports, OPRA publishes options quotes, number of contracts traded, open interest, and end-of-day summaries.

## 2e. TRADING HALTS / FAST MARKETS

The CBOE permits trading to be halted in any listed options contract based on the agreement of 2 Floor Officials for not more than 2 business days. To extend the trading halt beyond 2 consecutive business days, a senior executive of the exchange must also agree to the halt. The factors considered in determining whether to halt trading include:

for stock options, whether trading in the underlying security has been halted in the primary market;

for stock options, if the opening of the underlying security in the primary market has been delayed because of unusual circumstances;

for index options, the current calculation of the index value is not available;

for all options, the extent to which the rotation has been completed or other factors regarding the status of the rotation; or

for all options, other unusual factors are present.

Trading resumes when 2 Floor Officials agree.

#### **Rule 80B Circuit Breakers**

Trading will also be halted if the NYSE stops trading under its "circuit breaker" rule (Rule 80B) which shuts the market due to excessive volatility. The rule shuts the market for time periods ranging from 1/2 to 1 hour if the Dow Jones Industrial Average drops by 10%. When the market reopens, if the DJIA drops by another 10%, the circuit breaker kicks in again and the market is shut. When the market is reopened, if the DJIA drops by another 10% (30% cumulative drop), the market is closed until the next business day.

Note that if the market is shut for the balance of the day, any open "market at the close" orders can not be executed and must be canceled.

#### **If NYSE Closes Market - All Other U.S. Markets Close As Well**

Finally, all of the exchanges have agreed that if the NYSE shuts its market because the circuit breaker is tripped in a market decline, all of the other securities exchanges, such as AMEX, NASDAQ, CBOE will shut as well.

#### **CBOE Reopens With Rotation**

The CBOE states that upon reopening, a rotation will be held in each class of option unless 2 Floor Officials conclude that a different method of reopening should be used.

#### **Corporate News Announcements - Automatic RAES Suspension**

Similar to NASDAQ MarketWatch, which receives important corporate news announcements from listed issuers and evaluates them to see if a trading halt should be implemented, the CBOE has an automatic system that receives corporate news announcements. If the news announcement is significant, the system automatically suspends RAES (the Retail Automatic Execution System). Thus, orders for these options classes will be executed manually. 2 Floor Officials are promptly notified of this suspension and must use their judgment to determine the

significance of the announcement and whether to resume RAES operation in the affected classes of options.

#### Fast Market Procedures

If trading on the floor becomes disorderly, 2 Floor Officials can declare a "fast market" in that options class. During a "fast" market" any 2 Floor Officials can:

assign one or more classes or series of options to Order Book Officials at other trading posts;

authorize OBO clerks to execute transactions;

direct that one or more trading rotations be employed;

suspend the firm quote rule;

turn off RAES (the Retail Automatic Execution System) so that all trades must be done manually, slowing the market;

take any other necessary actions to restore a fair and orderly market.

During a "fast market," the CBOE can restrict the entry of contingency orders - stop orders, stop limit orders and market-if-touched orders, since these orders can be "piled up" at specific price points on the book of open orders and, once elected, can unleash a flood of orders to buy or sell that will further disrupt the market.

#### If Fast Market Is Not Cured, Trading Is Halted

Regular trading is resumed when 2 Floor Officials determine that the conditions causing the market disruption no longer exist. If the procedures listed above used to "cure" the fast market conditions do not work, then the 2 Floor Officials must halt trading in that options class or series.

## 2f. TRADE REPORTING / MATCHING

During CBOE market hours (8:30 - 3:00 PM CT for equity options), any trade must be reported within 90 seconds for:

clearance purposes, by both the buyer and seller; and

trade reporting purposes, by the seller only.

If an error is made in reporting a trade price, the actual price of the trade prevails. A correcting price report must be made for both clearance and trade reporting purposes. The trade information submitted for clearance purposes is matched on that day by the exchange. At the end of the

day, the exchange issues an Unmatched Trade Report to each Clearing TPH (Trading Permit Holder), which contains a list of trades that did not receive a matching trade report from another Clearing TPH. Promptly upon receipt of the Unmatched Trade Notification or Report, the TPH must reconcile all unmatched trades and report all reconciliations and corrections to the CBOE.

Trading Permit Holders must resolve all unmatched trades on trade date. If an unmatched trade cannot be resolved by mutual agreement, it must be promptly closed out. If a trade remains unresolved 15 minutes prior to opening of trading the next business day because one side failed to respond to the report, then the executing member who responded reports the trade on its terms to the OCC.

Each business day, the CBOE reports all matched trades to the OCC for each Clearing TPH. Based on this report, the OCC reflects each member's options position changes on its books and computes the member's required margin deposit.

## CBOE OPTIONS TRADING SECTION EXAMINATION

1.

Closing rotations in options are employed by the Chicago Board Options Exchange:

- I On the business day prior to expiration for those options contracts that are about to expire
- II For the 3 business days prior to expiration for those options contracts that are in the money by \$.01 or more
- III From 4:00 PM Eastern Standard Time until 4:15 Eastern Standard Time
- IV From 4:15 PM Eastern Standard Time until 4:45 Eastern Standard Time

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

2.

Order Book Officials on the CBOE may accept which of the following orders?

- I Market
- II Limit
- III Spread
- IV Straddle

- a. I only
- b. I and II
- c. III and IV
- d. I, II, III, IV

3.

Equivalent orders to buy are simultaneously placed by the Order Book Official, Market Maker, and Floor Broker. The priority of executing the orders would be:

- I Order Book Official
- II Market Maker
- III Floor Broker

- a. I, II, III
- b. III, II, I
- c. I, III, II
- d. II, III, I

4.

Trading in a stock is suspended. Which statement is true regarding the trading of listed options on that stock?

- a. Only opening transactions are permitted
- b. Only closing transactions are permitted
- c. Both opening and closing transactions are permitted until the contracts expire
- d. Trading will be halted in options contracts on the suspended stock

5.

Which of the following is NOT a reason why the CBOE would halt trading in an options series?

- a. There is a pending news material news announcement about the company
- b. The CBOE trading system is experiencing technical problems
- c. The underlying stock has halted trading in its primary market
- d. The open interest in the contract has exceeded pre-set levels

6.

A customer enters an order to "Buy 100 ABC Jan 50 Calls @ \$5, IOC" The floor broker is able to buy 40 contracts at the specified premium. Which statement is true?

- a. The floor broker will buy the 40 contracts and will reattempt execution of the remaining balance of 60 contracts later that day
- b. The floor broker will buy the 40 contracts and will cancel the other 60 contracts that cannot be filled
- c. The floor broker will not attempt a partial execution and will cancel the entire order
- d. The floor broker will buy 40 contracts and will place an order to buy an additional 60 contracts at the \$5 premium with the Board Broker

7.

If an options market is "FAST," which of the following are true?

- I The Exchange may shift trading in that class of contracts to alternate posts
  - II The Exchange may allow other Order Book Officials and their clerks to execute transactions in that class of contracts
  - III The Exchange may restrict the entry of stop, stop-limit, and market-if-touched orders
  - IV The Exchange may impose a trading "HALT" until conditions have settled
- a. I and II only
  - b. III and IV only
  - c. I, II and IV
  - d. I, II, III, IV

8.

All of the following orders may be executed during the opening rotation EXCEPT:

- a. market orders
- b. market - not held orders
- c. limit orders
- d. stop orders

9.

Which of the following are true statements?

- I Buy limit orders are placed below the prevailing market
- II Buy stop orders are placed above the prevailing market
- III Buy stop limit orders are placed below the prevailing market
- IV Buy MIT orders are placed above the prevailing market

- a. I and II only
- b. III and IV only
- c. I, II, and IV
- d. I, II, III, IV

10.

Which of the following are true statements?

- I Buy stop orders are placed above the current market
- II Buy MIT orders are placed below the current market
- III Sell stop orders are placed below the current market
- IV Sell MIT orders are placed above the current market

- a. I and III only
- b. II and IV only
- c. III and IV only
- d. I, II, III, IV



11.

All of the following are true regarding the treatment of bids made on the floor of the CBOE EXCEPT:

- a. At the opening, public market orders held by the Order Book Official have priority over equivalent limit orders held by the Order Book Official
- b. The bid representing the highest price has priority over lower bids
- c. If two or more orders represent the highest price, and a bid by the Order Book Official is not involved, priority is afforded the orders based upon the sequence of the bids
- d. If two or more bids represent the highest price, and one of the bids is displayed by the Order Book Official, the other bid has priority

14.

Which statements are true regarding the limitations placed on market makers on the CBOE?

- I A member may, on the same business day, act as a Market Maker and a Floor Broker in option contracts on the same underlying securities
- II A member may, on the same business day, act as a Market Maker in the option contracts on one security; and may act as a Floor Broker in the option contracts of another security
- III A member may, on the same business day, act as a Market Maker in the option contracts on one security, and may act as a Order Book Official in the options contracts of another security

12.

All of the following quotes by a market maker are permitted under CBOE rules EXCEPT:

- a. 5.00 - 5.05
- b. 5.00 - 5.10
- c. 5.00 - 5.50
- d. 5.00 - 6.50

- a. I only
- b. II only
- c. II and III only
- d. I, II, III

13.

Which of the following statements are true about Order Book Officials on the CBOE?

- I Order Book Officials may accept market orders
- II Order Book Officials may accept limit orders
- III Order Book Officials may accept public orders
- IV Order Book Officials may accept member orders

- a. I and IV only
- b. II and IV only
- c. I, II, III
- d. I, II, III, IV

15.

The smallest fractional change allowed in price quotes for equity options contracts is:

- a. \$.02
- b. \$.05
- c. \$.0625
- d. \$.10

**16.**

Which of the following is the proper description of the following order:

"Sell 10 ABC Jan 100 Calls @ 8.50 MIT"

- a. The order becomes a market order to sell if a trade occurs at 8.50 or higher
- b. The order becomes a limit order to sell at 8.50 if a trade occurs at 8.50 or higher
- c. The order becomes a market order to sell if a trade occurs at 8.50 or lower
- d. The order becomes a limit order to sell at 8.50 if a trade occurs at 8.50 or lower

**17.**

If the NYSE halts trading in all securities due to imposition of the "circuit breaker" rule that is initiated in response to extraordinary market conditions, the CBOE will:

- a. halt trading in stock options on NYSE listed issues, but not in stock options on AMEX or NASDAQ listed issues
- b. halt trading in all stock options, but not in index options
- c. halt trading in all stock options and index options
- d. continue to trade all options contracts

**18.**

If 2 Floor Officials agree, trading in a specific options contract can be halted for a maximum of:

- a. 1 business day
- b. 2 business days
- c. 3 business days
- d. 5 business days

**19.**

All of the following are contingency orders **EXCEPT:**

- a. MIT
- b. Stop
- c. Not held
- d. MOC

**20.**

The agency responsible for disseminating reports of options trades is:

- a. OCC
- b. CBOE
- c. OPRA
- d. SEC

## CBOE OPTIONS TRADING EXPLANATIONS

1. The best answer is a. Aside from daily opening rotations, the CBOE conducts a closing rotation for those contracts that are about to expire. The closing rotation for stock options is conducted on the Friday prior to expiration, from 4:00 PM Eastern Time (3:00 Central Time) until 4:15 Eastern Time (3:15 Central Time). The use of a closing rotation helps provide for an orderly close in those contracts about to expire, and aids in letting customers offset outstanding positions that would be automatically exercised (those that are in the money by \$.01 or more for equity options).
2. The best answer is b. While Order Book Officials may take limit orders on the book at all times, they are only allowed to take market orders prior to the opening. Once the opening occurs and the OBO has filled those market orders, no more market orders may be taken during the trading day. The OBO can never take spread or straddle orders, since they require both legs to be executed at once. These are handled only by Floor Brokers.
3. The best answer is c. Since Order Book Officials only handle public orders, they always have priority. Since Market Makers only trade for their own account, they are always last in line. The priority for a Floor Broker's order depends on whether it is an order for a retail customer or for a member firm's proprietary account. In any event, we know that OBOs come first, and Market Makers come last, making Choice c the only available answer.
4. The best answer is d. If trading in a stock is suspended, say on the New York Stock Exchange, the exchange where the option trades will also stop trading in the option contracts. This must occur because there is no longer any way to price the option contracts if there is no current market for the underlying stock. Any holders of outstanding options can still exercise their contracts during a trading halt, since this is performed through the Options Clearing Corporation and does not occur on the exchange floor.
5. The best answer is d. An options trading halt will occur if trading of the stock is halted in its primary market; if the exchange is experiencing technical problems; or if there is a material pending news announcement about the issuer (which would also cause the stock's primary market to halt trading). A high open interest level (the number of options contracts created that have yet to be closed by trading or exercise), has nothing to do with a trading halt.
6. The best answer is b. "IOC" on an order means "Immediate or Cancel." The definition of an IOC order is one to be filled in whole or in part as soon as the order is represented in the trading crowd, with any portion not so executed being treated as canceled. Thus, if the trader can only execute 40 contracts of the 100 contract order, the unfilled balance of 60 contracts is canceled.
7. The best answer is d. If an options market is "FAST," meaning that trading is exceptionally heavy, CBOE rules provide for the following measures to help execute all of those orders. The exchange may shift trading in that class of contracts to alternate posts, increasing the number of locations at which trading may occur. The exchange may allow other Order Book Officials and their clerks to execute transactions in that class of contracts, increasing the number of personnel trading that class of contracts. If trading becomes disorderly, the Exchange may impose trading rotations in that class of contracts. To control the order flow and stabilize the market, the Exchange may restrict

the entry of stop orders, stop-limit orders, and market-if-touched orders and may also shut the Retail Automated Execution System (RAES). If these measures do not stabilize the market, then a trading HALT will be declared.

8. The best answer is d. During the opening and closing rotations, only market and limit orders may be executed at the bids and offers made. It makes no difference if a market order is marked "not held" - this simply gives the trader discretion over price and time of execution, and if the trader feels that the rotation will offer the best price and time, he may execute the order at this point. No stop orders, spread orders, or straddle orders are executed during the rotations. Rotations are used daily to insure orderly openings; and are used at the close on the business day prior to expiration to insure an orderly close.

9. The best answer is a. Buy limit orders specify a maximum price that the customer wishes to pay. For example, if the market is trading at \$50 per share, and the customer wishes to pay no more than \$40 for the stock, the order placed would be "Buy 100 ABC @ \$40 GTC." This is a buy limit order and is placed lower than the current market price. If the stock trades down to \$40 or lower, the order is executed at the limit price or better (lower) if a seller at that price is found. If a trade occurred at \$40 (not this order) and the stock then moved above \$40 and stayed there, this order could not be executed.

A buy MIT (market if touched) order is similar to a buy limit in that it is also placed lower than the prevailing market. Using the above scenario, assume that the market is trading at \$50 and a customer places the following order: "Buy 100 ABC @ \$40 MIT GTC." This is a buy "Market If Touched" order and is placed lower than the current market price. If the stock trades down to \$40 or lower, the order becomes a market order to buy. If a trade occurred at \$40 (not this order) and the stock then moved above \$40, this order would still be filled because it became a market order to buy - there is no limit on the price.

A buy stop order (or buy stop limit) is used to limit a loss on a short stock position. These orders are placed above the current market price. Assume that the market is currently trading at \$50. A customer who shorted the stock at this price would like to limit any upside loss to, say, 10 points. He places the following order: "Buy 100 ABC @ \$60 Stop." If the market trades up to \$60, the order is activated, and becomes a market order to buy.

To summarize, buy limit and buy MIT orders are placed below the current market and are activated as the market falls. Buy stop and buy stop-limit orders are placed above the current market and are activated as the market rises.

10. The best answer is d. See explanation #67 for a discussion of buy stop and buy limit orders. Below is a discussion of sell limit, sell stop and sell MIT orders.

Sell limit orders specify a minimum price at which the customer wishes to sell. For example, if the market is trading at \$50 per share, and the customer wishes to sell the stock for at least \$60, the order placed would be "Sell 100 ABC @ \$60 GTC." This is a sell limit order and is placed higher than the current market price. If the stock trades up to \$60 or higher, the order is executed at the limit price or better (higher) if a buyer at that price is found. If a trade occurred at \$60 (not this order) and the stock then moved below \$60 and stayed there, this order could not be executed.

A sell MIT (market if touched) order is similar to a sell limit in that it is also placed higher than the prevailing market. Using the above scenario, assume that the market is

trading at \$50 and a customer places the following order: "Sell 100 ABC @ \$60 MIT GTC." This is a sell "Market If Touched" order and is placed higher than the current market price. If the stock trades up to \$60 or higher, the order becomes a market order to sell. If a trade occurred at \$60 (not this order) and the stock then moved below \$60, this order would still be filled because it became a market order to sell - there is no limit on the price.

A sell stop order (or sell stop limit) is used to limit a loss on a long stock position. These orders are placed below the current market price. Assume that the market is currently trading at \$50. A customer who is long the stock at this price would like to limit any downside loss to, let us say, 10 points. He places the following order: "Sell 100 ABC @ \$40 Stop." If the market trades down to \$40, the order is activated, and becomes a market order to sell.

To summarize, sell limit and sell MIT orders are placed above the current market and are activated as the market rises. Sell stop and sell stop-limit orders are placed below the current market and are activated as the market falls.

11. The best answer is d. Since orders held by the Order Book Official are those from the public, these orders always have priority over equivalent orders from other sources (e.g., market makers or floor brokers). Therefore, Choice d is false. The other statements are true. At the opening, public market orders held by the Order Book Official have priority over equivalent limit orders held by the Order Book Official, since market orders always have priority over limit or stop orders at the same price. The bid representing the highest price has priority over lower bids, and the ask representing the lowest price has priority over higher asking prices. Finally, if two or more orders represent the highest price, and a bid by the Order Book Official is not involved, priority is afforded the orders based upon the sequence of the bids (first come, first served!).

12. The best answer is d. The CBOE sets maximum allowable spreads (between bid and ask quotes) at which market makers may quote contracts. These are:

| Premium Amount | Maximum Spread |
|----------------|----------------|
| \$0 - \$2      | \$ .25         |
| \$2 - \$5      | \$ .40         |
| \$5 - \$10     | \$ .50         |
| \$10 - \$20    | \$ .80         |
| Over \$20      | \$1.00         |

This rule serves to stop market makers from charging excessive spreads in their transactions.

13. The best answer is c. Order Book Officials may only accept orders from the public - they cannot hold and execute orders for other members' proprietary accounts. Prior to the opening, the OBO can accept market orders to be filled at the opening. Once the market has opened, they no longer accept market orders. At any time, limit orders for public customers may be placed with the OBO. The OBO will execute these orders for a commission if the market moves in that direction. The OBO cannot accept contingency orders such as stop, stop-limit, and market-if-touched orders. Also, the OBO cannot accept straddle and spread (2 legged) orders. These can only be executed by floor brokers.

14. The best answer is b. This is a particularly tricky question. As a rule, market makers are prohibited from acting as a floor broker in the same security. However, there is no prohibition against a market maker, in, let us say, IBM calls and puts, from walking over to the trading pit for GE calls and puts and acting as a floor broker trading for other members in those contracts. The only requirement is that the individual must be registered with the Exchange as a market maker in IBM contracts and as a floor broker in GE contracts. Market makers and floor brokers are Trading Permit Holders - they actually are small businessmen who have purchased the right to trade for profit. These individuals cannot be Order Book Officials. OBOs are Exchange employees (not members) who handle the book of public orders on the trading floor.

15. The best answer is b. Equity options contracts are quoted in minimum premium increments of \$.05 (a "nickel"). Note that the CBOE and other options exchanges are rolling out a "penny pilot" program, where more actively traded contracts are quoted in increments of \$.01, but this is not yet fully implemented.

16. The best answer is a. A sell MIT (market if touched) order is similar to a sell limit in that it is also placed higher than the prevailing market. Assume that the market is trading at \$50 and a customer places the following order: "Sell 100 ABC @ \$60 MIT GTC." This is a sell "Market If Touched" order and is placed higher than the current market price. If the stock trades up to \$60 or higher, the order becomes a market order to sell. If a trade occurred at \$60 (not this order) and the stock then moved below \$60, this order would still be filled because it became a market order to sell - there is no limit on the price.

17. The best answer is c. If the NYSE closes its market, which will occur if the DJIA drops by 10% intra-day, the CBOE will close its market as well. The time length of the shut due to the imposition of the "circuit breaker" is either 1/2 hour or 1 hour, depending on the time of day that the halt occurs.

18. The best answer is b. The CBOE will halt trading in a specific option contract if two Floor Officials agree that trading should be halted. The length of the halt can be no more than 2 business days.

19. The best answer is c. Contingency orders include MIT order (Market-If-Touched - where the market must hit a price for the order to be elected); Stop orders (where the stop price must be hit in order for the order to be elected); and MOC (Market On Close) orders. A "Not Held" order gives a trader discretion over price and time of execution of a market order - this is no contingency to this order.

20. The best answer is c. OPRA stands for the Options Price Reporting Authority. It receives reports of options trades from all options market venues and consolidates them into a single trade report.



## Series #56

### Final 1

1.

All of the following equity securities trade **EXCEPT**:

- a. Common Stock
- b. Preferred Stock
- c. Treasury Stock
- d. Common Stock Warrants

2.

XYZ Company has issued 10%, \$100 par non-cumulative preferred stock. Two years ago, XYZ omitted its preferred dividend. Last year, it paid a preferred dividend of \$5 per share. This year, XYZ wishes to pay a common dividend. In order to make the distribution to common shareholders, each preferred share must be paid a dividend of:

- a. 0
- b. \$5
- c. \$10
- d. \$15

3.

Which of the following do not pay dividends?

- I Preferred Stock
- II ADRs
- III Warrants
- IV Real Estate Investment Trusts

- a. I only
- b. III only
- c. III and IV
- d. II and IV

4.

Equity options positions will be automatically exercised on the third Friday of the month if the contract is:

- a. \$.01 "in the money"
- b. \$.02 "in the money"
- c. \$.03 "in the money"
- d. \$.05 "in the money"

5.

A customer holds 1 ABC Oct 60 Call contract. The market price of ABC is currently 66. ABC declares a 20% stock dividend. On the ex date, the holder will have:

- a. 1 contract with a multiplier of 100
- b. 1 contract with a multiplier of 120
- c. 1.2 contracts with a multiplier of 100
- d. 1.2 contracts with a multiplier of 120

6.

Referring to the prior question, on the ex-date, the strike price:

- a. is adjusted down to 50
- b. is adjusted down to 55
- c. remains at 60
- d. is adjusted up to 72

7.

A customer enters an order to sell 100 shares of ABC at 40 stop limit when the market price of ABC is \$40.88. The tape then shows the following:

.....ABC.....PDQ.  
39.88...40.25...40.00...40.13

The order will be elected at:

- a. 39.88
- b. 40.00
- c. 40.13
- d. 40.25

8.

Referring to the prior question, the first trade where the order can be executed is:

- a. 39.88
- b. 40.00
- c. 40.13
- d. 40.25

**9.**

Exercise settlement of a PHLX World Foreign Currency option is:

- a. same day
- b. next business day
- c. 3 business days after trade date
- d. 5 business days after trade date

**10.**

Which statements are true about the VIX option?

- I High VIX levels are indicative of a volatile market
  - II High VIX levels are indicative of a stable market
  - III High VIX levels are generally bullish
  - IV High VIX levels are generally bearish
- a. I and III
  - b. I and IV
  - c. II and III
  - d. II and IV

**11.**

Portfolio margining is:

- I risk based
  - II strategy based
  - III calculated using Regulation T rules
  - IV calculated using probability-based loss percentages
- a. I and III
  - b. I and IV
  - c. II and III
  - d. II and IV

**12.**

A NASDAQ market maker is quoting ABCD stock @ 10.00 - 10.25 (10 x 10). The quote represents the inside market. A customer enters an order to buy 200 shares at 10.00. Under SEC rules, the market maker:

- a. must sell 200 shares at 10.00
- b. must update its quote size to 10 x 12
- c. must update its quote size to 12 x 10
- d. is not required to take any action

**13.**

A member firm becomes aware of relevant information about a representative who was terminated 2 years ago. Which statement is **TRUE**?

- a. The member firm is obligated to amend the individual's U-4 Form promptly
- b. The member firm is obligated to amend the individual's U-5 Form within 30 days
- c. The member firm must file a report with FINRA within 10 business days
- d. No action needs to be taken because the individual has been out of the business for 2 years and all of that individual's licenses have lapsed

**14.**

The Trade Reporting Facility for NASDAQ reports trades of which of the following securities?

- I NASDAQ Global Market stocks
  - II NASDAQ Capital Market stocks
  - III Third Market trades of exchange listed stocks
  - IV Trades of exchange listed stocks effected on the floor of the exchange
- a. I and II only
  - b. III and IV only
  - c. I, II, III
  - d. I, II, III, IV

**15.**

Under ACT/TRF rules, round lot trades in Global Market stocks must be reported within:

- a. 30 seconds of execution
- b. 60 seconds of execution
- c. 90 seconds of execution
- d. 120 seconds of execution

**16.**

Which of the following is the equivalent of a short put position?

- a. long stock / long call
- b. long stock / short call
- c. short stock / long call
- d. short stock / short put

**17.**

Which of the following is the equivalent of a short stock position?

- a. long stock / long call
- b. long stock / short call
- c. short call / long put
- d. short call / short put

**18.**

A customer owns 100 shares of ABC stock and purchases 1 ABC Jan 50 Put @ \$4 as a hedge. The market declines, and the customer wishes to exercise the put. ABC has declared a cash dividend that the customer wishes to receive. What is the first day that the customer can exercise the put and still receive the dividend?

- a. One business day prior to "Ex" date
- b. "Ex" Date
- c. One business day after the "Ex" date
- d. Record date

**19.**

In determining if there is a violation of position limits or exercise limits, the Options Clearing Corporation will aggregate long calls with:

- I Long Puts
- II Short Calls
- III Short Puts

- a. I only
- b. II only
- c. III only
- d. I, II, III

**20.**

Under SEC rules, issuers are prohibited from:

- a. buying calls on their own stock
- b. selling calls on their own stock
- c. buying puts on their own stock
- d. selling puts on their own stock

**21.**

All of the following orders can be accepted at the opening rotation **EXCEPT:**

- a. market order
- b. limit order
- c. spread order
- d. market if touched order

**22.**

Which of the following accounts would be aggregated to determine if a violation of options position limits existed?

- a. All accounts that are the responsibility of a registered representative
- b. All accounts over which a registered representative exercises discretion
- c. All accounts of different customers holding the same series of options contract
- d. All accounts of a registered investment adviser who does not have a power of attorney over the accounts

23.

Which of the following covers a short ABC Jan 50 Call position under O.C.C. rules?

- I Long 1 ABC Dec 50 Call
- II Long 1 ABC Feb 50 Call
- III Long 1 ABC Jan 40 Call
- IV Long 1 ABC Jan 60 Call

- a. I and III only
- b. III and IV only
- c. II and III only
- d. I, II, and IV

26.

Which of the following orders can be accepted during the opening rotation?

- I Market
- II Spread
- III Limit
- IV Straddle

- a. I and III
- b. II and IV
- c. I, II, III
- d. I, II, III, IV

Use the following information to answer the next 2 questions:

On the same day, a customer buys 1 ABC Oct 80 Call @ \$11 and sells 2 ABC Oct 85 Calls @ \$5.

24.

The breakeven points are:

- I 81
- II 89
- III 91
- IV 96

- a. I and II
- b. III and IV
- c. I and III
- d. I and IV

25.

If ABC stock rises to 100, and all positions are exercised, the gain or loss is:

- a. \$100 loss
- b. \$1,000 loss
- c. \$1,100 loss
- d. \$1,600 loss

27.

The Market Maker on the floor of the Chicago Board Options Exchange can trade with which of the following?

- I Other Market Makers
- II Floor Brokers
- III Order Book Officials
- IV Public Customers

- a. I only
- b. II and III only
- c. I, II, III
- d. I, II, III, IV

28.

When is the first day that exercise is permitted for an equity option purchased in a cash settlement?

- a. Trade date
- b. Trade date + 1
- c. Settlement date
- d. Settlement date + 1

29.

The retention period for an options trade blotter is:

- a. 1 year
- b. 3 years
- c. 5 years
- d. 6 years

30.

Options order tickets must be written:

- a. prior to order entry
- b. prior to order execution
- c. promptly after order execution
- d. prior to order confirmation

31.

Which position exposes a customer to unlimited loss risk?

- a. Long 1 ABC Jan 50 Call  
Long 1 ABC Jan 50 Put
- b. Long 1 ABC Jan 50 Call  
Short 1 ABC Jan 40 Call
- c. Short 1 ABC Jan 50 Put  
Short 100 shares of ABC @ \$50
- d. Short 1 ABC Jan 50 Put

32.

A customer buys 100 shares of ABC stock at \$62 and sells 2 ABC Jan 65 Calls @ \$4. The maximum potential loss is:

- a. \$5,400
- b. \$6,400
- c. \$6,600
- d. unlimited

33.

Referring to the prior question, the breakeven points are:

- |     |    |
|-----|----|
| I   | 54 |
| II  | 58 |
| III | 73 |
| IV  | 76 |

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

34.

Statements of account must be furnished to customers at least:

- I monthly if transactions occur in the account
- II monthly if no transactions occur in the account
- III quarterly if transactions occur in the account
- IV quarterly if no transactions occur in the account

- a. I and II
- b. III and IV
- c. I and IV
- d. II and III

**35.**

Under CBOE rules, all of the following procedures are required to prevent and detect insider trading by registered representatives **EXCEPT:**

- a. All associated persons must be advised in writing of the prohibition against misuse of material, non-public information
- b. Associated persons must sign attestations affirming their awareness of, and agreement to abide by, insider trading prohibitions
- c. Brokerage accounts of associated persons must be reviewed periodically to detect possible misuse of material non-public information
- d. Monthly reports of trading by associated persons must be filed with the Securities and Exchange Commission

**36.**

All of the following would cause options trading to be halted **EXCEPT:**

- a. a trading halt on the primary exchange listing that issue
- b. an SEC-directed trading halt on the primary exchange listing that issue
- c. a trading halt on a regional exchange listing that issue
- d. a delayed opening on the primary exchange listing that issue

**37.**

A market maker on the floor of the CBOE gives a firm quote without stating a size. This quote is good for:

- a. 1 contract
- b. 10 contracts
- c. 100 contracts
- d. the smallest order present on the floor at the moment

**38.**

A review of the daily trade blotter shows the following positions taken that day in a customer account:

**Long 800 Shares of XXX @ \$100  
Long 8 XXX 120 Puts @ \$25**

Which statement is true?

- a. This is an appropriate hedge for the account
- b. This is an appropriate income strategy for the account
- c. This is inappropriate hedge for the account
- d. This is an inappropriate income strategy for the account

**39.**

Which orders can be accepted for the opening rotation?

- I Market order
- II Limit Order
- III Straddle order
- IV Spread order

- a. I only
- b. II only
- c. I and II
- d. I, II, III, IV

**40.**

A trader is long an options contract that is nearing expiration which currently has no bid on the floor; and which is offered at \$.05. Which closing transaction should be used?

- a. Market order to sell
- b. Limit order to sell at \$.05
- c. Cabinet trade
- d. All or none order

41.

Which statements are true regarding cabinet trades?

- I Cabinet trades are effected by Market Makers
  - II Cabinet trades are treated in the same manner as "off the floor" trades
  - III Cabinet trades are effected at a premium of \$.01 per share
  - IV Cabinet trades may be placed for customer, firm, or Market Maker accounts
- a. I and II only
  - b. I, II, III
  - c. II, III, IV
  - d. I, II, III, IV

42.

Options trade confirmations include which of the following information?

- I Opening or Closing transaction
  - II Exercise Price
  - III Whether the trade was effected on an agency or principal basis
  - IV Whether or not the trade was discretionary
- a. I and II only
  - b. III and IV only
  - c. I, II, III
  - d. I, II, III, IV

43.

A member firm may assume a loss in a customer option account:

- a. under no circumstances
- b. if the loss resulted from the member's mistake
- c. if approval of the Exchange is obtained in advance
- d. either b or c above

44.

If it is now the beginning of January, The maximum maturity on the longest available January equity LEAP contract is:

- a. 18 months
- b. 24 months
- c. 38 months
- d. 40 months

45.

Under Regulation SHO, the list of "hard to borrow" threshold securities must be prepared by the exchange:

- a. hourly
- b. daily
- c. weekly
- d. bi-weekly

46.

Which of the following statements are true regarding passive market makers under Rule 103?

- I Passive bids can be no higher than the highest current independent bid
  - II Passive bids reflecting customer limit orders may be higher than the highest current independent bid
  - III Passive bids must be identified as such on NASDAQ
  - IV Passive market makers are subject to daily volume restrictions
- a. I and II only
  - b. III and IV only
  - c. I, II, III
  - d. I, II, III, IV

**47.**

If a registered person fails to complete the Regulatory Element of the Continuing Education requirement within the allotted time, that person:

- a. may request an extension from FINRA
- b. will have their license suspended, but can still be compensated by the member firm
- c. will have their license suspended and cannot be compensated by the member firm
- d. must be terminated within 30 days

**49.**

A company holds a research analyst meeting and discusses information about the company that is likely to have an impact on the stock's price once the information is broadly released. A research analyst attending the meeting would be permitted to do all of the following EXCEPT:

- a. Discuss the information with his immediate supervisor in the member firm's research department
- b. Update the research file maintained by the member firm about that issuer
- c. Release a revised opinion about the company to the member firm's customers
- d. Revise the member firm's rating of the company and release it once the news is broadly disseminated by the issuer

**50.**

An individual that has been registered as a representative for 9 years:

**48.**

SEC Regulation FD covers:

- a. notification to customers of a member firm's privacy policies and practices
- b. selective disclosure of material non-public information by issuers
- c. standardization of disclosure of financial and non-financial information by issuers
- d. registration filings with the SEC by small business issuers

**51.**

An officer of a company would have to give a "disclosure notice" in which of the following situations?

- a. At a meeting of the company's Board of Directors, where the officer is going to disclose the latest quarterly results
- b. When taking outside analysts to a luncheon, where company results are going to be discussed
- c. When talking to the issuer's outside counsel about company legal matters
- d. When talking to company employees in training sessions that include discussions of company results

**52.**

Broker-Dealer reports of lost or stolen U.S. Government securities must be filed with:

- a. Securities Investor Protection Corporation
- b. FINCEN
- c. Securities Information Center
- d. Federal Deposit Insurance Corporation

**53.**

Money laundering regulations are established by all of the following EXCEPT:

- a. SROs
- b. SEC
- c. FRB
- d. Department of Treasury

**54.**

A cabinet transaction (accommodation liquidation) in an options series effected on the AMEX or CBOE:

- I is permitted on any trading day
  - II is permitted only on the Third Friday of the expiration month
  - III must be reported within 90 seconds of execution
  - IV must be reported following the close of the business day
- a. I and III
  - b. I and IV
  - c. II and III
  - d. II and IV

**55.**

A registered person of a member will be placed on "inactive status" and need not be re-registered by the member upon his or her return to active employment with the member if that individual:

- I is called into active duty in the Armed Forces of the United States
- II is called into religious missionary duty by a not-for-profit charitable organization recognized by the Government of the United States
- III volunteers for active duty in the Armed Forces of the United States
- IV volunteers for religious missionary duty in a not-for-profit charitable organization recognized by the Government of the United States

- a. I only
- b. I and II only
- c. III and IV only
- d. I and III only

**56.**

A registered representative has received inside information about a listed company, but has not acted on that information. The representative should:

- a. notify the SEC within 3 business days
- b. inform the home office of this situation
- c. notify FINRA within 3 business days
- d. inform the issuing corporation of this situation

**58.**

Annual testing of a member firm's AML program may be conducted by:

- a. the designated anti-money laundering compliance person
- b. a person who performs the functions being tested
- c. a qualified outside party or member personnel
- d. any of the above

**57.**

Why would a customer choose portfolio margin instead of regular margin for his or her investment account?

- a. Because the registered representative servicing the account can give recommendations to the customer that are only reserved for institutional customers
- b. Because the margin requirement will be lower based on the fact that diversified and hedged positions in the account will lower overall risk
- c. Because the account will be managed by a professional portfolio manager registered with the SEC under the Investment Advisers Act of 1940
- d. Because the portfolio will be held in a separate investment account and will receive additional SIPC insurance coverage

**59.**

A registered person resigns from a broker-dealer in order to finish graduate school. Eighteen months later, this individual reassociates with another broker-dealer firm. This person must participate in the Regulatory Element of CE (Continuing Education) on a cycle based on:

- a. the date of initial registration
- b. the date of reassociation
- c. a date determined by FINRA
- d. a date determined by a branch manager

**60.**

At 3:50 PM ET on expiration date, a customer wishes to close out a long position on an "out-the-money" options contract. To do this, the registered representative should:

- a. enter a contrary exercise advice
- b. enter a cabinet trade
- c. enter a limit order
- d. do nothing because the contract can no longer be traded

**61.**

Exercise settlement of index options is based on the:

- a. premium at the moment of exercise versus the premium at the moment position was established
- b. value of the underlying index at the moment of exercise versus the strike price of the index option
- c. value of the underlying index at the end of the settlement day versus the strike price of the option
- d. delivery of the underlying securities included in the index

**62.**

Under SEC Rule 15g-1, a member firm is exempt from the penny stock disclosure rules if its business from penny stock transactions accounts for less than:

- a. 20% of revenue
- b. 15% of revenue
- c. 10% of revenue
- d. 5% of revenue

**63.**

An institutional customer selects one firm to provide custody and financing of securities, while orders to buy or sell are placed with executing brokers. This is an example of a:

- a. wrap account
- b. give up (clearing) agreement
- c. prime brokerage account
- d. step out account

**64.**

A member firm receives a customer order to buy a Pink Sheet stock. Under FINRA rules, the member, in order to determine the prevailing market, must contact a minimum of:

- a. 2 dealers
- b. 3 dealers
- c. 4 dealers
- d. 5 dealers

**65.**

Under the Uniform Practice Code, the ex-date for stock dividends or stock splits which represent 25% or more of the value of the subject security is 1 business day:

- a. before the Record Date
- b. after the Record Date
- c. before the Payable Date
- d. after the Payable Date

**66.**

The last trade in ABCD stock occurred at \$50 per share. An OTC Equity Trader effects multiple buy-sell trades in that stock for the firm's account at successive prices of \$40, \$45, \$50, \$55 and \$60 per share. These transactions are:

- a. wash trades
- b. matched sales
- c. boxed trades
- d. pattern day trades

**67.**

A customer sells short and fails to deliver on settlement date. Mandatory close-out is required in which two of the following circumstances?

- I The stock was on the threshold list as of trade date
- II The stock was not on the threshold list as of trade date
- III The stock remains on the threshold list for 5 settlement days
- IV The stock remains on the threshold list for 13 settlement days

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

68.

Under SEC Rule 10b-18, an issuer purchasing its own securities in the market can pay no more than the:

- I Highest current independent bid
  - II Lowest independent offer
  - III Last reported sale price
- a. I only
  - b. I or III, whichever is higher
  - c. II or III, whichever is lower
  - d. III only

69.

A member firm, wishing to have a clearly erroneous trade nullified, must make the request to NASDAQ MarketWatch:

- a. within 30 minutes of the transaction
- b. within 1 hour of the transaction
- c. no later than 4:00 PM ET on the day of the transaction
- d. no later than 8:00 PM ET on the day of the transaction

70.

Under SEC rules, limit orders from which of the following must be protected by a market maker?

- I Orders from customers of the market maker
  - II Orders from another member for customers of that member
  - III Orders from another member for that member's proprietary trading account
- a. I only
  - b. I and II
  - c. II and III
  - d. I, II, III

71.

A trader at a large market making firm routinely telephones his counterparts at smaller firms, inquiring as to why their orders are sent to other market makers, stating: "With our large institutional client base, directed orders will result in quick, profitable executions for both of us. Also, I'm sure I could get you into some of our syndicate deals if we begin to see order flow."

These phone calls are an example of:

- a. Front running
- b. Intimidation / Harassment
- c. Collusion
- d. Interpositioning

72.

A proprietary trading desk trades ahead of a customer limit order placed with the firm's market making desk. This action is:

- a. permitted without restriction
- b. permitted as long as a Chinese Wall is in place
- c. permitted as long as the firm has a no-action letter from the SEC
- d. prohibited

73.

Under Regulation M, if there is no independent market for a subject security, which statements are true?

- I Stabilization is permitted
- II Stabilization is not permitted
- III Passive market making is permitted
- IV Passive market making is not permitted

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV



74.

A broker-dealer holds a limit order to buy 100 shares of ABCD stock at \$20.00 for a customer. Which of the following trades are acceptable?

- I The purchase of 100 shares of ABCD for the firm's trading account at \$19.50 prior to executing the customer's order
  - II The purchase of 100 shares of ABCD for the firm's trading account at \$20.50 prior to executing the customer's order
  - III The long sale of 100 shares of ABCD out of the firm's trading account to the customer at \$20.00
  - IV The short sale of 100 shares of ABCD out of the firm's trading account to the customer at \$20.00
- a. I only
  - b. I and II only
  - c. III and IV only
  - d. II, III, IV

75.

The SEC's Penny Stock Rule applies to which of the following?

- I Capital Market stock trading at \$4 per share
  - II OTC Bulletin Board stock trading at \$4 per share
  - III Global Market stock trading at \$4 per share
  - IV Pink Sheet stock trading at \$4 per share
- a. I and III only
  - b. II and IV only
  - c. I, II and IV
  - d. I, II, III, IV

76.

An order ticket to sell securities that will be borrowed for delivery on settlement must be marked:

- a. Sell-Long
- b. Sell-Short
- c. Sell Long-Exempt
- d. Sell Short-Exempt

77.

NASDAQ MarketWatch has the authority to declare a clearly erroneous trade null and void on:

- I its own motion
  - II the complaint of the buying dealer
  - III the complaint of the selling dealer
- a. I only
  - b. II only
  - c. II or III
  - d. I, II, III

78.

The "Trade-Through" rule of Regulation NMS applies to all of the following EXCEPT:

- a. NYSE issues
- b. AMEX issues
- c. NASDAQ issues
- d. OTCBB issues

79.

A pegged order to buy is placed at the:

- a. inside bid
- b. inside ask
- c. inside bid minus \$.01
- d. inside ask plus \$.01

80.

OATS reports are submitted by:

- a. the buy side of the transaction
- b. the sell side of the transaction
- c. both the buy and sell side of the transaction
- d. the side of the transaction that is the Executing Member

81.

A customer places a market order with her broker-dealer to buy 1,000 shares of ABCD stock - a NASDAQ Global Market security. The NBBO at the time of order entry is: \$10.50 - \$11.00. The trade is sent to Market Venue "A," which is currently quoting the stock at: \$10.25 - \$11.25. The order is filled by Market Venue "A" at \$11.25.

Which statement is true?

- a. Market Venue "A" has not violated any rules
- b. Market Venue "A" has committed a violation called "selling away"
- c. Market Venue "A" has committed a violation called "trade shredding"
- d. Market Venue "A" committed a violation called a "trade through"

82.

An index arbitrage trading desk places sequential buy orders at the market opening for securities included in the index to raise their price against the current index value. Which statement is true?

- a. These transactions can only be effected on an upbid
- b. This is an illegal practice known as Marking to Market
- c. This is an illegal practice known as Marking the Open
- d. This is an illegal practice known as Painting the Tape

83.

A member firm buys stock from a market maker and instructs the market maker to deliver the securities to another member for clearance and settlement purposes. This is an example of a:

- a. wrap account
- b. give up (clearing) agreement
- c. prime brokerage account
- d. step out account

84.

All of the following orders would be included in an SEC Rule 605 report **EXCEPT**:

- a. limit orders
- b. marketable limit orders
- c. immediate or cancel limit orders
- d. fill or kill limit orders

85.

All of the following transactions are **EXEMPT** from the trade through rule (Rule 611) **EXCEPT**:

- a. benchmark trades (VWAPs)
- b. intermarket sweep orders (ISOs)
- c. stopped stock transactions
- d. minimum quantity transactions

86.

Which of the following customers is considered to be "long" 100 shares of ABCD stock?

- I A customer who has a long position of 200 ABCD shares and has shorted 100 shares of ABCD "against the box"
- II A customer who owns 1 ABCD call contract
- III A customer that owns two ABCD convertible bonds, convertible into 50 shares each, who has given irrevocable instructions to convert
- IV A customer who owns 100 ABCD warrants and has exercised those warrants

- a. I and III only
- b. II and IV only
- c. I, III, IV
- d. I, II, III, IV

87.

A firm's market making desk, aware that the firm is about to publish a bullish research report on ABCD stock, purposefully increases its long position in order to satisfy anticipated retail demand. This action is:

- a. permitted without restriction
- b. permitted as long as the research report is released within 48 hours of the first trade made to increase the firm's position
- c. permitted as long as NASDAQ is notified, in writing, of the impending research report
- d. prohibited

88.

The rate of change of an option premium as compared to the rate of change of the price of asset underlying the option is called:

- a. alpha
- b. beta
- c. delta
- d. gamma

89.

A registered representative buying call options on a stock with the advance knowledge of a large buy order being placed by an institution. This is a prohibited practice known as:

- a. Free Riding
- b. Front Running
- c. Interpositioning
- d. Backing Away

90.

To take a second job, an employee of a member firm:

- a. must get permission from his or her employer
- b. must get permission from the SRO
- c. must amend his U-4 filing
- d. is under no notification requirements

91.

Records of speaking engagements of registered personnel must be maintained by member firms for:

- a. 6 months
- b. 1 year
- c. 3 years
- d. 5 years

92.

All of the following are violations of the FINRA Conduct Rules EXCEPT:

- a. guaranteeing a customer account against loss
- b. selling a customer an exempt security with a written agreement to buy back that security at a fixed price
- c. making blanket recommendations of low price speculative stocks to customers
- d. selling dividends to customers by inducing customers to buy stocks just prior to the ex-date

93.

Which of the following individuals are permitted to be included in arbitration panels?

- I Persons affiliated with member firms
- II Disinterested persons with no industry affiliation
- III Attorneys that are members of the bar

- a. I only
- b. II only
- c. III only
- d. I, II, III

**94.**

Under the provisions of Regulation SHO, a short sale of an NMS security can only be effected on an upbid if its price declines by

- a. 1%
- b. 2%
- c. 5%
- d. 10%

**97.**

ABC stock has just closed at \$70.50 on the NYSE. A customer has an open order on the Specialist's/DMM's book to sell short 100 shares of ABC at \$70 Stop. ABC stock goes ex-dividend \$.55. The order on the Specialist's/DMM's book the next morning will be:

- a. Sell short 100 ABC at \$69.45 Stop
- b. Sell short 100 ABC at \$70.00 Stop
- c. Sell short 100 ABC at \$70.50 Stop
- d. Sell short 100 ABC at \$80.05 Stop

**95.**

If a person is convicted of insider trading:

- I the amount of any profit achieved or loss avoided must be paid
  - II three times the amount of any profit achieved or loss avoided must be paid
  - III payments are made to the Department of Treasury
  - IV payments are made to the Securities and Exchange Commission
- a. I and III
  - b. I and IV
  - c. II and III
  - d. II and IV

**98.**

All of the following statements are true about American Depository Receipts EXCEPT:

- a. ADRs facilitate domestic trading of foreign securities
- b. ADR holders receive dividends
- c. ADR holders have voting and preemptive rights
- d. ADRs are issued by domestic banks

**96.**

A registered representative with a wealthy clientele has many clients that are officers of publicly held companies. The registered representative receives an order from the executive vice-president of ADAP Corp. to sell 4% of the outstanding shares. Prior to placing this order, the registered representative may, in his or her personal account:

- a. buy ADAP put options
- b. buy ADAP common stock
- c. sell ADAP call options
- d. sell short ADAP stock

**99.**

A customer places an order to buy 100 shares of ABC stock at \$50 per share when the market price of the stock is at \$60. The member firm fills the order at \$58. By the time when the error is discovered the next day, the stock is trading at \$48. Which statement is true?

- a. The customer must be offered the \$48 price per share
- b. The customer must be offered the \$50 price per share
- c. The customer must be offered the \$58 price per share
- d. The customer must be offered the \$60 price per share

100.

An order is reported to a customer as executed, but, in fact, was not executed. Which statement is TRUE?

- a. The firm must honor the trade
- b. The firm must honor the trade only at the customer's insistence
- c. The firm must correct the erroneous trade report sent to the customer
- d. The firm must report the error to the SRO

## Series #56 - Final 1 Explanations

1. The best answer is c. Treasury stock does not trade. It represents shares of the company that have been repurchased by the issuer. Such shares are held in "Treasury". Treasury stock does not vote, nor does it receive dividends. Issuers repurchase shares for Treasury typically to reduce the number of common shares outstanding. This increases reported Earnings per Share, and thus increases the common stock's market price. Common stock, preferred stock, warrants and rights all trade in the market.
2. The best answer is c. Since the preferred stock is **noncumulative**, to make a dividend distribution to common shareholders, the company need only make this year's preferred dividend distribution. The stated dividend rate on the preferred is 10% based on \$100 par, so \$10 of preferred dividends must be paid per share. If this preferred were cumulative, then all omitted dividends must be paid before a distribution can be made to common.
3. The best answer is b. Preferred stock pays a fixed dividend rate; American Depository Receipt holders receive dividends; and Real Estate Investment Trusts make dividend distributions to shareholders. Holders of warrants and rights do not receive dividends on these instruments.
4. The best answer is a. Equity options positions that are "in the money" by \$.01 or more as of the market close on the Friday prior to expiration are automatically exercised by the Options Clearing Corporation.
5. The best answer is a. When a company declares a stock dividend or a fractional stock split, the option contract is not adjusted. If there is an exercise, then the "deliverable" is adjusted. So, 1 ABC Jan 60 Call where there is a 20% stock dividend remains 1 ABC Jan 60 Call. If there is an exercise, then the deliverable is adjusted to  $100 \times 1.2 = 120$  shares at  $\$60/1.2 = \$50$  per share.
6. The best answer is c. When a company declares a stock dividend or a fractional stock split, the option contract is not adjusted. If there is an exercise, then the "deliverable" is adjusted. So, 1 ABC Jan 60 Call where there is a 20% stock dividend remains 1 ABC Jan 60 Call. If there is an exercise, then the deliverable is adjusted to  $100 \times 1.2 = 120$  shares at  $\$60/1.2 = \$50$  per share.
7. The best answer is a. Sell stop orders are placed **lower** than the current market price of the stock and are triggered when the market hits or goes through the stop price. Just prior to entering the order, the last trade in ABC stock was at 40.88. The stop price is set at 40.00. If the market trades at 40.00 or lower, the stop is activated. The next trade that takes place in ABC stock is at 39.88. The market has fallen right through the stop price, so this trade activates the order.
8. The best answer is d. This sell order was placed at 40 Stop Limit. Once it is activated, it becomes an order to sell at the limit price of 40 or higher. The next trade after 39.88 (which elected the order) is at 40.25. This meets the limit price to sell at 40 or higher, so execution can take place at this price.
9. The best answer is b. Exercise settlement of PHLX traded World Foreign Currency options is the same as for index options. On exercise (which can only happen at expiration, since the contracts are European style), the writer must pay the holder the "in the money" amount the next business day in U.S. dollars.

10. The best answer is b. The VIX is a measure of market volatility - the higher the index value, the more volatile the market's price movements. Very volatile price movements are indicative of increased investor fear and are bearish.

11. The best answer is b. Portfolio margin is a "risk" based margin method that gives substantially lower margin requirements for lower risk positions. It recognizes that if positions are hedged, such as a stock position hedged by the purchase of a put, then the loss potential of the combined position is much lower. Portfolio margin produces a much lower margin requirement for such a hedged position (the margin is basically equal to the maximum loss) than the separately calculated margins for each position that Regulation T would require. Regulation T is a so-called "strategy based" margin method, that applies a fixed margin percentage to each strategy separately. It does not account for the fact that one position may offset the risk of another position, which is what portfolio margin recognizes. Also note that portfolio margin can only be used by institutional or wealthy sophisticated individual customers.

12. The best answer is c. Whenever a market maker receives a customer limit order that improves either its displayed price and/or size, it must display that order under SEC rules. In this case, the customer is placing an order to buy 200 shares at 10.00. Since the market maker's quote is 10.00 - 10.25 (10 x 10), the market maker is bidding the stock at 10.00 for 1,000 shares. Since the customer wants to buy 200 shares at the same price of 10.00, there are now willing buyers for 1,200 shares at 10.00. Thus, the quote must be updated to 10.00 - 10.25 (12 x 10).

13. The best answer is b. If any information becomes known about a terminated representative after the U-5 filing is completed, FINRA applies an "open-ended" updating requirement. The U-5 must be amended with the new information within 30 days of discovery - it makes no difference how long the representative is out of the business.

14. The best answer is a. The Trade Reporting Facility for NASDAQ (NASDAQ TRF) reports trades of all NASDAQ issues. Trades of NYSE listed issues are reported through the NYSE TRF. This reports trades of NYSE-listed issues effected OTC (both Third Market and Fourth Market trades). Reports of trades of OTCBB and Pink Sheet issues are made to the ORF (OTC Reporting Facility).

15. The best answer is a. Under ACT rules, transactions in NASDAQ, OTCBB and Pink Sheet securities executed between 8:00 AM and 8:00 PM ET (the hours that ACT is open) must be reported within 30 seconds of execution (effective 11/1/10). The TRF for NASDAQ (Trade Reporting Facility) disseminates the trade report immediately for NASDAQ trades. The ORF (OTC Reporting Facility) reports the trade for OTCBB and Pink Sheet issues, also immediately.

16. The best answer is b. A short put position has the characteristics of giving a fixed gain (the premium) if the market rises and the put expires out the money; and increasing loss as the market drops (where the writer is obligated to buy stock for less than it is worth). As an example, assume a customer sells 1 ABC Jan 50 Put at \$5. If the market rises, the put expires and the customer has a \$5 gain. If the market falls to "0," the put will be exercised, and the customer must pay \$50 for stock that is worthless. The net loss is \$45, since he received \$5 per share in premiums for writing the put.

If the customer were to buy 100 shares of ABC stock at \$50 and sell 1 ABC Jan 50 Call @ \$5, these characteristics are matched. In a rising market, the call would be exercised. The

stock that was purchased at \$50 would be delivered at \$50, for no gain or loss. However, a \$5 premium is earned. In a falling market, the call expires and the customer loses on the long stock position. The maximum loss is \$50 per share of stock, net of \$5 premium received, or \$45 per share. Thus, the synthetic equivalent of a short put position is long stock / short call (which is the same as being a covered call writer).

17. The best answer is c. If a customer has a short stock position, he has unlimited upside loss potential, and increasing gain as the market drops. Assume that a customer shorts 100 shares of ABC at \$50. His maximum loss is unlimited; his maximum potential gain is \$50 per share. If the customer sells 1 ABC Jan 50 Call @ \$5, he matches the unlimited upside loss characteristic. However, his gain is limited to 5 points. If the customer also buys 1 ABC Jan 50 Put @ \$5, the premium paid of \$5 offsets the premium received of \$5. In a falling market, the customer would gain from the long put position, while the call would expire "out the money." Thus, the synthetic equivalent of a short stock position is short call / long put.

18. The best answer is b. If a customer exercises a stock option contract, settlement occurs "regular way" 3 business days after trade date. To receive a dividend, a customer must be on the record books on Record Date. The "ex" date is set by the exchange, based from the record date. This is the first date that any purchaser of the stock in a regular way trade will settle **after** the Record date, and, thus will not receive the dividend. Thus, to receive the dividend, the holder of a put must exercise **on or after** the ex date, since exercise of a put results in a regular way sale of the stock. Exercise of the put prior to the ex date will result on settlement on or before the Record date, and the person who exercised would not be on record to receive the dividend.

19. The best answer is c. To determine if there is a violation of position or exercise limits, the Options Clearing Corporation aggregates contracts on the same issuer on the same side of the market. Thus, long calls are aggregated with short puts (both representing the "upside" of the market); while long puts are aggregated with short calls (both representing the "downside" of the market).

20. The best answer is b. Under SEC and CBOE rules, issuers are prohibited from selling calls against their own stock.

21. The best answer is c. At the opening rotation, each series of option is traded **alone** for a brief period, followed sequentially by the next option in the series, etc., until the rotation is completed. Since all contracts are not being traded at the same time, it would be impossible to fill a spread or straddle order (since these orders require 2 different contracts to create the position, and only 1 contract is being traded at a time in the rotation).

22. The best answer is b. To determine if a violation of position limits exists, all accounts where an individual or entity makes investment decisions for accounts are aggregated; as are accounts where an individual or entity materially influences the actions of the person making investment decisions. In choice **b**, the registered representative is making the investment decisions (discretionary accounts) so these accounts come under the aggregation rule. In the other accounts, investment decisions are being made individually by the holders of the accounts.

23. The best answer is c. Under O.C.C. rules, for a short call option position to be covered, a long option position must be taken with the same expiration or later (thus, if the short call option is exercised, the long call can still be exercised to get the stock for delivery. If

the long call expired earlier, then there would be no way to get the stock if the short call were exercised); and the strike price on the long option must be the same or lower than that on the short call. (Thus, if the writer is exercised, the stock can be purchased at the same price or lower - there is no loss to the writer of the call. If the strike price on the long call were higher, then there would be a loss on the exercise of the short call.)

24. The best answer is a. This is a ratio spread. The positions are:

|   |  |
|---|--|
| Buy 1 ABC Oct 80 Call @ \$11 = \$11 Debit   |  |
| Sell 2 ABC Oct 85 Calls @ \$5 = \$10 Credit |  |
| <hr/>                                       |  |
| Net \$1 Debit                               |  |

If the market falls, below 80, both positions expire "Out the money" and the loss is the \$1 debit. If the market rises above \$80, then the maximum gain occurs at \$85. At \$85, the short calls expire "at the money." There is a \$5 point profit on the long 80 call - \$1 net debit, for a maximum profit of \$4 = \$400 - this amount is now locked-in if the market continues to rise. However, if the market rises above 85, the maximum \$4 profit is now reduced by the loss on the 1 naked short call. If the market rises to \$89, there is a loss of \$4 on the naked short call that equals the \$4 locked-in profit, so this is breakeven. Above this, the loss potential is unlimited on the naked short call.

25. The best answer is c. Continuing from the prior explanation, if the market rises to 100, there is a 15 point loss on the short naked call, offset by the \$4 point locked-in gain, for a net loss of \$1,100.

26. The best answer is a. At the opening rotation, each series of option is traded **alone** for a brief period, followed sequentially by the next option in the series, etc., until the rotation is completed. Since all contracts are not being traded at the same time, it would be impossible to fill a spread or straddle order (since these orders require 2 different contracts to create the position, and only 1 contract is being traded at a time in the rotation).

27. The best answer is c. Market makers on the CBOE floor do not deal with the public. They trade with other market makers, floor brokers, and order book officials.

28. The best answer is a. This is a hard question! If an option contract is purchased in a cash settlement, then the transaction settles that day, rather than the next business day. In this case, the Options Clearing Corporation permits exercise on the same day as trade date.

29. The best answer is d. Unlike the majority of records related to options that must be kept for 3 years, certain records must be kept for 6 years. These include daily transaction records (the "blotters") and customer account statements.

30. The best answer is a. All order tickets must be put into written form prior to order entry. If the order is later changed, it must either be canceled and a new order entered, or if there is a change after execution, the principal must approve (initial) the change.

31. The best answer is c. If a customer is short stock and short a put, the customer has unlimited risk potential on the short stock position in the rising market (the short put would expire out-the-money). Choice **a** is a long straddle, where the maximum loss is the premium paid; Choice **b** is a short call spread, where the maximum loss is the difference

in the strike prices, net of the credit received. Choice **d**, a short put, has a maximum loss equal to the strike price minus the premium collected. Only Choice **c** has unlimited loss potential.

32. The best answer is **d**. This is a ratio write, which basically consists of 1 covered short call and 1 naked short call. The customer has bought the stock at \$62, and sells 2 ABC Jan 65 Calls @ \$4, for a collected premium of 8 points. If the market stays below 65, then the calls expire out-the-money, and the customer has reduced the cost of the stock to  $\$62 - \$8$  total premium collected = \$54 per share. If the stock drops below this price, then the customer loses on the stock position, while the calls expire out-the-money. This is the first breakeven point.

If the market rises above 65, then both short calls are exercised. The customer delivers 100 shares that he owns (purchased at \$62) at the 65 strike price, for a gain of 3 points in addition to the 8 points collected in premiums. The exercise of the 1 naked short call obligates the writer to sell another 100 shares at 65 that he or she does not own. These shares can be bought in 11 points higher, at 76, and the customer will still breakeven. Above this price, the writer keeps losing on the 1 short naked call - the risk potential on this position is unlimited.

33. The best answer is **b**. This is a ratio write, which basically consists of 1 covered short call and 1 naked short call. The customer has bought the stock at \$62, and sells 2 ABC Jan 65 Calls @ \$4, for a collected premium of 8 points. If the market stays below 65, then the calls expire out-the-money, and the customer has reduced the cost of the stock to  $\$62 - \$8$  total premium collected = \$54 per share. If the stock drops below this price, then the customer loses on the stock position, while the calls expire out-the-money. This is the first breakeven point.

If the market rises above 65, then both short calls are exercised. The customer delivers 100 shares that he owns (purchased at \$62) at the 65 strike price, for a gain of 3 points in addition to the 8 points collected in premiums. The exercise of the 1 naked short call obligates the writer to sell another 100 shares at 65 that he or she does not own. These shares can be bought in 11 points higher, at 76, and the customer will still breakeven. Above this price, the writer keeps losing on the 1 short naked call - the risk potential on this position is unlimited.

34. The best answer is **c**. Customer account statements must be sent at least quarterly if no trades occur in the account; and monthly if trades occur in that month.

35. The best answer is **d**. Member firms are obligated, under CBOE rules, to maintain procedures to prevent and detect insider trading violations. An annual report must be made to the exchange detailing these procedures. These procedures must include a written statement, given to all registered persons, detailing the insider trading prohibitions, that must be signed by each associated person, attesting to the fact that he or she is aware of the rules, and has not violated the rules. Under the rules, member firms are required to periodically review the account activity of associated persons to detect any possible insider trading violations. There is no requirement to report trading activity of associated persons to the SEC.

36. The best answer is **c**. If trading is halted in a stock on its principal exchange or if trading is halted by the SEC, then the option stops trading. The stopping of trading of a stock on a regional exchange will not stop the trading of the option, since it can still be priced by the trading taking place on its principal exchange.

37. The best answer is b. If no size is stated, a quote from a market maker on the CBOE is good for 10 contracts.

38. The best answer is c. This customer is hedging by purchasing a put that is 20 points "in the money." He is virtually insuring that the put will be exercised, forcing the customer to sell the stock (at \$120). This is not the intent of a long stock / long put strategy. The intent is only to protect if the market should drop below the current price (\$100); but to still give the customer the upside gain potential on the security.

39. The best answer is c. At the opening rotation, each option series trades alone for a brief time period to fill any orders for that series in an "orderly" fashion. When all of the series have been "rotated through," trading starts in all series. A spread or straddle order requires that 2 series be traded at the same time to create the position - this is an impossibility if only one series is trading at the time. Any order for a single series (buy, sell, buy limit, sell limit) can be filled at the opening (or closing) rotation.

40. The best answer is c. A "cabinet" trade is a closing trade for a worthless contract at a premium of \$.01 per share (\$1 aggregate premium per contract). These are handled by Board Brokers as an "accommodation" to give customers a closing trade confirmation. Since there is no bid on the floor for this option, the only way to effect a closing sale is through such a "cabinet trade."

41. The best answer is c. A "cabinet" trade is a closing trade for a worthless contract at a premium of \$.01 per share (\$1 aggregate premium per contract). These are handled by Board Brokers as an "accommodation" to give customers a closing trade confirmation. Cabinet trades can be placed with the Order Book Official by customers, member firms, and Market Makers. These are treated like an "off floor" trade because there is no reporting in real time of the trade to the tape. These transactions are reported at the end of the day.

42. The best answer is c. It is not noted on the trade confirmation that a trade was "discretionary" - however this is noted on the order ticket for the trade. The confirmation will include; opening or closing transaction; exercise price per share (but **not** aggregate exercise price of the contract); and whether the trade was effected on an agency or principal basis (among many other disclosed items).

43. The best answer is d. Exchange rules prohibit a member from assuming a customer loss, **unless** the loss resulted from the member's mistake; or the Exchange specifically allows such action to be taken by the member (not likely!).

44. The best answer is b. Equity LEAPS expire each January on the same date as the regular options expiration (remember that contracts expire on the Saturday following the 3rd Friday of the month). They are issued after the May expiration and expire in the January 30 months later. If it is now the beginning of January '11, the January '11 options are still trading, as are the January '12s and January '13s. After the May '11 expiration, January '14s will be issued. Thus, at the beginning of January '11, the longest available equity LEAP is the January '13. This contract has 24 months left to its life.

45. The best answer is b. Under Regulation SHO, the list of "threshold" securities must be prepared by each exchange and NASDAQ daily. NASDAQ posts the list just before midnight prior to each trading day. These are the securities that are "difficult to borrow."

46. The best answer is d. All of the statements are true regarding Rule 103 restrictions on passive market makers. Rule 103: Syndicate members who are market makers in that security may either seek an excused withdrawal from making a market in that security - that is, get permission of FINRA to stop making a market during this period; or may elect to operate as a "passive" market maker. A passive market maker may bid for that security at no higher than the highest current independent bid. Thus, the firm cannot push the price up in the market. If it elects to operate as a passive market maker, any bids are identified as "PSMM" - as in passive market maker. Note that under Rule 103, unsolicited customer orders to buy may be accepted at any price. In addition, passive market makers are limited as to the amount of "net purchases" of that security (orders from all sources) that can be made on any day during the restricted period. The limit is 30% of that market maker's average daily trading volume over the preceding month. Once this limit is reached for the day, it must obtain an excused withdrawal from making a market from FINRA.

47. The best answer is c. If a registered individual fails to complete the Regulatory Element of the Continuing Education requirement within the 120-day window that he or she is given, this person's registration is suspended and the member firm is prohibited from paying that individual. This is a very good incentive for each person to complete his or her Regulatory Element CE.

48. The best answer is b. Regulation FD (Fair Disclosure), passed in 2000, is basically an elaboration of the insider trading rules. It prohibits issuers from making selective disclosure of non-public information to research analysts, mutual fund managers, and other industry professionals, unless at the same time, the information is broadly disseminated to the public.

49. The best answer is c. Under Regulation F/D (Fair Disclosure), if an issuer makes "selective disclosure" of material non-public information, then the recipients are deemed to be insiders until the information is broadly released. Thus, the analyst could not use the information to issue a revised opinion to the firm's customers until the issuer released that information. However, the analyst can discuss the new information with his or her supervisors and can update the firm's records about that issuer in light of the new information.

50. The best answer is c. Any registered individual must complete the Regulatory Element of the Continuing Education requirement on the 2nd anniversary of registration and every 3 years thereafter.

51. The best answer is b. Regulation FD (Fair Disclosure) requires that when an individual that is associated with a company is going to divulge any information that might have a market impact to a group of individuals, simultaneous disclosure must also be made to the general public (that is what is meant by a disclosure notice). The Board of Directors already has a fiduciary responsibility to the company, as does the company's attorney and the company's employees, so they do not come under the rule. However, research analysts do not have such a fiduciary responsibility to the issuer, and if any disclosures are going to be made to them, simultaneous disclosure to the public is also required.

52. The best answer is c. Reports of any lost security (it makes no difference if it is a U.S. Government issue) must be made to the SIC - Securities Information Center - and to the transfer agent. If the security is believed to be stolen, the FBI must be notified as well.

53. The best answer is b. Money laundering regulations are established by the Federal Reserve and the Department of Treasury - and apply to banks, trusts, savings and loans, check cashing services, money wiring services, broker-dealers, etc. - that is, anyone routinely handling money transactions. In addition, each SRO (self-regulatory organization), such as the CBOE or FINRA requires member firms to put AML programs in place. The SEC has no money laundering regulations.

54. The best answer is b. Cabinet transactions, also called accommodation liquidations, permit a customer to close a worthless option contract at an aggregate premium of \$1.00 per contract (\$.01 per share). Orders for these transactions are kept in a "cabinet" on the AMEX or CBOE floor and are executed by the Specialist or Board Broker daily. Such trades are not reported within 90 seconds of execution - rather, they are reported at the end of each business day.

55. The best answer is d. If a customer fails to return the signed Options Agreement within 15 calendar days of approval of account opening, the customer is prohibited from opening new options positions in the account. However, closing trades are permitted. There is no requirement to "freeze" the account under Regulation T - this only occurs if the customer does not pay for transactions "promptly," in which case the account is frozen for 90 days and during this time window the customer must pay in advance for purchases.

56. The best answer is b. This question is subjective, but that is the nature of many of these "exam-type" questions. Nothing illegal has happened since the representative did not trade on the information. However, the representative should report the situation to the home office - specifically the compliance department. Compliance will investigate and decide what action (e.g., reporting the information to the exchange) should be taken.

57. The best answer is b. Portfolio margin is "risk-based" so that a diversified or hedged portfolio (which will have lower risk) will get a much lower margin than regular strategy based margin.

58. The best answer is c. Member firms that deal with the public must test their Anti-Money Laundering programs annually. (Note that a firm that does not execute transactions for customers, e.g., the firm conducts only proprietary trading or deals only with other broker-dealers, is required to test every 2 years.) The testing must be performed by an independent person. This independent testing may not be conducted by the designated anti-money laundering compliance person; by a person who performs the functions tested; or by any person who reports to these individuals. It can be performed by a qualified outside party or by a member firm employee who does not fall into the prohibited categories.

59. The best answer is a. If a registered person terminates association with a broker-dealer firm, and reassociates within 2 years of termination, that person is subject to the Regulatory Element of CE on a cycle based on initial registration.

60. The best answer is b. The customer wants to "close out" the position, meaning enter a closing trade. The contract stops trading at 4:00 PM ET, so a closing trade can be entered. Because the contract is "out the money," it can be closed in a cabinet trade for an aggregate \$1 premium for the contract as an accommodation. Cabinet trades ("accommodation liquidations") are used to provide a record to individuals who have worthless options positions that are soon to expire "out the money." In a closing

transaction, the Order Book Official will accept limit orders from holders and writers of "out the money" contracts to close the positions at a total premium of \$1 per contract (\$.01 per share). The OBO will match the orders as an accommodation, and report the executed trades to the firm that placed the order. Filing a CEA (Contrary Exercise Advice) is not appropriate, since the customer does not want to exercise the contract.

61. The best answer is c. If an index option is exercised, exercise settlement is based on the closing index value that day versus the strike price of the option. This creates a bit of a "problem" because if the contract is exercised during the trading day, the closing index value is not yet known. A much better way to capture a profit on the contract is to close it at the current market premium. However, exercise is permitted as part of the basic contract!

62. The best answer is d. The "penny stock rule" is intended to apply to member firms that specialize in recommending speculative penny stocks to unsuspecting investors. These customers must sign a detailed suitability determination prior to confirmation of purchase, and where the customer signs is a big bold disclaimer that the customer is likely to lose everything! Thus, they are not likely to sign unless they really, really, think they are doing the right thing. The rule is not intended to apply to member firms that are not "in the business" of pushing penny stocks - defined as firms that derive less than 5% of their revenue from penny stock transactions.

63. The best answer is c. A prime brokerage account is one where a customer, generally an institution, selects one broker (the prime broker) to provide custody and financing of securities purchased, and other brokers (executing brokers) to buy and sell on behalf of the customer. Unlike a prime brokerage account which involves a customer, a give-up clearing arrangement is between two members. For example, member firm A agrees to settle and clear all trades entered by member firm B.

64. The best answer is b. In order to determine the prevailing market when buying or selling a non-NASDAQ security on behalf of a customer, member firms must contact a minimum of 3 dealers (if there are that many dealers making a market). However, if there are 2 or more market makers displaying priced quotations - meaning that there is an inside market in the issue, the 3 contact rule does not apply. Thus, the rule applies only to OTCBB or Pink Sheet issues where an inside market does not exist.

65. The best answer is d. The Uniform Practice Code sets ex-dates for corporate distributions. On the ex-date, the stock's price is reduced for the value of the distribution. The most commonly known ex-date is that for cash dividends - set at 2 business days prior to record date for regular way trades. Anyone who buys prior to this date will settle on the record date or before and thus will get the dividend. Anyone who buys on ex-date or after will settle after the record date and will not get the dividend - hence the reduction.

The ex-date for stock dividends and stock splits is totally different. It is set at 1 business day after the payable date (which is typically about 2 weeks after the record date). What happens is that anyone who buys, settling during the window of time encompassing the day after the record date through the payable date, will not be on record to get the stock split, yet on the day after the payable date, the price is reduced for the distribution that they were not on record to receive! These buyers claim the extra shares that they are owed with a "due bill." Anyone who settles after the payable date (the ex-date) will pay the reduced price, and a due bill is no longer required.

66. The best answer is a. Effecting a series of buy-sell transactions (these are wash trades, since they "wash" each other out) without any change of ownership is a "time-honored" manipulation known as "painting the tape" - it gives the appearance of active trading in a security when this is not the case. Note that Choice d is incorrect because only retail customers can be defined as "pattern day traders."

67. The best answer is b. Customer short sales not resulting in delivery must be bought-in after 10 business days from settlement, if the security was on the exchange's or the NASDAQ's threshold list as of trade date under Regulation SHO and remains on that list for "13 settlement days" - which is the same as 10 business days from settlement ( $T + 3 = \text{Settlement} + 10 = 13 \text{ settlement days}$ ). These are securities that are "hard to borrow" and the SEC does not want large outstanding short positions that are uncovered to build in these securities. A threshold security is one with a large outstanding short position - defined as one with a clearing short position at the National Securities Clearing Corporation of 10,000 shares or more; and the position represents 1/2% or more of the total shares outstanding.

68. The best answer is b. Under SEC Rule 10b-18, if an issuer wishes to buy its stock in the open market, it cannot do so in a manner that will influence the stock's price. It cannot buy the stock at the market open or within 1/2 hour of market close; and can pay no more than the highest current independent bid or the last sale price, whichever is higher. Thus, the issuer cannot push the price of its securities up in the market.

69. The best answer is a. Under FINRA rules, a member firm must contact NASDAQ MarketWatch within 30 minutes of an execution that it believes to be erroneous. NASDAQ will give a written determination and can nullify the trade, adjust the terms of the trade or do nothing. Either side can appeal the written determination within 30 minutes of receipt to MORC - the Market Operations Review Committee. All decisions made upon appeal are binding and final.

70. The best answer is b. The limit order protection rule applies to customer limit orders - not to member firm proprietary limit orders. Also note that customer limit orders must be protected whether they come from that market maker's own retail base of customers or from the customer base of another member.

71. The best answer is b. Routine telephone calls of this nature are a form of intimidation and harassment, which is a prohibited practice.

72. The best answer is b. This one is interesting. A member firm cannot "trade ahead" of, or front-run, a customer limit order. However, if the firm has a Chinese Wall in place between its proprietary trading desk and its market making desk, then each should have no knowledge of what the other is doing. In that case, there is no violation because the proprietary trading desk does not know about the customer limit order received by the firm's market making desk. On the other hand, if there were no Chinese Wall in place, this would be a clear violation.

73. The best answer is d. Regulation M consists of Rules 101 - 105, and covers trading by market participants during the "20-day cooling off period" in securities where a registered secondary offering is taking place; as well as stabilization in the aftermarket. Rule 103 states that if a market maker in a security that is subject to a secondary offering joins an underwriting group for an "add-on" offering of that issuer's securities, then the market maker must either stop making a market or act as a passive market maker. Rule 104 covers stabilization of the security in the aftermarket. Both of

these rules require that to either act as a passive market maker or to place a stabilizing bid, an independent market must exist. That means that there must be one other market maker posting quotes who is not involved in the distribution of securities.

74. The best answer is **d.** If a dealer holds a customer order, he cannot execute an order for the firm account that competes with that order - unless the customer order is executed first. The customer has placed an order to buy 100 shares of ABC stock at \$20. It is OK for the firm to buy the stock for its own account at \$20.50 prior to executing the customer order, since the customer's limit price has not been met. However, the firm cannot buy for its own account at \$19.50 until the customer order has been executed, since \$19.50 is within the customer's limit. It is perfectly acceptable for the firm to sell the customer the stock at \$20 out of its inventory account. It makes no difference whether the firm sells this stock long to the customer or if it sells the stock short to the customer. In trading accounts, firms routinely maintain both long and short positions.

75. The best answer is **b.** A "penny stock" is defined as one that is not exchange or NASDAQ listed, trading for less than \$5 per share. Translated, a penny stock is a Pink Sheet or OTCBB issue, trading at less than \$5 per share. Exchange listed or NASDAQ issues are not defined as "penny stocks" regardless of price. These securities are subject to the "penny stock rule," which is intended to apply to member firms that specialize in recommending speculative penny stocks to unsuspecting investors. These customers must sign a detailed suitability determination prior to confirmation of purchase, and where the customer signs is a big bold disclaimer that the customer is likely to lose everything! Thus, they are not likely to sign unless they really, really, think they are doing the right thing.

76. The best answer is **b.** If the shares to be sold are going to be borrowed for delivery on settlement, this is a "short" sale. Short-exempt is now used for short sales of stocks that are subject to the "circuit breaker" provisions of Rule 201 of Regulation SHO. If a stock falls by 10% from its previous close, short sales for the remainder of that day and the entire next day must be done at a price higher than the national best bid. Such an order to short a stock that is subject to the circuit breaker is now marked "short exempt."

77. The best answer is **d.** NASDAQ MarketWatch has the authority to declare an inter-dealer trade null and void; or can adjust the terms of the trade, given that the trade is clearly erroneous. It can do so on its own motion or at the request of either the buyer or the seller.

78. The best answer is **d.** Rule 611 of Regulation NMS (National Market System) prohibits an exchange from "trading through" the better priced quote of another exchange. Thus, all exchanges must be linked so that the trade execution will always occur at the NBBO. If another market is posting a better priced quote, the exchange that receives the order must fill the order at the better price, or must route the order to that market for a fill. Regulation NMS applies to NYSE, AMEX, and NASDAQ listed issues. These are all markets that can electronically update and access quotes for trade execution within 1 second of order receipt. The rule does not apply to OTCBB or Pink Sheet issues, where trades are still done manually.

79. The best answer is **a.** Peg orders dynamically track the inside market - their price movements are "pegged" to the movements of the NBBO. A "primary peg" order is tied to the same side of the NBBO - National Best Bid and Offer (inside market). Thus, a primary peg order to buy is tied to the inside bid. A primary peg order to sell is tied to the inside ask.

80. The best answer is c. Unlike trade reports, where generally the executing party reports the trade, OATS (Order Audit Trail System) reports are made by both the buyer and the seller.

81. The best answer is d. This customer placed a market order to buy the stock. The best offer at that moment is \$11.00, yet the order was filled by Market Venue "A" at its offer of \$11.25. This is a violation known as a "trade through" because Market Venue "A" is required by Regulation NMS to either match the best price of the other market (\$11.00) or route the order to the other "better-priced" market for execution within 1 second. "Selling away" is the violation that occurs if a representative sells a customer a security that is being offered by another firm (the security is not being offered by the representative's firm). The representative is "selling away" from his or her firm. "Trade shredding" is the illegal practice of breaking up a large single trade into a bunch of smaller trades in order to increase "payment for order flow" received when that firm routes the orders to a "preferenced" executing broker with whom the firm has a "payment for order flow" agreement.

82. The best answer is c. Marking the Open is trading at the open, or falsely reporting trades at the open, just to affect the stock's opening price. FINRA has disciplined program traders for "marking the open" violations. These firms attempt to arbitrage the difference between an index option's value (which can be based on market open, depending on the index option) against the actual prices of the securities that are included in the index. The illegal practice was placing sequential orders at the open for the securities in the index to either move their price up (or down), so that the index arbitrage position would show a profit.

83. The best answer is b. In this situation, a member firm is "giving up" the name of its clearing broker to the market maker from which it is buying securities. In essence, the member firm has hired another firm to settle and clear all transactions on its behalf. This is a "give-up" clearing agreement. A prime brokerage account is one where a customer, generally an institution, selects one broker (the prime broker) to provide custody and financing of securities purchased, and other brokers (executing brokers) to buy and sell on behalf of the customer. Unlike a prime brokerage account which involves a customer, a give-up clearing arrangement is between two members.

84. The best answer is d. SEC Rule 605 of Regulation NMS requires that market centers prepare, and make available to the public, monthly standardized reports summarizing their order executions. Included in the report is data on:

Effective spreads;

How market orders of various sizes were executed relative to the public quote;

Speed of execution;

Fill rates; and

Price improvement or disimprovement.

Only market and limit order executions (including marketable limit orders and IOC - Immediate or Cancel - limit orders) are included in the reports (an IOC order is one that is filled in part or in full in one attempt, with any unfilled portion canceled). Fill or kill orders (fill it all in one attempt or the entire order is canceled) are no longer accepted.

by any exchange. Special handling orders such as market-not held and average price orders are also excluded. Reports are only compiled for each stock exchange and NASDAQ (but not for the options exchanges, which differs from the options exchanges' inclusion in Rule 606). Also note that OTCBB and Pink Sheet security executions are excluded from these reports.

85. The best answer is d. Rule 611 requires that marketable orders in NMS securities (NYSE, AMEX and NASDAQ) be executed within 1 second of execution at the best price or be routed to the better-priced market for execution. Exempted from the rule are "Benchmark" orders, which are VWAP orders. These are filled after the market close at the volume weighted average price, so the rule does not apply. The rule also does not apply to ISOs - Intermarket Sweep Orders. ISOs place the responsibility to get the best price on the firm placing the order - such orders are sent to multiple markets to sweep their books. The rule does not apply to "stopped orders" which guarantee a minimum price to sell or maximum price to buy for a block trade (at least 10,000 shares or \$200,000). There is no exemption from the rule for minimum quantity orders.

86. The best answer is c. A customer is considered to be long stock to the extent of his **net long** position. In the first choice, the customer is long 200 shares and short 100 shares (short 100 shares "against the box"), for a net long position of 100 shares. A customer is considered to be long if he owns options or warrants and **has exercised**. Choice II is not considered a long stock position since the call has not been exercised, while Choice IV is a long position because the warrants have been exercised. A customer is considered to be long stock if the customer owns a convertible security and gives irrevocable instructions to convert (Choice III).

87. The best answer is d. "Trading ahead of research" is prohibited. A member firm cannot alter its inventory position in anticipation of a research report that it is about to release. FINRA strongly suggests, but does not require, that member firms maintain a Chinese Wall between the firm's research department and trading desk.

88. The best answer is c. The rate of change in price of an option premium as compared to the change in price of the underlying asset is called "delta." Delta has a value anywhere between 0 and 1. A deep out the money option will have a delta of "0" - its price does not move as the underlying asset's price moves because, essentially, the option is worthless. An in the money option has a delta of "1" - for every \$1 move in price of the underlying asset, the option premium also moves in lockstep by the same \$1.

89. The best answer is b. A registered representative buying call options in advance of placing a large buy order for a customer is "front running" the trade, hoping to make a profit from a rise in the stock's price due to the influence of the large purchase. This is an illegal activity.

90. The best answer is a. To take a second job, each SRO requires that the individual obtain the written permission of his employer. No other approvals are needed.

91. The best answer is c. Generally speaking, all records related to advertising, including speaking engagements, must be maintained for 3 years.

92. The best answer is b. Choice **b** defines a repurchase agreement, which is permitted. Prohibited activities are guaranteeing a customer account against loss; making blanket recommendations of low price speculative stocks; and selling dividends to customers.

93. The best answer is d. Arbitration panels consist of individuals affiliated with member firms and representatives from the general public. Attorneys are also permitted on arbitration panels (a nice source of income for attorneys who are retired).

94. The best answer is d. Rule 201 of Regulation SHO requires that if an NMS stock (NYSE, AMEX or NASDAQ) falls by 10%, it can only be sold short on an "up bid" for the remainder of that trading day and the entire next trading day. The intent is to stop short sellers from relentlessly driving the price of a security down.

95. The best answer is c. Fines assessed for insider trading convictions are paid to the Department of Treasury. The fines are not paid to the SEC. If they were, then the SEC might be tempted to "go crazy" prosecuting insider trading cases to pump up its operating budget (raises for everyone!). The amount to be paid is 3 times (treble damages) the profit achieved or loss avoided.

96. The best answer is b. Front running a customer order that is likely to have a market impact is a prohibited practice. This officer is selling 4% of the outstanding shares, which is likely to depress the price of the stock. Prior to placing the order, the representative cannot personally take a position in that stock to profit from the likely market decline - thus, the representative cannot sell that stock short, cannot buy put options on the stock, and cannot sell call options on the stock. There is no reason why the representative cannot buy that stock for his or her personal account - since this is profitable if the stock rises, and will result in a loss if the stock falls.

97. The best answer is a. Orders placed below the market are adjusted on the specialists book for distributions on ex-date. The orders below the market are OBLOSS - Open Buy Limits Open Sell Stops. This is an open sell stop order. The dividend amount of \$.55 is subtracted from the \$70 order price, for an adjusted order price of  $\$70 - \$0.55 = \$69.45$ .

98. The best answer is c. ADR holders receive dividends but do not have voting or preemptive rights. The bank holding the shares passes through dividends to the receipt holders; the bank votes the shares and sells off any preemptive rights, distributing the monies to shareholders. ADRs are the means by which foreign securities are traded in the U.S.

99. The best answer is a. This is an error in execution, and the firm is obligated to execute the order properly. The customer placed an order to buy at \$50 per share, meaning \$50 or lower. Since the stock is trading at \$48 when the error is discovered, the customer must be offered this price.

100. The best answer is c. If a trade is reported to a customer in error, the firm must correct the trade report. It has no obligation to give the customer the trade because it never occurred.

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## Series #56

### Final 2

1.

All of the following may trade for their own account on the floor of an options exchange **EXCEPT** a:

- a. market maker
- b. competitive option trader
- c. registered option trader
- d. floor broker (board broker)

2.

The OCC does all of the following **EXCEPT**:

- a. maintain an orderly trading market in options
- b. issue options contracts
- c. assign options exercise notices
- d. guarantee viability of options contracts

3.

Which statements are true regarding PHLX World Foreign Currency option contracts?

- I Contracts are available in American style
- II Contracts are available in European style
- III Exercise settlement is in units of the foreign currency
- IV Exercise settlement is in U.S. dollars

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

4.

A market maker is quoting ABCD at 31.00 - 31.20 (12 x 5). The inside market is 31.10 - 31.20. The market maker receives a customer order to sell 200 ABCD at 31.18. Under SEC rules, the market maker must:

- a. execute the order
- b. update its quote to .00 - .18 (12 x 2)
- c. update its quote to .00 - .18 (2 x 12)
- d. move its quote away from the inside market

5.

Under SRO rules, order tickets must be time stamped:

- a. at time of execution
- b. within 15 seconds of execution
- c. within 20 seconds of execution
- d. at, or prior to, market close on trade date

6.

Under SEC rules, a registered broker-dealer that engages in the purchase or sale of trading units of \$200,000 or more is known as a:

- a. Third Market Maker
- b. Qualified Block Positioner
- c. Registered Reporting Member
- d. Primary Market Maker

7.

Unless specified by a customer, a market-not held order must be entered as a:

- a. Day order
- b. GTC order
- c. VWAP order
- d. SIZE order

8.

Under Regulation M, the maximum restricted period for trading a subject security by a syndicate member that is **NOT** a market maker is:

- a. 1 day
- b. 5 days
- c. 10 days
- d. 20 days

11.

A Chinese Wall must be maintained by a broker-dealer between investment banking and which of the following departments?

- I Research
- II Trading
- III Retail Sales
- IV Mergers and Acquisitions

- a. I and II only
- b. III and IV only
- c. I, II and III
- d. I, II, III, IV

9.

A "T.2" modifier next to a stock symbol where trading is halted on NASDAQ indicates:

- a. news is about to be announced
- b. news has been announced
- c. market makers are about to resume making quotes
- d. market makers are about to resume trading

12.

Which of the following are true about OATS?

- I Order information must be reported to OATS within 30 seconds
- II Order information must be reported to OATS daily
- III Only the sell side reports to OATS
- IV Both the buy and sell side report to OATS

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

10.

Currently, the market price of ABC stock is at \$50 and the market price of DEF stock is at \$27. In which choice can both of the following orders from customers be immediately executed?

- a. Buy 200 shares of ABC at the market; Sell 200 shares of ABC at \$55
- b. Sell short 200 shares of ABC at \$55; Sell 200 shares of ABC @ \$45
- c. Buy 200 shares of DEF at \$30; Sell short 200 shares of ABC at \$45
- d. Buy 200 shares of DEF at \$30 Stop; Sell short 200 shares of DEF @ \$45 Stop

13.

A customer buys 1 Swiss Franc Mar 88 Call and sells 1 Swiss Franc Mar 90 Call. This position is a:

- a. bull call spread
- b. bear call spread
- c. horizontal call spread
- d. diagonal call spread

**14.**

If the holder of an OEX option contract decides to exercise, the holder:

- a. must pay the strike price of the contract
- b. will receive the current premium on the contract
- c. will receive the in-the-money amount on the contract
- d. will receive the in-the-money amount less the premium paid for the contract

**15.**

Which statements are true regarding European style foreign currency options?

- I The contracts can be exercised at any time
- II The contracts can only be exercised at expiration
- III The contracts can be traded at any time
- IV The contracts can only be traded at expiration

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

**16.**

On the floor of the Chicago Board Options Exchange, duties similar to those performed by the NYSE Specialist are handled by the:

- a. Floor Broker
- b. Designated Primary Market Maker
- c. Order Book Official
- d. Floor Official

**17.**

The latest time to trade an index option (other than during a closing rotation) is:

- a. 4:00 PM EST (3:02 PM CT)
- b. 4:15 PM EST (3:15 PM CT)
- c. 5:30 PM EST (4:30 PM CT)
- d. 11:59 PM EST (10:59 PM CT)

**18.**

On the same day in a margin account when the market price of ABC stock is at \$50, a customer takes the following positions:

**Buy 1 ABC Jan 40 Call @ \$12**

**Sell 2 ABC Jan 50 Calls @ \$5**

**Buy 1 ABC Jan 60 Call @ \$1**

The maximum potential loss is:

- a. \$300
- b. \$700
- c. \$9,700
- d. Unlimited

**19.**

A customer is long the Swiss Franc at a cost of \$.90 per SF. The customer wishes to place a collar on the position using PHLX SF World Currency options. To create the collar, the customer would:

- I Buy 1 PHLX 89 SF Call
- II Buy 1 PHLX 89 SF Put
- III Sell 1 PHLX 91 SF Call
- IV Sell 1 PHLX 91 SF Put

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

20.

FLEX options allow customers to choose:

- a. when the contract will be exercised
- b. the contra-party to the contract
- c. the terms of the contract
- d. when payment must be made for the contract

21.

A customer who is an officer of ABC Corporation confides in his registered representative that this quarter's earnings report will be worse than expected. As a result of this, the registered representative buys puts on ABC stock for his personal account. Which statement is true?

- a. No violation of "insider trading" prohibitions has taken place
- b. Only the registered representative is potentially liable for "insider trading" violations
- c. Only the corporate officer is potentially liable for "insider trading" violations
- d. Both the registered representative and the corporate officer are potentially liable for "insider trading" violations

22.

Quoted options premiums reflect which of the following?

- I Intrinsic value
- II Time Value
- III Commission
- IV Mark-up

- a. II only
- b. II and III only
- c. I and II only
- d. I, II, III, IV

23.

Listed stock options for a given expiration month stop trading on the Chicago Board Options Exchange at:

- a. 4:00 PM Eastern Standard Time on the third Friday of that month
- b. 11:59 PM Eastern Standard Time on the third Friday of that month
- c. 4:00 PM Eastern Standard Time on the Saturday following the third Friday of that month
- d. 11:59 PM Eastern Standard Time on the Saturday following the third Friday of that month

24.

Cabinet transactions may be accepted for:

- I Opening transactions for public customers
- II Closing transactions for public customers
- III Opening transactions for member accounts
- IV Closing transactions for member accounts

- a. I and II only
- b. III and IV only
- c. II and IV only
- d. I, II, III, IV

25.

"A market or limit order which is to be executed in whole or in part as soon as such order is represented in the trading crowd. Any portion not so executed is to be treated as canceled". This is the description of a(n):

- a. Fill or Kill order
- b. All or None order
- c. Immediate or Cancel order
- d. One Cancels the Other order

**26.**

Once the CBOE closing bell is rung on the Friday prior to expiration:

- I All trading ceases in options contracts listed on the Exchange
  - II Closing rotations are employed once a closing price in the primary market is established
  - III Cabinet trades that remain open must be matched and reported
- a. I only
  - b. II only
  - c. I and II
  - d. I, II, III

**27.**

Approved copies of options communications must be retained by member firms for:

- a. 1 year
- b. 3 years
- c. 5 years
- d. 6 years

**28.**

A customer who is long 1 ABC Jan 50 Call exercises on Monday, January 15th. The Options Clearing Corporation notifies a member firm that is short that contract that it has been exercised on Tuesday, January 16th. The member firm selects and notifies a customer who is short that contract that he has been exercised on Wednesday January 17th. The customer who is exercised must deliver the stock no later than:

- a. Thursday, January 18th
- b. Friday, January 19th
- c. Monday, January 22nd
- d. Tuesday, January 23rd

**29.**

The OCC does all of the following EXCEPT:

- a. standardize listed options contracts
- b. guarantee the performance of the writer of listed options contracts
- c. adjust listed options contracts for cash dividends
- d. issue listed options contracts when a report of an opening transaction is received

**30.**

On the same day in a margin account, a customer sells 1 ABC Jan 65 Call and sells 1 ABC Jan 55 Put when the market price of ABC is at \$60. The customer has created a:

- a. Long Straddle
- b. Long Strangle
- c. Short Straddle
- d. Short Strangle

**31.**

The prohibited practice known as supporting would likely be employed by a customer with a:

- I Short Call Position
- II Short Put Position
- III Short Straddle Position

- a. I only
- b. II only
- c. I and III
- d. II and III

**32.**

The prohibited practice known as capping would likely be employed by a customer with a:

- I Short Call Position
- II Short Put Position
- III Short Straddle Position

- a. I only
- b. II only
- c. I and III
- d. II and III

33.

If the writer of an equity call option is exercised, the writer:

- a. must deliver the stock in 1 business day
- b. must deliver the stock in 3 business days
- c. can effect an offsetting closing trade the same day
- d. can effect an offsetting closing trade in 3 business days

35.

Which of the following would violate O.C.C. position limits, assuming a 75,000 contract limit?

- I Long 40,000 ABC Call Contracts / Long 40,000 shares of ABC stock
  - II Long 40,000 ABC Call Contracts / Short 40,000 ABC Put Contracts
  - III Long 40,000 ABC Put Contracts / Short 40,000 shares of ABC stock
  - IV Long 40,000 ABC Put Contracts / Short 40,000 ABC Call Contracts
- a. I and III only
  - b. II and IV only
  - c. II, III, IV
  - d. I, II, III, IV

34.

An order ticket is marked "Buy 100 ABC Jan 50 Calls @ \$5 IOC." The floor trader is able to buy 40 call contracts at the customer's limit. Which statement is true?

- a. The unfilled order balance of 60 contracts is canceled
- b. The trader can attempt a later execution to filled the remaining balance
- c. The unfilled portion of the order must be given to the Market Maker for execution
- d. The unfilled portion of the order must be given to the Board Broker for execution

36.

All of the following statements about the insider trading rules are true EXCEPT:

- a. violators are liable for treble damages
- b. violators can be imprisoned
- c. reporters of violations can receive an informer bounty
- d. violators are subject to civil penalties only

37.

Under Regulation M, passive market making is permitted if:

- a. there are no independent market makers in that stock
- b. there are independent market makers in that stock
- c. there are independent market makers and any passive bid entered is higher than the independent bid
- d. the syndicate manager allows

38.

A customer shorts stock which is on NASDAQ's "threshold" (restricted) list. The following day, the stock is removed from the list. If there is a failure to deliver on settlement, which statement is true?

- a. Mandatory buy-in is required after 10 business days from settlement
- b. Mandatory buy-in is required after 45 days have elapsed from trade date
- c. Mandatory buy-in is required only at the specific direction of NASDAQ
- d. Mandatory buy-in is not required

39.

Which of the following is defined as a "public" arbitrator? An individual who:

- a. within the past 3 years was associated with a securities broker-dealer
- b. is retired from the securities business
- c. is an accountant who has devoted 20% or more of his or her professional work in the last two years to securities firms
- d. is an author who has written magazine articles about the securities business for industry trade publications

40.

Under the provisions of the USA PATRIOT Act of 2001, when opening a new account for a non-resident alien, which of the following must be obtained from the customer?

- a. Social security number
- b. Passport number
- c. Driver's license number
- d. Major credit card number

41.

Which statement is true about inspection of customer account records by the Office of Supervisory Jurisdiction?

- a. Customer account records must be inspected at least annually by the Office of Supervisory Jurisdiction
- b. Customer account records must be inspected at least quarterly by the Office of Supervisory Jurisdiction
- c. Customer account records must be inspected periodically by the Office of Supervisory Jurisdiction
- d. No inspection of customer account records is required by the Office of Supervisory Jurisdiction

42.

All of the following associated persons are required to be fingerprinted **EXCEPT**:

- a. registered representative who solely solicits customer orders
- b. registered representative who solely transfers securities
- c. registered representative who solely processes customer transactions
- d. registered representative who solely handles customer securities and funds

**43.**

Stabilizing bids may be entered:

- I Above the Public Offering Price
  - II Below the Public Offering Price
  - III Below the Public Offering Price but above the current independent market
  - IV At the Public Offering Price
- a. I and IV only
  - b. II and III only
  - c. II and IV only
  - d. II, III, IV

**45.**

Responsibilities of the Office of Supervisory Jurisdiction include:

- I Annual review of each registered representative's reputation
  - II Annual review of customer account records
  - III Review and endorsement of each customer order
  - IV Review and endorsement of correspondence sent to customers if the firm has not implemented a correspondence compliance program
- a. I and II only
  - b. III and IV only
  - c. II, III, IV
  - d. I, II, III, IV

**44.**

An individual who was previously employed as a registered representative at a broker-dealer seeks employment at another member firm. The new employer member requests a copy of that individual's U-5 form. The applicant must provide the copy of the U-5 to the prospective employer within:

- a. 1 business day of request
- b. 2 business days of request
- c. 3 business days of request
- d. 5 business days of request

**46.**

All of the following would fall under the definition of an "insider" EXCEPT:

- a. Lawyer working on a proposed corporate acquisition
- b. Accountant preparing financial statements of a company that is the subject of a merger
- c. Financial printer typesetting the documents for a tender offer that will be announced soon
- d. Investment advisor recommending the stock of a company that is the target of a tender offer

47.

Under industry regulations, which disclosures are required to be made by a member firm upon request?

- I A customer requests that a member firm provide a copy of its latest balance sheet
  - II A customer requests that a member firm provide a copy of FINRA rules
  - III Another member firm requests that the member firm provide its latest financial statement
  - IV The Securities and Exchange Commission requests that a member provide information on a new issue offering managed by that firm
- a. I and II only  
 b. III and IV only  
 c. I, II, III  
 d. I, II, III, IV

48.

A registered individual leaves the industry, and is concerned that he might not reassociate with another member firm within 2 years. The individual approaches a friend at another member firm to hold his license during his absence. This action is:

- a. permitted without restriction  
 b. permitted with the permission of the principal  
 c. permitted with the permission of the self-regulatory organization  
 d. prohibited

49.

An amended U-4 filing is required if a registered individual:

- I is convicted of a felony
  - II discovers a deficiency in the existing filing
  - III changes employers or residence address
  - IV changes marital status
- a. I and II only  
 b. III and IV only  
 c. I, II, III  
 d. I, II, III, IV

50.

A customer who bought stock at \$42 per share has seen the position appreciate to \$79 per share. The customer would like to protect the gain at minimal cost. The customer should buy a:

- a. 75 call and sell an 80 put  
 b. 75 put and sell an 80 call  
 c. 40 call and sell an 80 put  
 d. 40 put and sell an 80 call

51.

An investor that is bearish on stock price movements would:

- I Buy VIX Calls
  - II Buy VIX Puts
  - III Sell VIX Calls
  - IV Sell VIX Puts
- a. I and III  
 b. I and IV  
 c. II and III  
 d. II and IV

52.

A registered representative has been called to active duty in the Persian Gulf. At the time of receiving notice to report for active duty, the representative had previously received notice to complete his Regulatory Element Continuing Education requirement. The representative has 30 days left to complete his CE obligation. The representative leaves for active duty without completing the CE requirement and returns to civilian life 30 months later. Which statement is true regarding the representative's registration status upon his return?

- a. The representative's registration will be suspended because the Regulatory Element CE requirement was not satisfied within the required time frame
- b. The representative's registration remains active and the Regulatory Element CE requirement is waived due to the military service
- c. The representative's registration will lapse because he has not been associated with a member firm for more than 2 years
- d. The representative's registration would have been placed in special inactive status with FINRA and resumes upon return to his securities firm employer

53.

When can a member firm share in the gains and losses of a customer account?

- a. Under no circumstances
- b. If the member shares in direct proportion to the capital contributed
- c. If the customer is an immediate family member
- d. If the SRO gives advance approval

54.

A registered person resigns from a broker-dealer in order to finish graduate school. 3 years later, this individual reassociates with another broker-dealer firm. This person must participate in the Regulatory Element of CE (Continuing Education) on a cycle based on:

- a. the date of initial registration
- b. the date of reassociation
- c. a date determined by FINRA
- d. a date determined by a general principal

55.

Who issues an escrow receipt?

- a. Bank
- b. Brokerage firm
- c. American Depository Trust
- d. Options Clearing Corporation

56.

A customer takes the following positions:

Short 100 ABC Shares @ \$50  
Short 2 ABC Jan 50 Puts

This is a:

- a. Married put
- b. Ratio write
- c. Short straddle
- d. Synthetic short call

57.

What is the maximum number of securities in a narrow-based ETF?

- a. 1
- b. 5
- c. 9
- d. 11

**58.**

A market maker has 2 limit orders to buy 500 shares of ABCD at 10.00. A market order to sell 400 shares is executed by the firm at 10.00, at which point the firm fills one of the two orders for 400 shares. Which statement is true?

- a. This is permitted without restriction
- b. This is permitted as long as the firm consistently applies a methodology for dealing with multiple limit orders
- c. This is prohibited as any limit order must be filled in its entirety
- d. This is prohibited as FINRA rules require equal allocation between multiple limit orders

**60.**

A market maker in ABCD is quoting 10.00 - 10.50 (15 x 10), which is the inside market. A customer enters an order to buy 100 shares at 10.00. Under SEC rules, the market maker:

- a. must update its quote size to 16 x 10
- b. must update its quote size to 15 x 11
- c. must execute the order immediately
- d. is not required to update its quotation

**61.**

Under SRO rules, which **TWO** of the following are examples of locked or crossed markets?

- I Bid quotation is greater than the asked quotation
- II Bid quotation is lower than the asked quotation
- III Asked quotation is greater than the bid quotation
- IV Asked quotation is lower than the bid quotation

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

**59.**

Under SEC Rule 10b-18, all of the following statements regarding an issuer purchasing its own securities are true **EXCEPT**:

- a. purchases cannot affect the opening or closing of the security
- b. daily purchases cannot exceed 25% of the daily trading volume
- c. purchases outside the normal flow are permitted
- d. purchases on any single day can be made through no more than 2 market makers

**62.**

An order ticket to sell 100 ABCD shares long is executed. Under normal circumstances, the securities must be delivered on:

- a. T
- b. T + 1
- c. T + 3
- d. T + 5

63.

An OATS report includes all of the following EXCEPT:

- a. where the order was routed for execution
- b. aggregated orders
- c. date and time of receipt of each order
- d. name of contra party

64.

A market maker is quoting ABCD at 17.25 - 17.50 (10 x 10), which represents the inside market. The bid reflects a customer limit order. To avoid its Manning obligation, the market maker could buy, as principal, as long as it offers incoming sell orders a price at least:

- a. 1 cent above the bid
- b. 5 cents above the bid
- c. 10 cents above the bid
- d. 25 cents above the bid

66.

An officer of a publicly held company provides material non-public information to a neighbor, who immediately buys puts on the subject company. Which statement is true?

- a. The officer violated the insider trading rules
- b. The neighbor violated the insider trading rules
- c. Both the officer and the neighbor violated the insider trading rules
- d. Neither the officer nor the neighbor violated the insider trading rules

67.

Under SEC rules, trade tickets are:

- a. only required for customer orders; not for proprietary orders
- b. only required for proprietary orders; not for customer orders
- c. required for both customer orders and proprietary orders
- d. not required if the details of the trade are promptly reported for matching and settlement

65.

Interpositioning is permitted if:

- a. the member's trading desk is inadequately staffed due to heavy volume
- b. the member charges a lower than normal commission
- c. the member receives order flow in return
- d. the member receives a superior execution

68.

"Marking the Close" is best described as a:

- a. series of trades at or near the close
- b. series of trades at or near the close intended to down-tick the security
- c. series of trades at or near the close intended to up-tick the security
- d. series of trades at or near the close intended to either up-tick or down-tick the security

69.

Under SEC Rule 605 of Regulation NMS, market centers, in their monthly reports on order execution, must disclose all of the following information **EXCEPT**:

- a. quoted spreads
- b. speed of executions
- c. rates of price improvement
- d. fill rates

70.

The Trade Reporting Facility for NASDAQ:

- I requires reports of trades of NASDAQ listed issues within 30 seconds during ACT operating hours
- II immediately disseminates reported last sale information to the NASDAQ ticker
- III provides on-line access to real-time trade reporting information

- a. I only
- b. I and II only
- c. II and III only
- d. I, II, III

71.

NASDAQ market makers must maintain business hours from:

- a. 7:00 AM - 8:00 PM ET
- b. 8:00 AM - 8:00 PM ET
- c. 9:30 AM - 4:00 PM ET
- d. 9:30 AM - 8:00 PM ET

72.

An order entry firm has a "payment for order flow agreement" with a large NASDAQ market maker that pays the entry firm for each round lot 100 share order submitted to the market maker for execution. The order entry firm has a 1,000 share customer order that it submits as 10-100 share orders to the market maker to increase the payment for order flow received. Which statement is true?

- a. This practice is permitted since NASDAQ quotes are only firm for 100 shares
- b. This practice is known as decrementation and is prohibited
- c. This practice is known as trade shredding and is prohibited
- d. This practice is known as wash trading and is prohibited

73.

Under FINRA rules, all of the following information must be recorded on an order ticket **EXCEPT**:

- a. payment for order flow
- b. time of execution
- c. if a sale, whether long or short
- d. whether the trade was solicited or unsolicited

74.

A trader at a large market making firm calls a counterpart at another firm and strongly suggests that the firm raise its offer by 5 cents in order to allow his firm to reduce inventory. In return, the trader promises order flow. This action is

- a. permitted
- b. permitted if the agreement is documented in writing
- c. permitted with the approval of the general principal
- d. prohibited

75.

A customer enters a limit order to buy 800 shares of ABCD at 21.50, which includes an agreed upon mark-up of 25 cents. The last sale was reported at 21.43. Under SEC rules, the order must be protected at:

- a. 21.25
- b. 21.43
- c. 21.50
- d. the next trade of 800 shares or more

78.

Under Regulation M, Rule 105, covering add-on offerings of securities, any short sales effected by persons within how many days of the effective date are prohibited from being closed by the purchase of the same security from the underwriter?

- a. 1
- b. 2
- c. 3
- d. 5

76.

The TRF for NASDAQ:

- a. displays quotes for NASDAQ issues
- b. reports completed trades of NASDAQ issues
- c. displays quotes for Third Market makers in exchange listed issues
- d. reports completed trades of OTCBB and Pink Sheet issues

79.

The Manning Rule requires that:

- a. customer limit orders for OTC securities be protected
- b. customer limit orders for OTC securities be displayed
- c. execution of customer limit orders for OTC securities orders be reported to the Network C Tape
- d. customer limit orders for OTC securities be segregated from proprietary orders for the firm's trading account

77.

Trading in a NASDAQ stock has been halted pending an important news announcement. A customer wishes to place a limit order to sell short the shares during this trading halt. Which statement is true?

- a. The customer order cannot be accepted until trading resumes
- b. The customer order cannot be accepted because it is a short sale
- c. The customer order can be accepted by the member firm but the customer should be notified that trading is currently halted
- d. The customer order can be accepted by the member firm and executed through an unlinked ECN

80.

Which of the following orders for ABCD stock can be accepted into Single Book when ABCD is trading at \$10.50?

- I Buy 100 shares of ABCD @ \$10.00
- II Sell 100 shares of ABCD @ \$10.00 Short
- III Buy 100 shares of ABCD @ \$11.00
- IV Sell 100 shares of ABCD @ \$11.00 Short

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

81.

Which of the following is a manipulative practice?

- a. Placing successive orders to buy the same stock at \$50, \$55, \$60, \$65 and \$70
- b. Placing successive orders to buy a stock and then sell that stock repetitively on the same day
- c. Placing orders to buy stock for the firm's proprietary trading account while holding customer orders to buy that security
- d. Placing orders to short a stock for the firm's proprietary trading account while holding a customer order to buy that security

85.

A tender offer is announced for ABC stock. Which of the following is permitted to tender ABC shares?

- I A customer who is long 100 shares of ABC stock
  - II A customer who is short 100 shares of ABC stock
  - III A customer who is "short against the box" 100 shares of ABC stock
  - IV A customer who is long ABC call options
- a. I only
  - b. I and IV
  - c. II and III
  - d. I, II, III, IV

82.

A trader receives a block order for a NASDAQ security and breaks up the trade into smaller orders to maximize payment for order flow. This action is permitted:

- a. with the permission of the client
- b. if the order is placed as a market-not held
- c. without restriction
- d. under no circumstances

83.

Trading in a stock is suspended. Which statement is true regarding the trading of listed options on that stock?

- a. Only opening transactions are permitted
- b. Only closing transactions are permitted
- c. Both opening and closing transactions are permitted until the contracts expire
- d. Trading will be halted in options contracts on the suspended stock

86.

Which of the following statements are true regarding the Conduct Rule on sharing in customer accounts?

Sharing in an account:

- I is prohibited in all circumstances
- II is not permitted unless the member firm gives prior written approval to the account
- III is only allowed in direct proportion to the capital contributed by the person associated with the member
- IV of the "immediate family" of the person associated with the member is permitted and need not meet the "proportionate test"

- a. I only
- b. II and III only
- c. III and IV only
- d. II, III, IV

87.

Members must make which of the following available to regular bona-fide customers and other members upon request?

- I Copy of the firm's latest statement of financial condition
  - II Copy of the firm's latest income statement
  - III Copy of the firm's latest SRO audit results
- a. I only
  - b. II only
  - c. I and II
  - d. II and III

88.

A member is permitted to give an amount in excess of the gift limitation amount annually to an employee of another firm:

- a. if the principal approves of the amount in writing
- b. if there is a written employment contract spelling out the work to be performed and the compensation to be paid that has been previously approved by the principal
- c. if the individual agrees to provide a 1099 Form to the recipient of the payment
- d. under no circumstances

89.

If, in the course of settlements, securities are suspected to be stolen, a report must be filed with the Securities Information Center within:

- a. one business day of discovery
- b. two business days of discovery
- c. three business days of discovery
- d. four business days of discovery

90.

Under Rule 17a-3, all of the following are records required to be kept by broker-dealers EXCEPT:

- a. records of all activity in customer accounts
- b. records of all dealer quotations made in the course of trading
- c. records of original entry for cash receipts and disbursements
- d. record of original entry for all purchases and sales, whether for a customer or the dealer's account

91.

Under Rule 17f-2, which of the following employees of a broker-dealer must be fingerprinted?

- I Registered representatives
- II Registered principals
- III Unregistered employees that process securities
- IV Unregistered employees that process monies

- a. I and II only
- b. III and IV only
- c. I and IV only
- d. I, II, III, IV

92.

A trading halt has occurred and will last the rest of the day. A customer sends an urgent message to her broker to sell the security on ANY exchange. The broker should:

- a. hold the trade until the market reopens the next day
- b. send the trade to the Canadian exchange for execution
- c. execute the trade in the upstairs market
- d. execute the trade in the firm's proprietary trading account

93.

A "threshold list" security is one that:

- a. has a history of settlement failures over 5 settlement days
- b. must be bought in 5 business days past settlement if there is a fail to deliver
- c. is subject to higher position limits because it is actively traded
- d. is subject to computerized oversight in the StockWatch program

94.

A registered representative has been called to active military duty and his registration has been placed in "inactive status" by the member firm. Once the registered individual returns to civilian life, special inactive status ceases if the individual does not return to work at the member firm within:

- a. 30 days
- b. 60 days
- c. 90 days
- d. 120 days

95.

Which of the following is NOT a reason why the CBOE would halt trading in an options series?

- a. There is a pending news material news announcement about the company
- b. The CBOE trading system is experiencing technical problems
- c. The underlying stock has halted trading in its primary market
- d. The open interest in the contract has exceeded pre-set levels

96.

Which of the following open orders on the Specialist's (DMM's) book as of the close of trading would be adjusted if the "ex" date were tomorrow?

- I Buy 100 ABC @ 50 Day
- II Buy 100 ABC @ 60 Stop GTC
- III Buy 100 ABC @ 50 GTC
- IV Sell 100 ABC @ 60 GTC

- a. III only
- b. I and III
- c. II and IV
- d. I, II, III

97.

Which is NOT considered to be a good delivery for an 800-share purchase of stock?

- a. One 800-share certificate
- b. Eight 100-share certificates
- c. Ten 80-share certificates
- d. Thirty two 25-share certificates

98.

Which orders, if executed, do NOT guarantee a specific price or better?

- I Buy Limits
- II Buy Stops
- III Sell Limits
- IV Sell Stops

- a. I and II
- b. III and IV
- c. I and III
- d. II and IV

99.

Which statements are true regarding ex-dates?

- I The ex-date for cash distributions is set at 2 business days prior to record date
  - II The ex-date for cash distributions is set at the day after the payable date
  - III The ex-date for non-cash distributions is set at 2 business days prior to record date
  - IV The ex-date for non-cash distributions is set at the day after the payable date
- a. I and III
  - b. I and IV
  - c. II and III
  - d. II and IV

100.

Which statements are true?

- I Regular way trades of listed stocks settle on the business day after trade date
  - II Regular way trades of listed stocks settle 3 business days after trade date
  - III Regular way trades of listed stock options settle on the business day after trade date
  - IV Regular way trades of listed stock options settle 3 business days after trade date
- a. I and III
  - b. I and IV
  - c. II and III
  - d. II and IV

## Series #56 - Final 2 Explanations

1. The best answer is d. On the Options Exchanges, floor brokers, also known as board brokers, handle trades as agent only. They accept orders from the public for execution but do not trade for their own account. Market makers on the exchange floor make markets in option contracts and are buying and selling for their own account. Registered options traders and competitive options traders are individuals that trade on the floor for themselves to add liquidity to the market. They can take positions and carry them.
2. The best answer is a. The Options Clearing Corporation is the issuer and guarantor of listed options contracts. The OCC keeps the record of all long and short positions and changes that occur in these positions due to trading or exercise. When the OCC receives an exercise notice, it picks a writer to be assigned the contract on a random basis. Trading of the contracts occurs on exchanges - there is no trading at the OCC!
3. The best answer is d. PHLX-traded World Foreign Currency options are only available European style and can only be exercised at expiration, not before. However, they can be traded anytime. Exercise settlement results in the writer delivering the holder the "in the money" amount in cash - in U.S. dollars only. There is no delivery of the foreign currency.
4. The best answer is b. If a market maker receives an order which improves its quoted price or size, it must reflect this improvement in its quote. This customer has placed an order to sell 200 shares at 31.18, which is better than the market maker's current offer of 31.20. Thus, the quote must be updated to: 31.00 - 31.18 (12 x 2).
5. The best answer is a. Order tickets must be stamped at time of order entry, at time of order execution, and at time of order cancellation, if canceled.
6. The best answer is b. Under SEC rules, a Qualified Block Positioner is defined as any broker-dealer who is registered with the SEC under Section 15 of the Act that engages in the purchase or sale of blocks of stock of \$200,000 or more. A Qualified Block Positioner must meet higher capital standards than Qualified Third Market Makers. Such firms can execute block transactions without being subject to Regulation SHO. In executing block transactions, the firm must exercise reasonable diligence so that the block could not be sold to or purchased from others at better terms; and that the shares comprising the block are sold as rapidly as possible under the circumstances.
7. The best answer is a. Market-Not Held orders give the representative discretion over price and time of execution. For retail customers, these must be "Day" orders and must be filled that day, unless the customer specifies otherwise.
8. The best answer is b. During the cooling off period for "add-on" offerings, Regulation M places restrictions on syndicate members that are not market makers from trading that issuer's securities. The idea is that the syndicate members will not attempt to bid up the price of the issuer's outstanding shares, in order to be able to raise the POP of the additional issue. The rule states that:

If the security is actively traded (average daily trading volume of \$1,000,000 or more and public float of at least \$150,000,000), there are **no** restrictions placed on market

makers trading the issue prior to the distribution. The idea here is that this issue is too big for the price to be manipulated. This is called a "Tier 1" issue.

If the security has an average daily trading volume of \$100,000 and a public float of at least \$25,000,000, the restricted period is the business day prior to the effective date. This is called a "Tier 2" issue.

Any other security not meeting these minimums is a "Tier 3" issue and is subject to a restricted period of 5 business days prior to the effective date.

9. The best answer is b. "T.1" next to a NASDAQ stock symbol indicates that the trading is halted pending a news announcement. "T.2" indicates that the news announcement has been made. "T.3" indicates that market makers can begin quoting the stock, and 5 minutes later, may begin making a market in that stock.

10. The best answer is c.

In Choice A, the market order to buy ABC stock can be immediately executed, but the order to sell ABC at \$55 (a sell limit) cannot be executed because ABC is currently at \$50 and a sell limit order at \$55 means sell at \$55 or higher.

In Choice B, the order to sell short ABC at \$55 (sell limit, with the sale of borrowed shares) cannot be executed because ABC is currently at \$50, and the order to sell at \$55 means that the customer wants to sell for \$55 or higher. The order to sell ABC at \$45 is a sell limit order - the customer wants to sell at \$45 or higher. Since the stock is currently at \$50, this order can be executed immediately at \$50.

In Choice C, the order to buy DEF @ \$30 is a buy limit order - the customer does not want to pay more than \$30. Since the stock is currently at \$27, this order can be executed immediately at \$27. The order to sell at \$45 is a sell limit order - meaning sell at \$45 or higher. Since the stock is currently at \$50, this order can be filled immediately at \$50.

In Choice D, the customer has placed an order to buy DEF at \$30 stop. The order is used to establish a long position in a rising market and is placed above the current market price of \$27. If the market rises to \$30, the order is triggered and becomes a market order to buy. Thus, this order cannot be filled right now since the market is now at \$27. The order to sell short ABC at \$45 stop establishes a short position in a falling market and is placed below the current market price of \$50. If the market falls to \$45, the order is triggered and becomes a market order to sell. Thus, the order cannot be filled right now because the market is at \$50.

11. The best answer is c. Chinese Walls to stop information flow must be maintained between:

Investment Banking and Trading;  
Investment Banking and Research; and  
Investment Banking and Sales (Retail and Institutional).

The intent is to stop the flow of information on upcoming underwritings, mergers or takeover deals being done by the underwriting department to others that might trade on the information for a profit before the public knows about the upcoming deal. Regarding the Chinese Wall required between investment banking and research, the

intent is to make sure that research is truly independent and not influenced by the investment bankers at that firm that might demand a "favorable" research report on an issuer so that they can curry favor with that issuer to get future underwriting business. The M & A department and the underwriting department are usually one and the same at investment banking firms. There are no barriers required between these two groups.

12. The best answer is d. OATS stands for Order Audit Trail System - the system for automated order entry. Both the buy and sell side enter their orders into OATS. OATS reports are made at the end of each day, and are matched, retroactively, to the actual trade reports that were made throughout that day. Any unmatched transactions are then "kicked-out" of the system for timely resolution. Also note that the CBOE has a similar system called "COATS."

13. The best answer is a. The customer's position is:

Buy 1 SF Mar 88 Call  
Sell 1 SF Mar 90 Call

This is a price or "vertical" spread. It is not a horizontal spread (different expirations) or a diagonal spread (both strike price and expiration being different). Price spreads can either be bullish or bearish. In this example, the customer is buying the lower strike price call, so this must have the higher premium. Thus, the long call is more expensive than the short call and this is a "debit" call spread. When a customer buys (pays the debt) for a call spread, it is essentially the same as buying a call with limited upside gain potential. This is a bull position - a bull call spread.

14. The best answer is c. Index options settle in cash if they are exercised. The writer of the option must pay the holder the in-the-money amount the next business day.

15. The best answer is c. Both European style and American style option contracts can be traded at any time until expiration. The distinction between the contract types relates solely to exercise provisions. American style contracts can be exercised at any time up until expiration. European style contracts can only be exercised at the expiration date. In the U.S., all option contracts are American style except for foreign currency options, which are available in both forms.

16. The best answer is b. The Specialist (now called the DMM - Designated Market Maker) on the NYSE floor performs 2 functions. He acts as market maker in a specific security, buying and selling for his own account. He also keeps the "book" of limit and stop orders that are away from the market for other brokers, and executes these orders for a commission. On the CBOE, the DPM (Designated Primary Market Maker) performs both functions. In addition, to add liquidity to the market, the CBOE also has other Market Makers in listed options that compete with each other and the DPM, but they do not maintain a book of orders. The CBOE also has OBOs - Order Book Officials - in listed options that maintain the book of public orders, but who do not make markets.

17. The best answer is b. Unlike equity options, which stop trading at 4:00 PM EST; index options stop trading at 4:15 PM EST.

18. The best answer is a. This customer has created a butterfly spread with a net debit of \$300.

Buy 1 ABC Jan 40 Call @ \$12  
Sell 2 ABC Jan 50 Calls @ \$5  
Buy 1 ABC Jan 60 Call @ \$1

The customer must pay \$12 for the Jan 40 Call and must pay \$1 for the Jan 60 Call; since \$5 per contract was received from selling each of the Jan 50 Calls, a credit of \$10 is received; so the net debit is 3 points ( $\$13 - \$10 = \$3$ ). If the market stays below 40, all of the contracts expire "out the money" and the \$300 debit is lost.

If the market rises from 40 to 50, there is a 10 point gain on the Jan 40 Call; while the other contracts expire. The net gain is 10 points - 3 point debit = 7 points or \$700. This is the maximum potential gain.

If the market rises above 50, the customer will begin to lose on the Short Jan 50 Call. Above \$50, there is a maximum 10 point gain on the long call spread (Long Jan 40 Call; Short Jan 50 Call); and a maximum 10 point loss on the short call spread (Short Jan 50 Call; Long Jan 60 Call). The net of these is "0." Thus, the maximum loss in a rising market is limited to the \$3 debit paid.

19. The best answer is c. A "collar" is the purchase of a put at a strike price below that of the underlying instrument (putting a floor on the instrument's price); and the sale of a call at a strike price above that of the underlying instrument (creating a ceiling price, above which the instrument will be called away). By putting a collar on the price, the customer is essentially guaranteeing a minimum and maximum price for the underlying instrument. The net cost of such a collar should be close to "0" since both contracts are "out the money" and the premium received from the sale of the call offsets the premium paid to buy the put.

20. The best answer is c. FLEX options available on the CBOE and PHLX allow the customer to customize the terms of the contract. The contra-party to such a contract would be the Specialist on the PHLX or Designated Primary Market Maker (DPMM) on the CBOE. In contrast, regular options are standardized trading instruments.

21. The best answer is d. The registered representative is clearly liable for "insider trading" violations, since he effected trades based upon material, non-public information. In addition, the officer is liable (the "tipper") as well under the provisions of the Insider Trading Act of 1988, since he should not have been relating this information in this manner.

22. The best answer is c. Premium quotes (which are the quotes of market markets) reflect the total of intrinsic value and time value components. Commissions and mark-ups are not included in these quotes. However, they would be added to the quote as the charge to a public customer for effecting a trade at the stated quote.

23. The best answer is a. Listed stock options for a given expiration month stop trading at 4:00 PM Eastern Standard Time on the third Friday of that month. (Also note that index options, in contrast, trade until 4:15 PM Eastern Standard Time.)

24. The best answer is c. Cabinet trades ("accommodation liquidations") are used to provide a record to individuals who have worthless options positions that are soon to expire "out the money." In a closing transaction, the Order Book Official will accept limit orders from holders and writers of "out the money" contracts to close the positions at a total premium of \$1 per contract (\$.01 per share). The OBO will match the orders as an accommodation, and report the executed trades to the firm that placed the order. The OBO may accept these trades from anyone, not just the public (which is the case with all other orders placed with OBOs). Thus, market makers and member firms may place cabinet trades with OBOs for their own accounts.
25. The best answer is c. "A market or limit order which is to be executed in whole or in part as soon as such order is represented in the trading crowd. Any portion not so executed is to be treated as canceled" is the description of an immediate or cancel order.
26. The best answer is c. Once the closing bell is rung on the Friday prior to expiration, trading **stops**, including cabinet trades. The only remaining activity is a closing rotation performed for 10 minutes or so, in each series that is expiring. This allows for an orderly closing of any "in the money" contracts, based upon the reported closing price on the principal Exchange for that stock, that still remain open.
27. The best answer is b. Copies of options communications must be retained for 3 years.
28. The best answer is a. Exercise settlement is 3 business days from exercise date. The fact that the writer was notified of the exercise 2 days after this date is of no relevance. If exercise occurs on Monday, January 15th, the stock must be delivered on Thursday, January 18th - that is, 3 business days after exercise date.
29. The best answer is c. The OCC does not adjust listed equity options for normal cash dividends. It only adjusts contracts for 2:1 or 4:1 stock splits and for extraordinarily large cash dividends. For fractional stock splits, stock dividends and reverse stock splits, it does not adjust the contract - rather it adjusts the "deliverable" if there is an exercise. The OCC standardizes listed option contracts, issues listed options contracts and guarantees performance of contract writers upon exercise.
30. The best answer is d. A strangle is a variation on a straddle. In a long strangle, a customer buys an "out the money" call and an "out the money" put on the same stock, hoping for a sharp market movement either up or down. The premium outlay is lower than for a long straddle; but a sharper market move is needed for the position to be profitable. In a short strangle, a customer sells an "out the money" call and an "out the money" put on the same stock, hoping that the market stays relatively stable (flat). The premium received is lower than for a short straddle; but a sharper market move, either up or down, is needed for either position to move "in the money" at the expense of the writer. Since the market price of the stock is at \$60, the short 65 call is 5 points "out the money" and the short 55 put is also 5 points "out the money," creating a short strangle.
31. The best answer is d. Supporting is a prohibited manipulative practice to attempt to "support" a stock's price, that is, keep the stock's price from falling. This would be used by unscrupulous investors who stand to lose in a falling market. Naked short puts show ever increasing loss as the market falls, as do short straddles, (which are composed of both a naked short call and a naked short put). Naked short call positions show a gain in a falling market.

32. The best answer is c. Capping is a prohibited manipulative practice to attempt to "cap" a stock's price, that is, keep the stock's price from rising. This would be used by unscrupulous investors who stand to lose in a rising market. Naked short calls show ever increasing loss as the market rises, as do short straddles, (which are composed of both a naked short call and a naked short put). Naked short put positions show a gain in a falling market.

33. The best answer is b. Exercise settlement of equity options results in a regular way delivery of the stock, 3 business days after exercise date.

34. The best answer is a. An "Immediate or Cancel" (IOC) order is an order to be filled in its entirety or in part in one attempt; any unfilled portion is canceled.

35. The best answer is b. Position limits only apply to options contracts on each "side" of the market - they do not apply to stock positions on each side. Thus, 40,000 Long Calls (40,000 contracts on the upside) and 40,000 Short Puts (40,000 contracts on the upside) exceed the maximum 75,000 contract limit on 1 side. Similarly, 40,000 Long Puts (40,000 contracts on the downside) and 40,000 Short Calls (40,000 contracts on the downside) exceed the 75,000 contract limit on 1 side.

36. The best answer is d. Insider trading violations are punishable by civil penalties, treble damages and imprisonment. Anyone who gives information to prosecutors that leads to an insider trading conviction can claim an informer bounty of 10% of the amount recovered.

37. The best answer is b. By definition, to be a "passive market maker" under Regulation M, a firm cannot bid any higher for a security than the highest current independent bid. Thus, in order to be a passive market maker, there must be at least one other independent market maker in that issue.

38. The best answer is d. If a customer sells short a security and fails to deliver on settlement, Regulation SHO requires that the position be bought-in after 10 business days from settlement (called "13 settlement days" in the rule, since the rule counts from trade date.  $T + 3 = S + 10 = T + 13$ ) if the security is on the exchange's list of "threshold" securities as of trade date and remains on the list during that entire time window. If the security is removed from the list after trade date, then the time window does not restart counting unless the security is added to the threshold list again (the list is updated daily). Basically, a "threshold" security is one that has a large outstanding short position - the SEC does not want large outstanding short positions that cannot be covered to build over time.

39. The best answer is d. FINRA defines a "Non-Public Arbitrator" as any person (or that person's immediate family member), who:

— within the past 3 years was associated with a securities broker-dealer (including government and municipal dealers) or with a commodities firm;

is retired from engaging in any of the business activities in the previous definition;

is an attorney, accountant, or other professional who has devoted 20% or more of his or her professional work in the last 2 years to clients in the first definition;

is an employee of a bank or other financial institution and effects transactions in securities (including governments and municipals) or commodities (including

futures and options) or monitors compliance of employees engaged in these activities.

Arbitration panels generally consist of 3 individuals (if the amount in dispute is \$100,000 or more), with 1 being a non-public arbitrator; and 2 being public arbitrators for disputes with customers; and 3 non-public arbitrators for "intra-industry" disputes.

40. The best answer is b. When opening a customer account for a non-resident alien, the customer's foreign passport number must be obtained. In addition, the customer must have a U.S. tax identification number.

41. The best answer is c. The Office of Supervisory Jurisdiction must inspect customer account records periodically to detect and prevent irregularities or abuses. In addition, the member firm must inspect each OSJ at least annually, to ascertain that these procedures are, in fact, being carried out.

42. The best answer is c. Rule 17f-2 requires that all officers and employees of broker-dealers be fingerprinted **EXCEPT** for the following:

Persons not engaged in the sale of securities; and

Persons who do not regularly have access to the keeping, handling, or processing of monies, securities, or the records of original entry.

Thus, a registered representative who solely processes customer transactions (e.g., preparing confirmations) need not be fingerprinted.

43. The best answer is c. Under the SEC's rules relating to stabilization, stabilizing bids may only be entered at or below the Public Offering Price, if no current independent bid exists for that issue. If a current independent bid exists, then a stabilizing bid can only be placed at or below this quote. For most new issues, there is no current independent bid because the NASDAQ screen is "blacked out" until the syndicate manager closes the syndicate books and notifies NASDAQ operations that the security is free to trade. When the screen is "turned on," it opens showing the stabilizing bid placed by the manager. At that point, any other independent market makers may enter quotes.

44. The best answer is b. If a person who has left a member firm associates with another member; and the new member requests a copy of that individual's U-5 form from the new employee; the new employee must provide a copy of the U-5 to the new employer within either 2 business days of the request if the U-5 has been obtained from the ex-employer; or 2 business days of receipt from the ex-employer.

45. The best answer is b. FINRA supervisory requirements for the Office of Supervisory Jurisdiction (OSJ) include an annual compliance review with each registered representative and registered principal to review recent regulations, firm policies, etc. There is no requirement for a review of the registered representative's reputation. Customer account records must be inspected by the OSJ periodically - an annual inspection is not sufficient. The OSJ principal must review and endorse each customer order. Each piece of correspondence to customers must also be reviewed and endorsed if the firm has not implemented a correspondence compliance program that trains representatives as to what is permitted in such communications and that audits these for compliance. If such a program is adopted, then the principal need only review correspondence - there is no need for a principal signature on each piece.

46. The best answer is d. An "insider" is someone who has material non-public information. In this question, the lawyer, accountant, and financial printer all have non-public information. The investment advisor recommending the stock does not appear to have non-public information, and thus is the best choice as a "non-insider."

47. The best answer is d. FINRA rules require that a member firm give its latest financial statement (balance sheet) to either a customer or another member upon request. FINRA rules also require that a customer be furnished with a copy of the FINRA Manual upon request. For purposes of this rule, a customer is defined as a person who has cash or securities in custody of the member firm. Of course, any SEC requests for information from a broker-dealer must be complied with by that firm.

48. The best answer is d. If a person disassociates from a member firm, that person's registration is terminated within 30 days with the filing of the U-5 form. If that person does not reassociate with another member firm within 2 years, all licenses lapse. FINRA prohibits the "parking" of licenses with a "friendly" member firm during any period when a person is working outside the industry to avoid this consequence.

49. The best answer is c. On the U-4 filing, disclosure is given of the prior 10 years' employment; and the prior 5 years' residences. If these change, an amendment must be filed. If a person is convicted of a felony, this must be disclosed on the U-4. Obviously, if a deficiency is found in an existing U-4 filing, this must be remedied with an amendment. Finally, marital status is not asked on the U-4 Form, so a change would not require an amendment.

50. The best answer is b. To protect an appreciated stock position at minimal cost, the customer should "collar" the stock position - this is the purchase of a put just below the current market price of the stock and the sale of a call just above the current market price of the stock. Both the put and the call are "out the money," so the market premiums will be low - giving the customer a "collar" at minimal cost. The current market price of the stock is at \$79 per share. If the customer buys a 75 put, the customer has the right to sell the stock at \$75 per share in a falling market. This put is 4 points "out the money," so it won't cost too much. However, the customer will lose 4 points if the stock falls below \$75 (stock is worth \$79 and can be sold at \$75 by exercising the put in a falling market). To reduce the cost even further, the customer can sell an 80 call (1 point out the money when the stock is at \$79). The premium collected reduces the customer's cost of protection - however the price of this is that the customer will not have any gain if the stock rises above \$80 - since the call will be exercised. Thus, "collaring" the position only makes sense if the customer believes that there is a good risk that the stock might drop, and that there is not much chance that the stock's price will rise, during the life of the collar.

51. The best answer is b. The VIX option is negatively correlated to stock price movements. If stock prices are falling, then the VIX would be expected to rise. The profitable VIX options positions would be long VIX calls and short VIX puts.

52. The best answer is d. If a registered individual is called up for active duty, his or her registration is placed in special "inactive" status, and basically is frozen in time until that person returns to civilian life. Upon return to work, the clock starts ticking again on the CE requirement, which must be completed within 30 days of that person's return to work (since it had 30 days to go when the individual was called for military service).

53. The best answer is b. The wording of the SRO rule on sharing in a customer account applies to both member firms and associated persons. The rule states that a member firm and an associated person can only share in a customer account if:

- 1) the associated person obtains written permission from the member firm; and
- 2) the member firm or person associated with the member firm obtains prior written permission from the customer; and
- 3) the member or person associated with the member firm only shares in direct proportion to capital contributed by the member or person associated with the member firm (the proportionality test is waived for sharing in accounts of immediate family members).

Thus, Choices a and d are clearly incorrect. Choice c is incorrect because sharing is not restricted only to accounts of immediate family members. Choice b is the best one offered, since it covers the requirement for sharing in direct proportion to capital contributed. Notice that the question does not address the requirement to get written customer approval.

54. The best answer is b. If a registered person terminates association with a broker-dealer firm, and reassociates after 2 years of termination, that person is subject to the Regulatory Element of CE on a cycle based on the date of reassociation (i.e., the most recent registration date).

55. The best answer is a. The OCC accepts an "escrow receipt" for stock to cover short call positions or an escrow receipt for cash to cover short put positions. An escrow receipt is a receipt from a bank showing that the stock is being held on deposit by the bank and that the bank will deliver the shares if there is an exercise of the short call; or that it will deliver the cash if there is an exercise of a short put.

56. The best answer is b. Ratio writes are ratio income strategies used in flat markets. This customer is selling 2 puts against a short stock position (a 2:1 ratio write) to earn double income in a flat market (since both short puts would expire). If the market rises, the puts expire and the customer is left with a short stock position that has unlimited upside risk. If the market falls, both short puts are exercised, obligating the customer to buy 200 shares of stock at the strike price. One short put is covered by the short stock position; the other short put is naked and the customer can lose all the way to "0" on that position.

57. The best answer is c. The technical definition of a narrow-based index is one with 9 or fewer stocks; where no one stock is more than 30% of the value of the index; and no more than 60% of the index value is attributable to the 5 largest stocks in the index.

58. The best answer is b. All firms that accept limit orders must have a methodology in place to deal with multiple limit orders at the same price. This firm can allocate the market order to sell against either of the customer limit orders to buy. Since the market order to sell 400 shares is less than either customer limit order to buy of 500 shares, the balance of the one partially filled order (100 shares) must be protected; as must the other unfilled 500 share order to buy at 10.00.

59. The best answer is d. Under SEC Rule 10b-18, if an issuer wishes to buy its stock in the open market, it cannot do so in a manner that will influence the stock's price. All transactions on a given day must be executed through only 1 market maker (not 2). It cannot buy the stock at the market open or within 1/2 hour of the close; and can pay no more than the highest current independent bid or the last sale price, whichever is higher. Its daily purchases cannot exceed 25% of daily trading volume in the issue, however purchases outside the normal order flow are permitted - such as block purchases (block order handling procedures have safeguards in them so that the order will not unduly influence the market price of the issue).

60. The best answer is d. If a customer limit order is at the inside market and is of "de minimis" size (10% or less of display size), the order does not have to be displayed. The market maker's bid at 10.00 is for 1500 shares. This customer order is for 100 shares, so it is for less than 10% of the display size and need not be displayed. Note, however, that it must still be protected, whether it is displayed or not.

61. The best answer is b. A locked market is one where the inside bid and ask are the same. A crossed market is one where the inside bid is higher than the inside ask. A normal market is one where the inside ask is higher than the inside bid.

62. The best answer is c. If there are no other instructions on an order ticket, it is assumed that settlement will be "regular way" - which is 3 business days after trade date for equity securities.

63. The best answer is b. OATS stands for the Order Audit Trail System, and is FINRA's electronic record of all orders entered for NASDAQ, OTCBB and Pink Sheet issues. This data is used for matching the order data to the actual trade that results through the ACT system. Reports into OATS are made on an order-by-order basis - they cannot be aggregated. In contrast, trade reports through ACT can be aggregated. The OATS information must include, among other things, date and time of order receipt; the contra-party; order identifier; terms of the order; time in force; where the order was routed for execution; and execution price. OATS data is entered at the end of each day, and is matched to the ACT reports that were made throughout that trading day.

64. The best answer is a. The market maker's displayed bid is at 17.25 - representing a customer limit order. If it were to buy at 17.25 or lower as principal, it would trigger a Manning obligation to buy for the customer. If it buys, as principal at 17.26 or higher (1 cent above the bid), then the firm has not "traded ahead" of the customer and there is no Manning obligation to fill the customer limit order to buy.

65. The best answer is d. Interpositioning (putting a middleman firm between a customer and the best market) is a prohibited practice unless it can be demonstrated that the use of the middleman firm will result in a better execution for the customer.

66. The best answer is c. The insider trading rules place liability on both the "tipper" and the "tippee," if the inside information was used to trade. Thus, the officer of the company that gave the tip; in addition to the neighbor who traded on it; are liable. Note that the actual stock of the issuer does not have to be traded for a violation to occur. Trading of equivalent or derivative securities based on inside information is a violation as well.

67. The best answer is c. The SEC requires that a copy of **each** order memoranda (trade ticket) be made and retained for 3 years, with all the details of the order information. It makes no difference if the order is for a customer account or for the firm's proprietary trading account. This can be kept either as a paper or electronic record.

68. The best answer is d. "Marking the close" refers to trading, at or near the close, to influence the closing price of the security, either up or down. This is a prohibited manipulative practice.

69. The best answer is a. SEC Rule 605 of Regulation NMS requires that market centers prepare, and make available to the public, monthly standardized reports summarizing their order executions. Included in the report is data on:

Effective spreads;

How market orders of various sizes were executed relative to the public quote;

Speed of execution;

Fill rates; and

Price improvement or disimprovement.

Quoted spreads are often much wider than effective spreads, since most trading occurs within the quoted spread. Thus, effective spreads are included in the report - not quoted spreads.

70. The best answer is d. The NASDAQ TRF (Trade Reporting Facility) is operated on the ACT platform. It requires that trades that occur in NASDAQ issues be reported within 30 seconds of execution during ACT operating hours (8:00 AM - 8:00 PM). Trade reports received by the TRF are immediately disseminated to the NASDAQ ticker and the news media through NASDAQ's "TDDS" - Trade Data Dissemination Service. Members have on-line access to real-time trade reporting information through the TRF's "Time and Sales" feature.

71. The best answer is c. NASDAQ market makers must be open for business during regular Market trading hours - 9:30 AM - 4:00 PM ET. They may elect to be open for the Premarket hours session as well as Aftermarket hours session - but are not obligated to do so.

72. The best answer is c. "Trade Shredding" is the practice of splitting large orders into multiple smaller orders for execution for the primary purpose of maximizing "payments for order flow." This is a prohibited practice. These payments could come in the form of credits, commissions, rebates of fees or any other payment of value.

73. The best answer is a. Payment for order flow information, if such a payment was made, is required on customer confirmations. It is not required on order tickets. Order tickets must have the time of execution stamped on the ticket. If the order is a sale, the ticket must be marked long or short. Finally, the ticket must be marked "solicited" or "unsolicited," showing how the order was received.

74. The best answer is d. This is a form of intimidation, which is prohibited.

75. The best answer is a. Limit orders are protected at a net price, excluding any mark-ups or mark-downs. Since the order to buy was placed at 21.50, including an agreed upon mark-up of 25 cents, the order must be protected at 21.25.

76. The best answer is b. The Trade Reporting Facility for NASDAQ runs on the ACT platform and reports completed trades of NASDAQ issues. The NYSE TRF reports completed trades of exchange listed issues effected OTC in the "Third Market." Note that it does not show quotes. Quotes for NASDAQ issues show in Single Book. Quotes for exchange listed issues show in CQS - the Consolidated Quotations Service. Finally, the ORF (Over The Counter Reporting Facility) reports completed trades of OTCBB and Pink Sheet issues.

77. The best answer is c. There is nothing prohibiting a member firm from accepting an order for a security that is subject to a trading halt. The order will be executable when trading resumes. However, the customer should be notified that there is a trading halt and that the order cannot be filled currently. If there is a trading halt, that means that there is no trading in that security anywhere, including ECNs.

78. The best answer is d. Rule 105 of Regulation M governs short-selling in connection with a public offering of securities during the cooling off period. Regulation M only applies to add-on offerings, not to IPOs. The rule establishes a 5-day restricted period prior to the effective date, where anyone who sells that security short is prohibited from purchasing that security from the underwriters to cover the short position. The intent is to stop a nasty market manipulation where short-sellers would "pounce" on the stock of a company that was about to issue shares in an add-on offering, relentlessly selling that company's stock short. This would drive down the price, and this would force the underwriters to lower the POP of the issue. The short sellers could then make a tidy profit by purchasing that stock from the underwriters at the lower POP, and using those shares to cover the short positions. With Rule 105, these covering purchases would have to be made in the market and not from the underwriter.

79. The best answer is a. The "Manning Rule" is the limit order protection rule. It prohibits NASDAQ and OTCBB market makers from "front running" customer limit orders.

80. The best answer is b. The market price is currently \$10.50 per share.

Orders that are lower than the current market (Buy Limits) will be placed in Single Book and filled if the market drops. Thus, the order to Buy 100 shares of ABCD @ \$10 will go onto the book of orders. An order to Buy 100 shares of ABCD @ \$11 will be immediately filled at \$10.50 since this is an order to buy at \$11 or better (buying lower is better).

Orders that are higher than the current market (Sell Limits) will be placed in Single Book and filled if the market rises. Thus, the order to Sell 100 shares of ABCD @ \$11 will go onto the book of orders. It makes no difference if the order is a long or short sale. An order to Sell 100 shares of ABCD @ \$10 will be immediately filled at \$10.50 since this is an order to sell at \$10.50 or higher (selling higher is better). Again, it makes no difference if the order is a long or short sale.

81. The best answer is a. Choice a is the manipulative practice of "painting the tape" - placing a sequence of trades at successively higher or lower prices to make it appear that the price of the security is moving either rapidly up or down. The idea (which is illegal, of course) is to attract other investors to continue "trading the trend" either

pushing the price ever higher or ever lower. Choice b is "pattern day trading" and is perfectly legal. Choice c is "front running" of a customer order - which is illegal since the firm must act in the best interests of the customer. This is an unethical practice, but it is not manipulation. Choice d is a perfectly legal trade - there is no prohibition on a member firm selling (either long or short) a stock while holding a customer order to buy that stock.

82. The best answer is d. Each SRO prohibits the breaking up of large trades into smaller units for purposes of increasing payments for order flow. This is the prohibited practice of "trade shredding." There are no exceptions to the prohibition.

83. The best answer is d. If trading in a stock is suspended, say on the New York Stock Exchange, the exchange where the option trades will also stop trading in the option contracts. This must occur because there is no longer any way to price the option contracts if there is no current market for the underlying stock. Any holders of outstanding options can still exercise their contracts during a trading halt, since this is performed through the Options Clearing Corporation and does not occur on the exchange floor.

85. The best answer is a. A customer is considered to be long a security to the extent of his **net** long position. In a tender offer, a customer can tender shares only to the extent of his net long position. In Choice I, the customer is net long 100 shares, so that stock can be tendered. In Choice II, the customer is short the stock and cannot tender (known as the short tender rule). In Choice III, the customer has a net "0" position (long 100 shares; short 100 shares) in the stock and therefore cannot tender. Furthermore, a customer who owns call options or warrants is **not** considered to be long unless these are exercised. Similarly, the holder of convertible securities is not long the stock unless irrevocable instructions to convert are issued by the customer.

86. The best answer is d. Sharing in a customer account is prohibited under each SRO's rules **unless** the member firm gives prior written approval to the account; and sharing in the customer account occurs in direct proportion to the capital contributed by the person associated with the member. Sharing in an account of the "immediate family" of the person associated with the member is permitted and need not meet the "proportionate test." This account also needs approval of a principal.

87. The best answer is a. Under SRO rules, bona-fide customers must be provided with the latest copy of the firm's balance sheet upon request. Members must also provide this information to other member firms. A bona-fide customer is defined as one who has cash or securities in the possession of the broker-dealer.

88. The best answer is b. A member can only compensate another person associated with a member in an annual amount in excess of \$100, if there is a written employment contract spelling out the work to be performed, and the compensation to be paid is previously approved by the principal. Otherwise, the SRO gift limitation is \$100 per person per year for gifts related to one's activities in the securities business.

89. The best answer is a. If securities are suspected to be stolen, the Securities Information Center must be notified within 1 day of discovery. In addition, the transfer agent must be notified and the local authorities must be contacted promptly.

90. The best answer is b. There is no requirement to keep a record of all quotes given in the course of trading. Required records include all activity in customer accounts; cash receipts and disbursements blotter; and a purchases and sales blotter, among others.

91. The best answer is d. Rule 17f-2 requires that all personnel of a broker-dealer must be fingerprinted **EXCEPT** those that are partners, directors, officers, or employees that are not engaged in the sale of securities; or do not have access to the keeping, handling or processing of securities; or do not have access to the keeping, handling or processing of monies; and do not have direct supervisory responsibility over these persons.

92. The best answer is a. If trading is halted, the trade cannot be executed and it cannot be sent to another country for execution. The trade will be executed the next day when the markets reopen.

93. The best answer is a. The threshold list is defined under Regulation SHO. It is a list of "hard to borrow" securities that have fails to deliver for 5 consecutive days of 10,000 shares or more; or that have fails to deliver that represent 1/2% or more of outstanding shares. If a security on the threshold list is sold short and there is a fail to deliver on settlement, Regulation SHO mandates "buy-in" in 13 settlement days.

94. The best answer is c. FINRA permits registered representatives that are called up for military duty to be placed on "inactive status," during which time they are not required to complete the Continuing Education requirements. Once the registered representative returns to civilian life, this status ceases upon return to work at the broker-dealer. If the individual does not return to work within 90 days of return to civilian life, this special status ceases and a U-5 must be filed by the firm terminating that individual's registration.

95. The best answer is d. An options trading halt will occur if trading of the stock is halted in its primary market; if the exchange is experiencing technical problems; or if there is a material pending news announcement about the issuer (which would also cause the stock's primary market to halt trading). A high open interest level (the number of options contracts created that have yet to be closed by trading or exercise), has nothing to do with a trading halt.

96. The best answer is a. Only orders that are placed **lower** than the current market are adjusted on ex-date by the Specialist (DMM - Designated Market Maker). These are Open Buy Limit and Open Sell Stop orders (OBLOSS). Choice I is a Buy Limit order placed for the day. If it is not executed this day, it is canceled and does not remain open on the books of the Specialist/DMM. Choice II is an Open Buy Stop order. This is placed above the current market and is not adjusted. Choice III is an Open Buy Limit order and would be adjusted. Choice IV is an Open Sell Limit order, which is placed above the market and would not be adjusted.

97. The best answer is c. To be a good delivery, stock certificates must be delivered in multiples of 100 on one certificate or in certificates of less than 100, where the certificates can be added exactly to 100 share units. Choice c does not meet this requirement. Individual 80 share certificates cannot be added into 100 share units. 25 share certificates are good (Four 25 share certificates = 100), as are eight-100 share certificates or one-800 share certificate.

98. The best answer is d. If a "Stop" order is elected, it becomes a market order to be filled at the first opportunity. Thus, the actual price at which the order is executed is not known. On the other hand, a "Limit" order specifies that the execution must comply with the limit price specified or better. Thus, limit orders are filled at that price or better.

99. The best answer is b. The ex-date for cash distributions is set at 2 business days prior to record date. Anyone who buys a stock in a regular way trade (3 business day settlement) will now settle after the record date, and will not be entitled to the cash dividend. On this date, as of the market opening, the stock's price is reduced for the dividend, since any buyers will not receive the distribution.

The ex-date for non-cash distributions such as rights, stock dividends or stock splits is totally different. It is set at the day after the payable date, which is typically a few weeks after the record date. This means that anyone who buys and settles after the record date will not be on the shareholder list to get the distribution. Since the price is not adjusted until the day after the payable date (about 2 weeks later), anyone who buys where the trade settles after the record date, but before the ex-date (day after payable date) will pay the higher unadjusted price, but will not be on the record books to receive the stock dividend or split. When the price is adjusted on the ex-date, each share held by this person will be reduced in price. If this person did not get the extra shares, he or she would be very unhappy. To claim the extra shares, these securities trade with a "due bill" for the extra shares, for trades that settle after record date until the ex-date. Also note that this is difficult, so if you find this confusing, consider yourself to be normal!

100. The best answer is c. Regular way trades of listed stocks settle 3 business days after trade date. In contrast, regular way trades of listed stock options settle 1 business day after trade date.

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## Series #56

### Final 3

1.

All of the following statements about warrants are true EXCEPT:

- a. Warrants have a longer term than rights
- b. Warrants are issued to make corporate securities offerings more attractive to investors
- c. Warrants give the holder a perpetual interest in the issuer's underlying common stock
- d. Warrants trade separately from the stock of the company

2.

Common stockholders have which of the following "rights"?

- I Right to vote for the Board of Directors
  - II Right to vote for the annual dividend rate
  - III Preemptive right
  - IV Rights to corporate assets upon dissolution
- a. I only
  - b. I and II
  - c. III and IV
  - d. I, III, IV

3.

An ADR is a:

- a. U.S. security held in U.S. branches of foreign banks
- b. foreign security held in foreign branches of U.S. banks
- c. negotiable certificate denominated in a foreign currency
- d. negotiable certificate denominated in U.S. currency

4.

Preferred stock has all of the following features as compared to common stock EXCEPT:

- a. fixed rate of return
- b. fixed maturity
- c. priority claim to dividends declared
- d. priority claim to assets upon dissolution

5.

A customer holds 100 shares of ABC Corp. \$100 par non-convertible preferred stock. If ABC declares and pays a 10% common stock dividend, then as of the payable date, the customer will now have:

- a. 90 shares of ABC preferred stock
- b. 100 shares of ABC preferred stock
- c. 100 shares of ABC preferred stock and 10 shares of ABC common stock
- d. 110 shares of ABC preferred stock

6.

Preferred stock valuation is based primarily upon:

- a. future earnings expectations for the issuer
- b. short term market interest rate levels
- c. long term market interest rate levels
- d. future dividend payment expectations for the issuer

7.

A Specialist (DMM) on the NYSE quotes ABC stock at:

\$40.00 - \$40.02  
250 x 150

A customer places an order to sell 25,000 shares of ABC stock at the market. The Specialist (DMM):

- a. is not required to fill the order
- b. will put the order on his book
- c. will fill the order in full for 25,000 shares
- d. will fill the order for 15,000 shares and place the remaining unfilled portion of the order for 10,000 shares on his book

8.

Regulation NMS applies to:

I NYSE listed issues  
II AMEX listed issues  
III NASDAQ listed issues

- a. I only
- b. I and II
- c. II and III
- d. I, II, III

9.

Regulation SHO is a body of rules covering:

- a. shorting against the box in an arbitrage account
- b. short sales of equities traded on an exchange or over-the-counter
- c. short term capital gains treatment on securities transactions
- d. shorting of naked options by retail customers

10.

The Third Market trades:

- a. listed securities on an exchange floor
- b. unlisted securities on an exchange floor
- c. listed securities over-the-counter
- d. securities of companies based in Third World countries

11.

Rule 605 of Regulation NMS requires:

- a. each market center to prepare monthly electronic reports about its quality of executions and effective spreads
- b. each broker-dealer to prepare quarterly reports on its routing of non-directed orders, including the 10 largest venues where orders were routed
- c. market makers in OTC stocks to display any customer limit orders that are better-priced than the dealer's own quote
- d. any order execution facility to execute the order at the NBBO, even if that execution facility is posting an inferior quote

12.

Rule 606 of Regulation NMS requires:

- a. each market center to prepare monthly electronic reports about its quality of executions and effective spreads
- b. each broker-dealer to prepare quarterly reports on its routing of non-directed orders, including the 10 largest venues where orders were routed
- c. market makers in OTC stocks to display any customer limit orders that are better-priced than the dealer's own quote
- d. any order execution facility to execute the order at the NBBO, even if that execution facility is posting an inferior quote

**13.**

A customer has sold short 100 shares of XYZ stock at \$90 per share. The stock has declined to \$78.75, and the customer now sells an XYZ Jul 80 Put @ \$5. The customer has created the synthetic equivalent of a:

- a. long call
- b. short call
- c. long put
- d. short put

**14.**

Prior to the opening of the options exchange, investor wishes to place an order to buy an option contract at a premium that is lower than the previous day's close. The order type to be placed is a(n):

- a. At the open order
- b. Limit order
- c. Stop order
- d. Not Held order

**15.**

On the same day in a margin account, a customer buys 200 shares of ABC stock at \$48 per share, and sells 5 ABC Jan 50 Calls @ \$1.50. The customer will breakeven at:

- a. 50.50
- b. 48.50
- c. 46.50
- d. 44.25

**16.**

Which two of the following create a collar on ABC stock, which is currently trading at \$42 per share?

- I Buy 1 ABC Jan 40 Call
- II Buy 1 ABC Jan 40 Put
- III Sell 1 ABC Jan 50 Call
- IV Sell 1 ABC Jan 50 Put

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

**17.**

The synthetic equivalent of a short put is:

- a. long stock / long put
- b. long stock / short call
- c. short stock / long call
- d. short stock / short put

**18.**

All of the following are income strategies EXCEPT:

- a. Long stock / Short call
- b. Short stock / Short put
- c. Short call / Short put
- d. Long call / Long put

**19.**

A registered representative is bearish on ABC stock and buys 10 ABC Jul 60 Put contracts. The representative then contacts each of his largest customers to explain his bearish sentiment and recommend that they buy put options on ABC. Which statement is true?

- a. There is no rules violation based upon the actions of the representative
- b. This is a potential insider trading violation
- c. This is a potential front running violation
- d. This is a potential free riding violation

20.

Which two of the following are neutral options strategies?

- I Short Straddle
- II Long Straddle
- III Butterfly Spread
- IV Short Call Spread

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

21.

A customer that wishes to sell 1 ABC Jan 60 Call @ \$5 in a cash account is permitted to do so if:

- a. 100 shares of ABC stock are held long in the customer account
- b. the customer provides a bank guarantee letter for \$6,000
- c. the customer is long an ABC Jan 50 Call in the account
- d. any of the above

22.

Which statement is true regarding index options?

- a. Exercise settlement results in a delivery of the securities in the index
- b. The regular trading session ends at 4:15 PM ET, 3:15 PM CT
- c. Exercise settlement occurs in 3 business days
- d. Most index options are issued in American style

23.

An accommodation liquidation order is a:

- a. market order
- b. limit order
- c. stop order
- d. market if touched order

24.

FLEX options:

- a. are issued by the Options Clearing Corporation
- b. are issued by the writer in an OTC transaction
- c. are not guaranteed by the Options Clearing Corporation
- d. are not permitted to be traded after issuance

25.

Options confirmations must include the:

- a. exercise price per share
- b. aggregate exercise price
- c. exercise cut-off date and time
- d. exercise style

26.

All of the following can be specified by a customer who wishes to write a PHLX FLEX option EXCEPT the contract:

- a. size
- b. expiration
- c. strike price
- d. premium

27.

Once a customer establishes an options position, the OCC reserves the right to change all of the following terms of the contract EXCEPT:

- a. Number of shares covered by the contract
- b. Number of contracts covering 100 shares each
- c. Exercise price of the contract
- d. Exercise style of the contract

28.

A registered representative in the branch receives an order from an institutional customer to sell 500,000 shares of ABCD stock at the market. When the member firm's block trading desk receives the order, the trader checks the firm's proprietary position and determines that the member firm is long 200,000 shares of ABC in inventory. The trader is concerned that execution of the customer sell order will cause the firm to have an inventory loss on its ABCD stock position and wants to buy 2,000 put option contracts on ABCD stock. The member firm may buy the put options:

- a. prior to executing the customer order to sell
- b. at the same time as the customer order to sell is filled
- c. when the execution report of the customer sell order has been published
- d. under no circumstances

29.

If the exchange that trades the stock underlying an options contract stops trading that stock, then all of the following are true EXCEPT:

- a. the option contract will stop trading
- b. the option contract can be exercised
- c. existing options orders to buy or sell can be filled
- d. existing orders to buy or sell can be canceled

30.

Which positions have unlimited loss potential?

- I Short uncovered call
- II Short uncovered put
- III Short stock / Long call
- IV Short stock / Short put

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

31.

Which of the following is a function of the OCC?

- a. Trading listed options contracts in a fair and orderly manner
- b. Guaranteeing performance upon the exercise of a short option contract
- c. Allocating an exercise notice to an individual customer that is short that contract
- d. Establishing the premium to be paid from the buyer to the seller of the contract

32.

The OCC assigns exercise notices on a:

- a. random basis
- b. FIFO basis
- c. either a random or FIFO basis
- d. any method that is fair and reasonable

Use the following information to answer the next 3 questions:

On the same day a customer buys 100 shares of ABC stock at \$40 and sells 1 ABC Jan 40 Call @ \$4 and sells 1 ABC Jan 40 Put @ \$2.

33.

This strategy is known as a:

- a. covered straddle
- b. covered call writer
- c. ratio write
- d. butterfly spread

34.

The maximum potential gain is:

- a. \$600
- b. \$3400
- c. \$7400
- d. Unlimited

35.

The maximum potential loss is:

- a. \$600
- b. \$3400
- c. \$7400
- d. Unlimited

36.

Bear put spreads are profitable if:

- I Both puts expire
  - II Both puts are exercised
  - III The spread between the premiums widens
  - IV The spread between the premiums narrows
- a. I and III
  - b. I and IV
  - c. II and III
  - d. II and IV

37.

Which of the following are bullish options strategies on ABC stock, currently trading at \$60 per share?

- I Buy ABC 60 Calls
- II Sell ABC 60 Puts
- III Buy ABC 60 Calls and Sell ABC 70 Calls
- IV Buy ABC 70 Puts and Sell ABC 60 Puts

- a. I and II only
- b. III and IV only
- c. I, II, III
- d. I, II, III, IV

38.

A customer who is short puts, and who buys the underlying stock in an attempt to keep the puts from moving "in the money" as expiration approaches, is engaging in the illegal practice of:

- a. hedging
- b. capping
- c. supporting
- d. pegging

39.

Floor Brokers on the CBOE are allowed to accept which of the following orders?

- I Limit
- II Stop
- III Spread
- IV Straddle

- a. I only
- b. I and II only
- c. III and IV only
- d. I, II, III, IV

40.

The initial strike price of an option contract is determined by the:

- a. Options Clearing Corporation
- b. Securities and Exchange Commission
- c. market value of the underlying stock
- d. length of time until expiration of the contract

41.

If a market is deemed to be "FAST" by 2 Floor Officials, entry of which of the following orders may be restricted?

- I Market
- II Market If Touched
- III Limit
- IV Stop

- a. I and II only
- b. IV only
- c. II and IV only
- d. II, III, IV

42.

If a put is exercised just prior to the ex-dividend date for the underlying stock, which statements are true?

- I The holder of the put receives the dividend
- II The holder of the put does not receive the dividend
- III The writer of the put receives the dividend
- IV The writer of the put does not receive the dividend

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

43.

Accommodation liquidation orders are placed at an aggregate premium of:

- a. \$1 per contract
- b. \$10 per contract
- c. \$100 per contract
- d. \$1000 per contract

44.

A customer enters an order to buy 10 XYZ Jan 50 Calls @ \$4. A trade occurs at that price, but the customer's order is not executed. This would occur because:

- I There were buy limit orders at the same price for other customers ahead of this order
  - II There were buy limit orders at the same price for other member firms ahead of this order
  - III There were spread orders that required the purchase of the same option ahead of this order
  - IV There were buy limit orders at the same price for market makers ahead of this order
- a. I only
  - b. II and IV only
  - c. I and III only
  - d. I, II, III, IV

45.

Which of the following positions has unlimited loss potential?

- a. Long ABC Stock / Long ABC Put
- b. Long ABC Stock / Short ABC Call
- c. Short ABC Stock / Long ABC Call
- d. Short ABC Stock / Short ABC Put

46.

A customer wishes to participate in a tender offer for ABCD common stock. The customer may tender if he or she owns:

- a. ABCD non-convertible bonds
- b. ABCD convertible bonds
- c. ABCD call options that have been exercised
- d. ABCD preferred stock

47.

Transactions that seek to take illegal funds and turn them into legitimate circulation are known as:

- a. wash sales
- b. fraudulent conversion
- c. money laundering
- d. blue skying

48.

Which of the following events would require a report under SEC Rule 17f-1 within 1 business day of discovery?

- a. The receipt of certificates found to be counterfeit
- b. Securities discovered to be missing as the result of a routine securities count
- c. Certificates discovered to be missing after a natural disaster damages the offices of the firm
- d. The receipt of bearer bonds that are missing upcoming interest coupons

49.

An order ticket to sell may be marked "long" in all of the following circumstances EXCEPT the customer:

- a. is long a call on that stock that has been exercised
- b. is short a put on that stock that has been exercised
- c. holds fully-paid convertible preferred stock of that issuer and has given instructions to convert
- d. holds fully paid warrants to buy the underlying stock in custody of the broker-dealer

50.

Which statements are true?

- I All XYX Calls are an options class
- II All XYX Jul 50 Calls are an options class
- III All XYX Calls are an options series
- IV All XYX Jul 50 Calls are an options series

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

51.

ABC Corporation's share price has declined from \$30 to \$10, prompting the issuer to declare a 1:3 reverse stock split. As of the "ex" date, the holder of 1 ABC Jan 10 Call will have:

- a. 1 ABC Jan 10 Call covering 100 shares
- b. 3 ABC Jan 10 Calls covering 100 shares
- c. 1 ABC Jan 30 Call covering 33.33 shares
- d. 3 ABC Jan 30 Calls covering 33.33 shares

**52.**

The CBOE may halt trading in a listed option contract for which of the following reasons?

- I Trading in the underlying security has been halted in the security's primary market
  - II The opening of trading in the underlying security has been delayed because of unusual market conditions
  - III Other unusual conditions or circumstances are present
- a. I only
  - b. I and II
  - c. II and III
  - d. I, II, III

**53.**

All of the following positions can be held in a portfolio margin account **EXCEPT:**

- a. listed options
- b. warrants
- c. index options
- d. debentures

**54.**

A customer that has agreed to submit a dispute to mediation:

- a. is permitted to withdraw from the mediation process without consent of the other party or the mediator
- b. can only withdraw from the mediation process with the consent of the mediator
- c. can only withdraw from the mediation process with the consent of the other party
- d. can only withdraw from the mediation process with the consent of FINRA

**55.**

Which of the following best describes "structuring"?

- a. Depositing or withdrawing bond certificates to or from an account in amounts just below Federal reporting requirements
- b. Depositing or withdrawing stock certificates to or from an account in amounts just below Federal reporting requirements
- c. Depositing or withdrawing cash to or from an account in amounts just below Federal reporting requirements
- d. Depositing or withdrawing bank checks to or from an account in amounts just below Federal reporting requirements

**56.**

A market maker on the CBOE is inundated with a flood of orders because of a major news announcement about the issuer in which he makes a market. The market maker cannot keep up with the order flow and declares a "FAST" market. This action is:

- a. permitted because of the influx of orders
- b. permitted if the primary market for the stock also declares a "FAST" market
- c. prohibited because the market maker does not have the authority to declare a "FAST" market
- d. prohibited because market makers must have the ability to keep up with all orders they receive

57.

The synthetic equivalent of a short call is:

- a. long stock / long put
- b. long stock / short call
- c. short stock / long call
- d. short stock / short put

58.

In determining if there is a violation of position limits, short calls would be aggregated with:

- I Long Calls
- II Long Puts
- III Short Puts

- a. I only
- b. II only
- c. III only
- d. I, II, III

59.

Common stockholders and preferred stockholders **BOTH** have:

- a. voting right
- b. preemptive rights
- c. dividend rights
- d. subscription rights

60.

A company decides to split its stock 5:4. Prior to the ex-date, the stock is trading at \$50 per share. The holder of 100 shares, as of the ex-date, will have:

- a. 120 shares valued at \$40 per share
- b. 125 shares valued at \$40 per share
- c. 120 shares valued at \$60 per share
- d. 125 shares valued at \$60 per share

61.

Gamma will be greatest for an option that is:

- a. in the money
- b. out the money
- c. at the money
- d. close to expiration

62.

Which of the following are SROs?

- I FINRA
- II SIPC
- III SIFMA
- IV CBOE

- a. I and IV only
- b. II and III only
- c. I, II and IV
- d. I, II, III, IV

63.

A NASDAQ listed issuer places an order to buy its common stock within 1/2 hour of the close of the market. Which statement is true regarding the handling of this order?

- a. This order can be accepted with no further action necessary
- b. This order cannot be accepted
- c. This order can only be accepted with the permission of FINRA
- d. This order can only be accepted if the issuer is informed that this transaction may be viewed as "manipulative"

64.

All of the following are responsibilities of NASDAQ's MarketWatch department **EXCEPT**:

- a. Monitoring NASDAQ securities for unusual price and volume activity
- b. Monitoring NASDAQ market makers for timeliness and quality of trade executions
- c. Making decisions on reports of clearly erroneous trades
- d. Assessing corporate news announcements for potential market impact and implementing a trading halt, if needed

**65.**

If the inside spread is 4 cents, the minimum increment necessary to qualify for price improvement is:

- a. 1 cent
- b. 2 cents
- c. 3 cents
- d. 4 cents

**66.**

A block under Regulation NMS is defined as a trade of:

- I 1,000 shares or more
- II 10,000 shares or more
- III \$100,000 or more
- IV \$200,000 or more

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

**67.**

The "trade-through" rule of Regulation NMS applies during the hours of:

- a. 9:30 AM - 4:00 PM ET
- b. 7:00 AM - 7:00 PM ET
- c. 8:00 AM - 8:00 PM ET
- d. 7:00 AM - 8:00 PM ET

**68.**

Which of the following is NOT defined as an ATS (Alternative Trading System)?

- a. Electronic Communications Network
- b. Dark Pool
- c. Member Firm Internal Crossing Network
- d. Electronic Securities Exchange

**69.**

Which of the following is NOT required to be on an order ticket to purchase a security at a limit price?

- a. Whether the trade was solicited or unsolicited
- b. If the customer does not wish the order to be adjusted on ex date for a cash dividend, the marking "DNR"
- c. Whether the firm acted in an agency or principal capacity in the transaction
- d. The name or account number of the customer

**70.**

Regulation NMS requires which of the following for market participants that wish to trade NMS securities?

- I Market participants are prohibited from entering quotes that will lock or cross the market
- II Market participants must be able to access each other's quotes and trade against them within 1-second
- III Market venues are prohibited from charging access fees
- IV Market venues can require users to execute trades on that venue's proprietary system

- a. I and II only
- b. III and IV only
- c. I, II, III
- d. I, II, III, IV

**71.**

Broker-dealers which have payment for order flow arrangements with market makers must disclose these arrangements in which of the following SEC reports?

- a. Form 211
- b. Rule 605
- c. Form B/D
- d. Rule 606

72.

If a market maker attempts to lock in the market during normal market hours, Single Book will:

- a. display the order in Level II
- b. place the order in MPID "NSDQ" at the locking price
- c. return the order to the market maker
- d. route the order for execution at the locking price

74.

During the 1-day restricted period prior to the effective date for an additional issue offering, a trader at a syndicate member places a bid and purchases the subject security. The SEC will overlook this Rule 101 violation if all of the following are true **EXCEPT**:

- a. the firm resigns from the syndicate
- b. the purchase was inadvertent
- c. the amount purchased totaled less than 2% of the security's average daily trading volume
- d. the firm has in place protective procedures designed to achieve compliance with Rule 101

78.

A customer is long 500 shares of ABC stock in a cash account and is short 300 shares of ABC stock in a margin account at the same firm. The customer wishes to sell the 500 shares in the cash account. To do this, the order ticket must be marked:

- a. Sell 500 ABC Long
- b. Sell 500 ABC Short
- c. Sell 300 ABC Long/Sell 200 ABC Short
- d. Sell 200 ABC Long/Sell 300 ABC Short

79.

The Limit Order Protection Rule applies to:

- I Listed securities traded on an exchange floor
- II Listed securities traded over-the-counter
- III NASDAQ Global Market securities
- IV NASDAQ Capital Market securities

- a. I and II only
- b. III and IV only
- c. I, II, III
- d. I, II, III, IV

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV



80.

A member firm is about to issue a research report about ABCD Corporation, a NASDAQ listed issuer. The member firm's proprietary trading desk may:

- I increase its inventory position in ABCD stock in anticipation of heightened investor interest if the report is favorable
  - II decrease its inventory position in ABCD stock in anticipation of lowered investor interest if the report is unfavorable
  - III increase its inventory position in ABCD stock in response to heightened unsolicited order flow for ABCD stock
  - IV decrease its inventory position in ABCD stock in response to lowered unsolicited order flow for ABCD stock
- a. I and II only
  - b. III and IV only
  - c. I and III only
  - d. II and IV only

81.

The Manning Rule covers:

- a. market orders
- b. limit orders
- c. stop orders
- d. GTC orders

82.

A market maker in a Global Market stock would NOT be allowed to do which of the following over the telephone?

- a. Inform another dealer that its market size in the subject security is larger than that displayed on NASDAQ
- b. Ask another dealer to tighten its bid-ask spread in the subject security
- c. Honor a bid for the subject security from which another dealer has just backed away
- d. Negotiate a transaction price for the subject security between the current best bid and offer

83.

Which of the following would be considered to be a manipulative practice?

- a. Executing transactions for the purpose of inducing customers to purchase a security
- b. Refusing to honor customer instructions regarding the handling of that customer's account
- c. Executing transactions to buy for the member firm's trading account while holding customer orders to buy at the same price
- d. Refusing to trade a security for a customer at the quoted price

84.

Under Regulation SHO, a "threshold security" is one that:

- a. cannot be sold short under any circumstances but long sales are permitted
- b. can only be sold short at a price that is \$.01 higher than the preceding trade
- c. if sold short and not delivered within 13 settlement days of the trade, buy-in is required
- d. if sold short on a downtick, must be immediately bought-in on an up-tick

87.

When comparing statutory versus cumulative voting methods, which statement is true?

- a. Minority shareholders have the same voting effectiveness with both methods
- b. Minority shareholders have greater voting effectiveness with cumulative voting
- c. Minority shareholders have greater voting effectiveness with statutory voting
- d. Minority shareholders have limited voting powers under the statutory method and full voting powers under the cumulative method

85.

Under the "best execution" rule, the factors that are considered include the:

- I character of the market for the security
- II size and type of transaction
- III price and volatility of the security
- IV number of markets checked

- a. I and II only
- b. III and IV only
- c. I, II, III
- d. I, II, III, IV

88.

A customer owns 1 ABC Jul 30 Call. ABC goes ex dividend \$1.00. As of the morning of the ex-date, the contract will cover:

- a. 100 shares at 29
- b. 100 shares at 30
- c. 101 shares at 29
- d. 101 shares at 30

89.

Which statements are true about shareholder rights?

- I Common shareholders have preemptive rights
- II Preferred shareholders have preemptive rights
- III Common shareholders have voting rights
- IV Preferred shareholders have voting rights

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

86.

In order to receive a dividend distribution, the last time for the holder of a call option to exercise is:

- a. at least 5 business days prior to the ex-date
- b. just prior to the ex-date
- c. just prior to the record date
- d. just after the ex-date

**90.**

Which one of the following customer actions could be an indicator of money laundering?

- a. Selling a security that has depreciated after holding it for one week and then buying back the position more than 30 days later
- b. Selling a security that has depreciated after holding the position for 1 week and then directing that the sale proceeds be wired to an overseas account
- c. Buying back a security that has depreciated after shorting it for 1 week and using the proceeds to short another position
- d. Selling stock short and 30 days later selling a put option against the stock position

**93.**

Failure to honor a stated quote is a violation known as:

- a. backing away
- b. selling away
- c. quoting away
- d. trading away

**94.**

The term "DNR" would apply to:

- I Buy Limit orders
- II Buy Stop orders
- III Sell Limit orders
- IV Sell Stop orders

- a. I and II only
- b. III and IV only
- c. I and IV only
- d. II and III only

**95.**

All of the following must be reported to SIC EXCEPT:

- a. lost securities
- b. stolen securities
- c. receipt of counterfeit securities
- d. receipt of a bearer bond missing coupons

**96.**

A customer order to sell can be marked "Long" in all of the following situations EXCEPT:

- a. the securities are held in street name by the broker-dealer
- b. the securities are held in a customer safe deposit box and the customer will deliver on settlement
- c. the securities are held registered in the name of the customer in book entry form by DTCC
- d. the securities were previously purchased by that customer at the same broker-dealer that received the customer sell order

**92.**

All of the following statements are TRUE about ETNs EXCEPT:

- a. ETNs can be traded in the market like any other stock
- b. ETNs offer an investment return tied to a benchmark index
- c. ETNs are an equity security
- d. ETNs are tax-advantaged

97.

Which statements are true about the use of mediation to settle disputes?

- I The mediator is a neutral, impartial facilitator in the process
  - II The mediator has the authority to determine issues, make decisions, and resolve the matter
  - III Any party to the mediation can withdraw at any time prior to the execution of a written settlement agreement
  - IV Once the parties agree to submit the dispute to mediation, any decision of the mediator is final and non-appealable
- a. I and III
  - b. I and IV
  - c. II and III
  - d. II and IV

98.

A foreign stock traded here in the U.S. as an ADR has been halted from trading by NASDAQ, but it is still trading in the foreign market. A member firm that receives a market order to buy that stock:

- a. cannot execute the order
- b. is permitted to execute the order
- c. must route the order to the foreign market for execution
- d. can only execute the order on an ATS

99.

A customer is short 100 shares of DEF 300% Leveraged ETF. If the minimum maintenance margin requirement is set at 30%, the margin requirement for this position will be:

- a. 30%
- b. 50%
- c. 60%
- d. 90%

100.

SEC Rule 10b-5-1:

- a. is the "catch all" fraud rule that makes any deceptive or manipulative practice in connection with the sale of a security potentially fraudulent under the Securities Exchange Act of 1934
- b. gives officers of publicly held companies a safe harbor from being charged with an insider trading violation if they establish a pre-arranged trading plan for that issuer's securities
- c. prohibits the purchase or sale of an issuer's securities based on material nonpublic information in breach of duty of trust owed to the issuer or shareholders of that security
- d. prohibits any person, in connection with a tender offer for securities, to bid for or purchase the security which is subject of the tender offer through any means other than via the offer

## Series #56 - Final 3 Explanations

1. The best answer is c. Warrants are long term options to buy a company's shares at a fixed price. They are typically attached to debt and preferred stock offerings to make the securities more attractive to purchasers. This is accomplished because the warrant gives growth potential to these senior security holders if the common stock price should rise in the future. Warrants typically have a fixed life of 5 years or less and then expire. Companies can issue perpetual warrants, but rarely do so.
2. The best answer is d. Common shareholders do not set the dividend rate - this decision is made by the Board of Directors of the company. Common shareholders do have the right to vote for the Board of Directors; the pre-emptive right to any new common shares that the company may issue; and the right to remaining corporate assets upon dissolution.
3. The best answer is b. An American Depository Receipt is a foreign security that is held in a foreign branch of a U.S. bank. The bank issues receipts against these shares, and the receipts are registered in the United States as securities and are listed and traded on U.S. stock exchanges. In this manner, the foreign corporation does not have to register its shares with the SEC in order to have trading take place in the U.S.
4. The best answer is b. Preferred stock does not have a stated maturity - it has an indefinite life. Preferred stock does have a stated dividend rate and priority claim to both dividends and corporate assets over common stock.
5. The best answer is b. Stock dividends paid to common shareholders have no impact on non-convertible preferred shareholders. This preferred shareholder has 100 shares; and gets no additional shares when the common stock dividend is paid. Common stockholders have a pre-emptive right; preferred stockholders do not.
6. The best answer is c. Preferred stock is a fixed income security with an "infinite life" since there is no maturity. The price of fixed income securities is determined by market interest rate levels. As market interest rates rise, preferred stock prices fall; as market interest rates fall, preferred stock prices rise. Since preferred stock is a long term investment, long term interest rate levels (not short term) determine market pricing.
7. The best answer is c. The Specialist/DMM is quoting the stock at \$40.00 Bid with a size of 250 (good for  $250 \times 100 = 25,000$  shares); and \$40.02 Ask with a size of 150 (good for  $150 \times 100 = 15,000$  shares). This customer is placing an order to sell 25,000 shares at the market. Since the Specialist has customers willing to buy 25,000 shares at the current Bid of \$40.00, the order will be filled in full at the current Bid.
8. The best answer is d. The "NMS" securities under Regulation NMS (National Market System) are NYSE, AMEX and NASDAQ listed issues. OTCBB and Pink Sheet issues are not subject to Regulation NMS.
9. The best answer is b. Regulation SHO is a newer SEC rule intended to apply a uniform short sale rule to both exchange listed and OTC equity issues; and to stop the illegal practice of "naked" short selling (selling short a security without the intention to borrow and deliver the securities on settlement).

10. The best answer is c. The Third Market is OTC trading of exchange listed securities. Trading of listed securities on an exchange floor is the First Market. There is no formal name (yet) for trading of unlisted securities on an exchange floor, such as trading of NASDAQ or OTCBB issues by exchange Specialists under a UTP (Unlisted Trading Privilege) plan.

11. The best answer is a. Rule 605 of Regulation NMS requires market centers to make monthly electronic reports about the quality of execution in each stock traded, including how market orders of various sizes are executed relative to public quotes. The reports must also include information about effective spreads. In addition, market centers must provide reports on the extent to which they were able to "improve" execution prices for limit orders as compared to the public quote at that time. Do not confuse Rule 605 with Rule 606.

12. The best answer is b. Rule 606 requires member firms to prepare a quarterly report on the routing of their non-directed customer orders. The report, which is publicly available, details the percentage of customer orders that were "non-directed;" the identity of the 10 largest markets or market makers to whom non-directed orders were routed; and details the member firm's relationship with that market maker (for example, many larger retail member firms own their own market maker subsidiaries to whom they route orders); and any arrangement for payment for order flow or profit-sharing.

Rule 605 of Regulation NMS requires market centers to make monthly electronic reports about the quality of execution in each stock traded, including how market orders of various sizes are executed relative to public quotes. The reports must also include information about effective spreads. In addition, market centers must provide reports on the extent to which they were able to "improve" execution prices for limit orders as compared to the public quote at that time. Do not confuse Rule 606 with Rule 605.

13. The best answer is b. The short stock position gives the customer the upside characteristic of unlimited loss potential. On the downside, the customer has no loss potential because the short put will be exercised, forcing the customer to buy in the stock that was previously sold short. The customer will keep the premium on the short put, plus will have a gain on the stock position. Thus, the characteristics of "short stock/short put" are unlimited upside loss and limited downside gain. The option position that matches these characteristics is a naked short call.

14. The best answer is b. The orders that are placed **lower** than the current market are "OBLOSS" - Open Buy Limit orders and Open Sell Stop orders. Thus, to buy an option at a premium that is lower than the closing price, an open buy limit order would be placed. Conversely, the orders that are placed **higher** than the current market are "OSLOBS" - Open Sell Limits and Open Buy Stops. Thus, to buy at a price higher than the current market, an open buy stop order would be placed.

15. The best answer is d. The customer has bought 200 shares of ABC stock at \$48 and has sold 5 ABC Jan 50 Calls @ \$1.50 for a total collected premium of \$7.50. If the market stays below \$50, the calls will expire out the money and the customer keeps the \$7.50 of collected premiums. If the market on the stock keeps dropping, the customer will lose on the 200 shares that were originally purchased at 48. The customer can afford to lose  $\$750/200$  shares = \$3.75 per share and will still breakeven. Thus, in a falling market, the breakeven point is  $\$48 - \$3.75 = \$44.25$  per share. If the market continues to fall, the customer can lose a maximum of  $\$44.25 \times 200$  shares = \$8,850. On the other hand, if the market rises above 50, the 5 short calls will be exercised. The customer is covered on 2 of

the calls, and will deliver the stock purchased at 48 for the 50 strike price, for a 2 point gain per share x 200 shares = \$400 gain. The customer has also collected \$750 in premiums, for a total gain of \$1,150. The customer is naked on the remaining 3 contracts to deliver at \$50 per share. In a rising market, the customer can afford to lose the \$1,150/300 shares = \$3.83 per share and will still breakeven. Thus, the upside breakeven is \$53.83. If the market continues to rise, the customer has unlimited loss potential on the 3 short naked call positions.

16. The best answer is c. When a customer places a "collar" on a stock position, he or she is "locking in" a sale price by buying a put at a strike price below the current market price of the stock (here the put is purchased with a \$40 strike when the stock is trading at \$42). To offset the cost of the put, a call is sold at a strike price above the current market price of the stock (\$50, when the market price is at \$42). If the stock's price rises above \$50, the short call will be exercised, obligating the customer to deliver the shares at \$50. Thus, the stock's price is now "collared" between \$40 and \$50.

17. The best answer is b. Assume a customer sells 1 ABC Jan 50 Put @ \$5. If the market rises, the put expires and the gain is \$5 points. If the market falls, the put is exercised, obligating the customer to buy the stock at \$50. Since \$5 was collected in premiums, the customer will breakeven if the stock falls to \$45. If the stock continues to fall, the customer can lose all \$45 per share. Compare this to a customer who:

Buys 100 Shares of ABC Stock @ \$50  
Sells 1 ABC Jan 50 Call @ \$5

If the stock rises above \$50, the short call is exercised. The stock that was purchased for \$50 is delivered at \$50. The customer makes the \$5 point premium only. If the market falls, the short call expires. The customer paid \$50 for the stock, offset by \$5 in collected premiums, for a net cost of \$45 per share. This is the breakeven point. If the market continues to fall, all \$45 per share can be lost on the stock position.

Thus, this position (Long Stock / Short Call) is exactly the same as a Short Put.

18. The best answer is d. To get income against a stock position, the option must be sold so that a premium is collected. In Choice **d**, the option is purchased, not sold. A put is purchased against a long stock position to hedge the stock position against a downward market move. The cost of the protection is the premium paid to buy the put.

19. The best answer is c. The registered representative has positioned his personal account prior to recommending the same strategy to his customers. If the customers take the recommended action, it could give the registered representative a nice profit in his personal account. This is a front running violation.

20. The best answer is a. A short straddle is the sale of a call and a put on the same stock, with the same strike price and expiration. The customer essentially has a short naked call position and a short naked put position, for which a double premium is collected. If the market does not move, both contracts expire and the customer collects a double premium (maximum gain). However, as the market moves up the customer loses on the short naked call; and as the market moves down, the customer loses on the short naked put. As an example, assume that when the market price of ABC stock is \$50, the customer takes the following positions:

Sell 1 ABC Jan 50 Call @ \$4  
Sell 1 ABC Jan 50 Put @ \$4

Net Credit  

The maximum gain is the \$800 credit received if the market stays at 50 and both contracts expire "at the money." If the market rises above \$50, the short naked call will be exercised, obligating the customer to deliver the stock that he does not own at \$50.

Since the price at which the shares must be purchased for delivery can rise an unlimited amount, there is unlimited risk. If the market falls, the short put is exercised, obligating the customer to buy the stock at \$50. Since the stock can fall to "0," the customer can lose \$5,000, net of the \$800 premium credit received. If the customer wants to limit these losses, the customer could add the following positions to the short straddle:

Buy 1 ABC Jan 55 Call @ \$2

Sell 1 ABC Jan 50 Call @ \$4  
Sell 1 ABC Jan 50 Put @ \$4

Buy 1 ABC Jan 45 Put @ \$2

Net Credit  

Instead of collecting \$8, the customer collects \$4. This is the maximum gain if the stock stays at \$50 and all positions expire. If the stock rises above \$55, the long call is exercised, limiting the upside loss to 5 points, net of \$4 collected, equals a net \$1 loss. If the market falls below \$45, the long put is exercised, limiting the downside loss to 5 points, net of the \$4 collected, equals a net \$1 loss. This position is profitable when the market is flat and is called a butterfly spread. The 2 short positions are the body of the butterfly; and the 2 long positions are the wings of the butterfly. A butterfly spread essentially combines a short call spread and a short put spread, and is profitable in a neutral market.

Long straddles are profitable if the market rises or falls, and are unprofitable if the market stays the same. As an example, assume that when the market price of ABC stock is \$50, the customer takes the following positions:

Buy 1 ABC Jan 50 Call @ \$4  
Buy 1 ABC Jan 50 Put @ \$4

Net Debit  

If the price stays at \$50, both positions expire and the \$8 debit is lost. If the market rises, the customer gains on the long call. If the market falls, the customer gains on the long put.

A short call spread is a bear market strategy. As an example, assume that a customer takes the following positions:

Sell 1 ABC Jan 50 Call @ \$4  
Buy 1 ABC Jan 60 Call @ \$1

Net Credit

If the market stays below \$50, both positions expire and the customer gains the credit of \$3. If the market rises, the short call is exercised, obligating the customer to deliver the stock at \$50. At the worst, the customer can buy the stock for delivery by exercising the long 60 call, causing the customer to lose \$10 per share on the stock. Since a \$3 credit was received, the maximum net loss is \$7.

21. The best answer is a. A customer that wishes to sell covered calls in a cash account can only do so if the stock is held fully paid in the cash account or if the stock is held fully paid at a bank, as evidenced by an escrow receipt. A bank guarantee letter can cover the sale of a put (where the loss potential is finite), but it cannot cover the sale of a call (since the loss potential is infinite). A long 50 call will cover the sale of a 60 call, but this creates a spread position. Spread positions can only be taken in a margin account - not in a cash account.
22. The best answer is b. Index options trade from 9:30 AM - 4:15 PM ET. In contrast, note that stock options trade from 9:30 AM - 4:00 PM ET. Exercise settlement of index options results in a delivery of cash, not the securities that are in the index. Exercise settlement for index options occurs next business day, as opposed to 3 business days for stock options. Finally, most index options are European style, not American style. In contrast, almost all equity options are American style, not European style.
23. The best answer is b. An accommodation liquidation order is placed by a customer who wishes to receive a closing trade confirmation for a worthless option contract (if one is audited by the IRS, the IRS really appreciates having a closing trade confirmation showing that the option position was liquidated rather than simply having the contract expire). An order is placed to close the contract at an aggregate premium of \$1 (\$.01 per share). This is a limit order. The board broker or order book official handles these orders as an "accommodation" to the public, hence the name.
24. The best answer is a. All exchange traded options contracts, including FLEX contracts, are issued by the OCC and are guaranteed by the OCC.
25. The best answer is a. Options confirmations must include the exercise price on a per share basis, not the aggregate exercise price of the entire contract. The exercise style is not a required disclosure; nor is the exercise cut-off date required to be disclosed on the confirmation.
26. The best answer is d. Options contracts with "flexible" terms are available on the PHLX, and are called FLEX options. The writer can specify the contract size, strike, underlying instrument, and expiration. The premium, however, is determined in the marketplace by the Specialist. The minimum size for a FLEX option trade is 50 contracts. Also note that FLEX options are now offered on the CBOE as well.
27. The best answer is d. Because listed option contracts are adjusted by the OCC for 2:1 and 4:1 stock splits, the number of contracts can be adjusted; the number of shares covered by each contract can be adjusted; and the strike price (exercise price) can be adjusted. The style of the contract (e.g., American or European) is not changed.
28. The best answer is c. Front running of customer orders is a prohibited practice. A member firm that receives a large customer order that is likely to have a market impact cannot trade that stock (or options on that stock) for its proprietary account to either take advantage of the market impact of the order or to mitigate the effect of filling the order on its proprietary account. However, once the customer order has been executed

and the trade report has been disseminated publicly, then the member firm may trade that stock (or options on that stock) for its proprietary account.

29. The best answer is c. If the exchange stops trading in a stock, options trading stops as well. Any existing orders to buy or sell cannot be filled - they can be canceled however, since this does not involve trading. Even though trading has stopped, any contracts that have been created can still be exercised - since exercises go through the OCC and not through the exchange.

30. The best answer is b. A short naked call obligates the writer, if exercised, to deliver stock that he does not own. This creates unlimited loss potential. A short naked put obligates the writer to buy stock at the strike price if exercised. The maximum loss occurs if that stock's value has fallen to zero - thus, the put writer can lose the purchase price of the stock, less any premium received for writing the put. A customer that takes a short stock position has unlimited loss in a rising market, but if the customer buys a call on that stock, it allows the customer to buy that stock at a fixed price, limiting upside loss. Finally, if a customer shorts stock and shorts a put, if the market rises, the put expires worthless and the customer is still exposed to unlimited upside loss potential on the short stock position.

31. The best answer is b. The Options Clearing Corporation issues listed options contracts and guarantees performance if a contract is exercised. The trading takes place on an exchange. The OCC assigns exercise notices to its customers - who are the member firms. A member firm that receives an exercise notice, in turn, must assign it to one of its individual customers, making Choice c incorrect. The premium paid from buyer to seller is established in the trading market - it is not set by the OCC.

32. The best answer is a. The OCC assigns exercise notices on a random basis. The member firm, once it receives an exercise notice from the OCC, has a choice of assignment methods - random, FIFO, or any other method that is fair and reasonable.

33. The best answer is a. The customer has created a long stock/short straddle position. This is termed a "covered straddle," however this name is not really accurate. The short call is covered by the long stock position; however, the short put is naked.

34. The best answer is a. The customer has created a long stock/short straddle position. This is shown following:

Buy 100 Shares of ABC at \$40

Sell 1 ABC Jan 40 Call @ \$ 4  
Sell 1 ABC Jan 40 Put @ \$ 2

~ \$ 6 Credit

The credit of \$600 is the maximum potential gain occurring if both contracts expire "at the money."

If the market rises above \$40, the short call is exercised, while the short put expires "out of the money." The stock that was purchased at \$40 is delivered for \$40 - there is no further gain or loss on this position. Thus, in a rising market, the maximum gain is \$600.

If the market falls below \$40, the short put is exercised (requiring the customer to buy **another** 100 shares at \$40), while the short call expires "out the money" As the market falls, the customer now owns 200 shares purchased at \$40. Since \$600 was collected in premiums, he can afford to lose 3 points per share and will still breakeven Thus, the breakeven occurs at  $\$40 - \$3 = \$37$ . If the market continues to drop to zero, the customer will lose the full value of the 200 shares purchased at \$40, net of \$600 collected in premiums, for a net loss of \$7,400 (\$37 per share).

35. The best answer is c. The customer has created a long stock/short straddle position. This is shown below:

Buy 100 Shares of ABC at \$40

Sell 1 ABC Jan 40 Call @ \$ 4  
Sell 1 ABC Jan 40 Put @ \$ 2

\$ 6 Credit

The credit of \$600 is the maximum potential gain occurring if both contracts expire "at the money."

If the market rises above \$40, the short call is exercised, while the short put expires "out the money." The stock that was purchased at \$40 is delivered for  $\$40 - \$4 = \$36$  - there is no further gain or loss on this position. Thus, in a rising market, the maximum gain is \$600.

If the market falls below \$40, the short put is exercised (requiring the customer to buy **another** 100 shares at \$40), while the short call expires "out the money" As the market falls, the customer now owns 200 shares purchased at \$40. Since \$600 was collected in premiums, he can afford to lose 3 points per share and will still breakeven Thus, the breakeven occurs at  $\$40 - \$3 = \$37$ . If the market continues to drop to zero, the customer will lose the full value of the 200 shares purchased at \$40, net of \$600 collected in premiums, for a net loss of \$7,400 (\$37 per share).

36. The best answer is c. Bear put spreads are a bearish strategy. Below is an illustration of a bear put spread:

Bear Put Spread - Profitable in Falling Market

Long 1 ABC Jan 70 Put @ \$7  
Short 1 ABC Jan 60 Put @ \$3

Net Debit \$4

This is a debit spread. If the market falls, both puts go "in the money" and are exercised. The customer winds up buying the stock at 60 and selling for 70, for a 10 point profit. Since 4 points was paid in net premiums, the net profit is 6 points or \$600. If the market rises, both puts expire "out the money" and the customer loses the debit.

Since this is a debit spread, it would be closed with a credit. To profit, the closing credit must be larger than the opening debit. Thus, the spread between the premiums must widen.

62. The best answer is c. To sell covered calls in a cash account, the customer must be long the underlying security, either held by the brokerage firm; or held in an OCC recognized depository as evidenced by an escrow receipt. Thus, if the call is exercised, the brokerage firm or depository will deliver the underlying securities. The purchase of a call contract only covers the sale of a call if the strike price of the long call is the same or lower; and the expiration of the long call is the same or later. Furthermore, this creates a spread position, and spreads are only permitted in margin accounts (with some very rare exceptions).

37. The best answer is c. The purchase of calls and the sale of puts are both bullish strategies (Choices I and II). Choice III is a bull call spread - a bullish strategy. Choice IV is a bear put spread - a bearish strategy. Below are illustrations of bull call spreads and bear put spreads:

### Bull Call Spread - Profitable in Rising Market

Long 1 ABC Jan 60 Call @ \$7  
Short 1 ABC Jan 70 Call @ \$3

Net Debit \$4

## Bear Put Spread - Profitable in Falling Market

Long 1 ABC Jan 70 Put @ \$7  
Short 1 ABC Jan 60 Put @ \$3

Net Debit \$4

38. The best answer is c. Supporting is an illegal practice that might be attempted by an individual who is short puts that are near expiration, and that he believes may go "in the money" (the stock falls in price). To stop this, this person could **buy** the underlying stock in a sufficient amount to "support" the market price, and keep the puts "at the money" until expiration. "Capping" is a similar illegal strategy for an individual who is short calls that are near expiration, and that he believes may go "in the money" (the stock rises in price). To stop this, this person could **sell short** the underlying stock in a sufficient amount to "cap" the market price, and keep the calls "at the money" until expiration. Pegging is another illegal practice, where a person who is short straddle (and thus would lose if the market moves **either** up or down), engages in transactions to "peg" the market - that is, keep the price constant so that neither side of the straddle goes "in the money."

39. The best answer is **d**. Floor brokers on the Chicago Board Options Exchange can execute **all** orders. They may accept market orders, limit orders, stop orders, spread orders, and straddle orders. They may only accept these orders from other member organizations; they cannot accept orders directly from the public.

40. The best answer is **c.** The basic rule for setting of options strike prices at issuance is that the strike is based on the current market price of the stock. For example, if the strike price interval is \$2.50 and a stock is trading at \$18, at that moment, new contracts cannot be issued at \$18, but they could be issued at, say, \$17.50, \$20.00, \$22.50, etc. For each stock trading at \$20 or less, strike prices can be issued up to 100% higher or lower;



for stocks over \$20, the range is +/- 50%. So if a stock is trading at, say, \$50, options can be issued with strike prices ranging from \$25 to \$75.

41. The best answer is d. If a market is deemed to be "Fast," Floor Officials may restrict the entry of stop orders, stop-limit orders, and market-if-touched orders. During trading, if these orders happen to be "bunched" at a specific price, and a trade occurs at that price, then they are triggered, and a flood of new market orders to either buy or sell could enter the market, worsening the situation. This is why entry of these orders would be restricted until the market calms down.

42. The best answer is c. If a put is exercised just prior to the ex-dividend date, the put writer is buying the stock early enough to show as an owner of record for that dividend distribution. Thus, the put writer would receive the dividend from the issuer, while the put holder (who sold that stock) would not receive the dividend. Please note that if the put were exercised after the ex-dividend date, the situation would have been reversed.

43. The best answer is a. An accommodation liquidation order is placed by a customer who wishes to receive a closing trade confirmation for a worthless option contract (if one is audited by the IRS, the IRS really appreciates having a closing trade confirmation showing that the option position was liquidated rather than simply having the contract expire). An order is placed to close the contract at an aggregate premium of \$1 (\$.01 per share). This is a limit order. The board broker or order book official handles these orders as an "accommodation" to the public, hence the name.

44. The best answer is c. Prior to executing orders for the firm account at the same, or better prices, any existing customer orders at those prices must be filled. The firm is prohibited from "front running" customer orders. Market makers on the CBOE floor are permitted to trade for their own accounts at prices that do not compete with existing customer orders - otherwise the customer orders have priority. Since customer limit orders are filled on a "first in, first out" basis, an existing customer limit order might not be filled if there were orders ahead of this customer order. Because of the "spread priority rule" which gives preference to filling spread and straddle orders on the trading floor, an existing customer buy limit order might not be filled because one "leg" of the spread or straddle position was filled at the same price and took priority.

45. The best answer is d. If one shorts stock, there is increasing gain in a falling market; and increasing loss in a rising market. Unlimited loss is only possible in a rising market. If a call is bought on that stock, then in a rising market, the customer can buy in the stock at a fixed price to cover the short stock position, limiting upside loss potential. If a put is sold against that stock, then in a rising market, the put would expire "out the money." The customer is left with the short stock position, which has unlimited loss potential in a rising market.

46. The best answer is c. To participate in a tender offer, the customer must be "long" the stock. A customer is "long" if the customer owns an option, right or warrant on that stock **and** has exercised (so we know that the stock is actually coming in). A customer is "long" if the customer owns a convertible security (into that stock) **and** has given irrevocable instructions to convert.

47. The best answer is c. Money laundering is the conversion of funds obtained through illegal actions into "legitimate" funds - so the money is "washed clean." Money laundering is illegal and firms must have procedures in place to detect and report (to the Department of Treasury) suspected money launderers. In contrast, wash sales are

sequences of buy and sell trades in the same security by the same person to give the appearance of trading activity, without any actual change of ownership of the security.

48. The best answer is a. Reports of stolen securities or receipt of counterfeit securities must be made to SIC (Securities Information Center) within 1 business day of discovery. Securities discovered to be missing as a result of a routine securities count do not have to be reported until 10 days elapse without finding the securities. Reports of securities that are lost (no criminal activity suspected) are not required to be made until 2 business days after discovery. There is no requirement to report the receipt of bearer bonds that are missing coupons.

49. The best answer is d. A customer is "long" if the customer owns an option, right or warrant on that stock **and** has exercised (so we know that the stock is actually coming in). Similarly, if a customer is short a put and it has been exercised, we know that the customer will be receiving the stock - so the customer is "long." A customer is "long" if the customer owns a convertible security (into that stock) **and** has given irrevocable instructions to convert. If a customer simply owns a right, call, or warrant; is short a put; or owns a convertible; this is not considered to be "long" the underlying stock until the action is taken to turn that instrument into that stock.

50. The best answer is b. The term "class of option" means all options contracts of the same type covering the same underlying security. Thus, all XYX Calls are a "class" and all XYX Puts are a "class." The term "series of options" means all options contracts of the same class having the same exercise price and expiration date. Thus, all XYX Jul 50 Calls are an options series.

51. The best answer is a. Reverse splits are very rare events. Essentially, the standpoint of the Options Clearing Corporation is that they leave the contract untouched, but if there is an exercise, they will "fix" the problem. Logically, if there is a reverse 1:3 stock split, then the strike price should be 3 times as much; and the contract size should become 1/3rd of the normal 100 share unit. But, instead, the OCC keeps all the terms of the contract unchanged. However, if there is an exercise, the holder would be buying 33.33 shares at \$30, for an aggregate value of \$1,000. The OCC calls this an adjustment to the "deliverable unit." So for a reverse stock split, the contract terms are not changed, but the "deliverable unit" is changed.

52. The best answer is d. The CBOE may halt trading in a specific option contract if two Floor Officials agree that trading should be halted. The length of the halt can be no more than 2 business days. Reasons for halting trading in a specific stock option contract are:

- 1) Trading in the underlying security has been halted in the security's primary market;
- 2) The opening of trading in the underlying security has been delayed because of unusual market conditions; and
- 3) Other unusual conditions or circumstances are present.

53. The best answer is d. Portfolio margin, which is risk-based as opposed to strategy-based, reduces margins for hedged stock positions and hedged stock portfolios. To hedge stock positions, listed options, unlisted derivatives, securities futures, warrants and index warrants may be used. Portfolio margins cannot be used for bond positions. This is the

case because they already have very low margins (for example, the margin on corporate bonds is the greater of 7% of face or 20% of market value).

54. The best answer is a. A customer that has submitted a dispute to mediation has entered into a process from which the customer can withdraw at any time. There is no requirement for consent from the mediator, the other party to the dispute, or from FINRA in order to withdraw. The dispute will then go to arbitration for resolution.

55. The best answer is c. "Structuring" is the illegal patterning of cash transactions so they fall under the \$10,000 reporting limit - such patterns require the filing of an SAR (Suspicious Activity Report) and a Form 104 CTR (Currency Transaction Report) with FinCEN. The SAR is filed within 30 days; the CTR is filed within 15 days.

56. The best answer is c. A market maker cannot declare a "FAST" market - it can only be declared with the approval of 2 Floor Officials. If an options market is "FAST," meaning that trading is exceptionally heavy, the Exchange rules provide for the following measures to help execute all of those orders. The exchange may shift trading in that class of contracts to alternate posts, increasing the number of locations at which trading may occur. The exchange may allow other Board Brokers or Order Book Officials and their clerks to execute transactions in that class of contracts, increasing the number of personnel trading that class of contracts. If trading becomes disorderly, the Exchange may impose trading rotations in that class of contracts.

57. The best answer is d. Assume a customer sells 1 ABC Jan 50 Call @ \$5. If the market falls, the call expires and the gain is 5 points. If the market rises, the call is exercised, obligating the customer to sell the stock at \$50. Since \$5 was collected in premiums, the customer will breakeven if the stock can be purchased at \$55. If the stock continues to rise, the customer can lose an unlimited amount. Compare this to a customer who:

Sells Short 100 Shares of ABC Stock @ \$50  
Sells 1 ABC Jan 50 Put @ \$5

If the stock falls below \$50, the short put is exercised. The stock that was sold short for \$50 must be purchased at \$50. The customer makes the \$5 point premium only.

If the market rises, the short put expires. The customer received \$50 for shorting the stock, and received another \$5 in collected premiums, for a net receipt of \$55 per share. This is the breakeven point. If the market continues to rise, an unlimited amount can be lost on the short stock position.

Thus, this position (Short Stock / Short Put) is exactly the same as a Short Call.

58. The best answer is b. Position limits are applied to each "side" of the market. Short calls and long puts represent the "down" side of the market; while long calls and short puts represent the "up" side of the market.

59. The best answer is c. Only common stockholders have voting rights, preemptive rights, and subscription rights (basically the preemptive right to subscribe to additional common shares offered by the issuer). Preferred stock does not have these rights. However, both common and preferred have the right to a cash dividend, if declared by the Board of Directors.

60. The best answer is b. A 5:4 split is a 1.25:1 stock split. Thus, for every 100 shares held, the owner will now have  $1.25 \times 100 = 125$  shares. The market price of the stock will be adjusted to  $\$50/1.25 = \$40$  per share. Note that the value of the aggregate holding ( $\$5,000$ ) does not change.

61. The best answer is c. Delta measures an options premium change as compared to the price movement of the underlying instrument. Gamma measures the change in options delta, that is how slowly or quickly delta is moving. As an out the money option gets close to being at the money, the rate of premium change accelerates and the gamma is the greatest. An option that is deep out the money has a gamma of "0" - the premium does not move as the stock price moves, since the option is basically worthless. An option that is in the money also has a gamma of "0" since the premium moves in lock-step, dollar-for-dollar, with the stock's price movement. Therefore, gamma is greatest for an option that is right at the money and it diminishes the deeper the option goes in or out the money.

62. The best answer is a. An SRO is a "self-regulatory organization" under SEC oversight - each stock exchange is an SRO (CBOE is an exchange floor) as is FINRA. They are registered with the SEC and their rules are approved by the SEC. SIPC is Securities Investor Protection Corp. - which is non-profit membership corporation, funded by member firms, that protects customer accounts from monetary loss in the event that their broker-dealer fails (maximum coverage is  $\$500,000$  per account). SIFMA is the Securities Industry and Financial Markets Association, the trade group that represents the views of brokerage firms to Congress and the media.

63. The best answer is d. Rule 10b-18 sets ground rules for issuers or affiliated persons who wish to buy their shares in the open market. If an issuer aggressively buys its stock in the market, or bids for its stock, it can manipulate the market price upwards. Bids and purchases that are made in compliance with Rule 10-b-18 will not be considered manipulative activities under Rule 10-b-5 ("catch-all" fraud rule). Rule 10-b-18 purchases, as they are known:

Must be effected through 1 broker/dealer on any given day;

Cannot be the opening transaction;

Cannot be executed within 10 minutes of market close if the security is "actively traded" as designated by Rule 101 of Regulation M, otherwise, the purchase cannot be executed within 30 minutes of market close;

Must be effected at prices no higher than the current highest independent bid for that security or last reported sale price (whichever is higher);

Cannot exceed 25% of the trading volume in the security that day (except for block purchases handled outside the normal flow of orders).

In essence, the rule says that if an issuer buys in its stock during market "quiet" hours; does not bid up the price of the stock; and does not buy too aggressively; then it will not be considered to be manipulating the price of its own securities. Generally, corporations buy back shares and either retire them (increasing reported Earnings Per Share) or use them to fund pension and stock option plans.

64. The best answer is b. NASDAQ MarketWatch is similar to the NYSE StockWatch department - both monitor securities price movements and trading volumes in their respective markets to detect potential "insider trading" and "front running" abuses. In addition, MarketWatch has responsibility for receipt of material corporate news announcements to assess whether a trading halt is needed; and receives reports of clearly erroneous trades from members and resolves them. The FINRA Market Regulation Department is responsible for monitoring market makers for rule compliance.
65. The best answer is a. Price improvement means that the market maker improves on the best quoted prices by at least 1 cent (e.g., buy for a customer at least 1 cent lower than the inside ask; or sell for a customer at least 1 cent higher than the inside bid). The spread itself is irrelevant.
66. The best answer is d. A "block" trade under Regulation NMS is a trade of 10,000 shares or more; or a trade with a value of \$200,000 or more. Block trades executed as "stopped" orders, where there is a guaranteed minimum price to sell or a maximum price to buy, are exempted from the "trade-through" rule of Regulation NMS.
67. The best answer is a. Rule 611 of Regulation NMS, the "trade-through" rule, only applies during the regular Market trading session of 9:30 AM - 4:00 PM ET. It does not apply to the Premarket or Aftermarket trading sessions.
68. The best answer is d. SEC Regulation ATS (Alternative Trading System) regulates ECNs, crossing networks operated internally by a member firm or open to the public, and dark pools. These are regulated as "broker-dealers" and not as exchanges. Each ATS must register with the SEC. Regulation ATS requires that:
- An ATS with **less than 5%** of the volume in all securities it trades to:
- file a notice of operation and quarterly reports;  
maintain records and an audit trail of transactions;  
refrain from using the word "exchange" to describe itself.
- An ATS with **5% or more** of the trading volume in an NMS security:
- must link with a registered market to comply with Rule 611 (the trade-through rule).
- An ATS with **20% or more** of the trading volume in any security:
- cannot apply discriminatory standards for access to the system;  
must establish procedures to insure adequate system capacity, integrity and contingency planning.
69. The best answer is c. An order ticket to buy must include customer name or account number; whether the trade was solicited or unsolicited; and if the customer does not want the order price reduced on ex date for a cash dividend, the marking "DNR" - Do Not Reduce. Once the trade is executed, the confirmation must include whether the firm acted as an agent or principal in the transaction. This information is not on the order ticket, since at the time the order is placed, the details of how it will be executed are unknown.

70. The best answer is a. Regulation NMS requires a "level playing field" for trading of NMS securities (NYSE, AMEX and NASDAQ issues). Each member must use a trading system that is NMS compliant, but cannot be forced to use a particular trading system. The system must be able to access quotes and trade NMS securities at the best price posted by any market (exchange, NASDAQ or ATS). Regulation NMS does not ban access fees, but it does limit them to \$.003 per share. Finally, quotes that will lock or cross a market cannot be entered into a trading system for an NMS security.

71. The best answer is d. SEC Rule 606 of Regulation NMS requires broker-dealers to do the following:

The fact that the firm made a payment for order flow must be disclosed on the customer trade confirmation.

The firm, on request of the customer, must disclose the identity of the market to which the customer's orders were routed for execution in the preceding 6 months along with the time of execution. (These are known as "non-directed" orders, since the customer did not tell the broker the specific market where the order was to be executed, so the member firm could route the order to wherever it wanted.)

The firm must notify customers, in writing, at least annually, of the availability of this information.

In addition, the rule requires member firms to prepare a quarterly report that is publicly available that details the

Percentage of customer orders that were "non-directed";

Identity of the 10 largest markets or market makers, to whom non-directed orders were routed and any other venue that received 5% or more of the firm's orders; and

Member firm's relationship with that market maker (for example, many larger retail member firms own their own market maker subsidiaries to whom they route orders);

Arrangement, if any, for payment for order flow or profit-sharing.

Because of this rule, member firms cannot have "hidden" arrangements with market makers to favor them in return for "payment for order flow" - everything is out in the open and is fully disclosed. Thus, customers can make informed decisions about how retail member firms are routing and executing their orders.

72. The best answer is d. If, during normal market hours, a firm attempts to lock the market, the order will be routed to the market participant next in line for execution, at the locking price. NASDAQ Single Book will not allow the display of locking or crossing quotes during normal market hours.

73. The best answer is b. Regulation SHO requires that every order ticket to sell be marked either "long" or "short." An order to sell a security is "long" if the customer is long a convertible security and tenders it for conversion. The SEC recognizes that the transfer agent will take longer than 3 business days to cancel the bonds and issue shares in their place, so it gives 35 days for delivery before the securities must be bought in. The mandatory buy in of "13 settlement days" only applies to short sales of securities on the "threshold list" that are not delivered on settlement.

74. The best answer is a. Syndicate members who are not market makers are prohibited from purchasing, making a bid for, or inducing the purchase of, the subject security during the restricted period. They may, however execute unsolicited orders during this period. However, if a syndicate member inadvertently purchases the subject security during the restricted period in an amount that totals less than 2% of the security's ADTV (Average Daily Trading Volume), the SEC will overlook the violation as the firm has procedures in place designed to achieve compliance with Rule 101 of Regulation M (consider this a learning question!). There is no requirement for the firm to resign the syndicate.

78. The best answer is d. Under SEC rules, a customer is considered to be "long" only to the extent of his net long position in a security. It makes no difference that the positions are split among different accounts at the brokerage firm. This customer is long 500 shares of ABC and short 300 shares of ABC for a "net" long position of 200 shares. If the customer wishes to sell 500 ABC shares, the first 200 shares are sold "long," with the remaining 300 shares being a "short" sale.

79. The best answer is d. The Limit Order Protection Rule applies to all customer limit orders, with the exception of orders for Pink Sheet issues.

80. The best answer is b. Under FINRA's "Trading Ahead of Research" rule, a member firm that is about to release a research report on an issuer in which it is a market maker, cannot change its inventory position (either increase or decrease) in response to the anticipated impact of the release of the report. It can, however, increase or decrease its inventory in response to unsolicited customer order flow. The rule also strongly recommends that member firms place Chinese Walls between research and the member firm's trading desk to insure that research report information does not get transmitted to the trading desk until the report is released.

81. The best answer is b. The "Manning Rule" is another name for the Limit Order Protection Rule, which prohibits member firms from trading ahead of customer limit orders.

82. The best answer is b. Asking another dealer to either tighten or widen its spread is a prohibited practice - such coercive action was one of the major violations that occurred during the NASDAQ "Price Fixing Scandal" that was uncovered in the mid- 1990's. The other actions are all just fine - a dealer is free to offer more shares than that displayed on NASDAQ (though the dealer cannot refuse to trade less than its displayed size); a dealer can honor a bid that another dealer has just refused to honor (note, however, that other dealer has committed a "backing away" violation); and negotiating prices between the current best bid and offer is what human traders are hired to do!

83. The best answer is a. Executing trades for the purpose of inducing customers to either buy or sell is a manipulation. The other choices offered are illegal or unethical, but they are not a market manipulation. Refusing to honor customer instructions (Choice b), front running a customer order (Choice c), and backing away from a firm quote (Choice d), are all prohibited but they are not actions that manipulate the market.

84. The best answer is c. Customer short sales not resulting in delivery must be bought-in after 10 business days from settlement, if the security was on the exchange's or NASDAQ's threshold list as of trade date under Regulation SHO and remains on that list for 10 business days past settlement. The actual rule uses the wording that "buy-in" must occur in 13 settlement days - but this is the same as 10 business days after settlement.

since 3 additional days are needed to get from trade date to settlement date. Threshold securities are those that are "hard to borrow" and the SEC does not want large outstanding short positions that are uncovered to build in these securities. A threshold security is one with a large outstanding short position - defined as one with a clearing short position at the National Securities Clearing Corporation of 10,000 shares or more; and the position represents 1/2% or more of the total shares outstanding.

85. The best answer is d. The "Best Execution" rule requires that a member firm use reasonable diligence to ascertain the best market for the security being traded, taking into consideration:

The character of the market for the security, including price, volatility, relative liquidity and pressure on available communications;

The size and type of transaction;

The number of markets checked;

Accessibility of the quotation; and

The terms and conditions of the order which result in the transaction, as communicated to the member and persons associated with the member.

86. The best answer is b. Exercise of an option results in a regular way trade. Stocks settle regular way 3 business days after trade date. Since the ex-date is set at 2 business days prior to the record date, to receive the dividend the stock must be bought 3 business days prior to the record date (or just prior to the ex-date). Exercising the call just prior to the ex-date is the same as buying the stock in a regular trade just prior to the ex-date.

87. The best answer is b. Cumulative voting gives the shareholders disproportionate voting weight as compared to statutory voting and is considered to be an advantage to the small investor. Under the statutory method, the shareholder can apply as many votes per directorship as he has shares in the company. Under the cumulative method, the shareholder can accumulate **all** votes that he has for **all** directorships and apply them to favored individuals.

88. The best answer is b. Listed option contracts are **not** adjusted for cash dividends. They are adjusted for 2:1 and 4:1 stock splits.

89. The best answer is a. Common shareholders have both voting rights and preemptive rights (the right to maintain proportionate ownership if the issuer issues additional common shares). Preferred stockholders do not have voting rights and do not have preemptive rights. This is the case because they are being given a fixed rate of return that is not affected by dilutive actions taken on the part of the company (as is the case with common shareholders).

90. The best answer is b. Money laundering is typically characterized by extensive deposits or withdrawals of cash, money orders, and wire transfers - especially to overseas accounts in countries with tight bank secrecy laws. The wire transfer request is the "tip off" to this question.

91. The best answer is b. An ETN is an Exchange Traded Note. It is a type of structured product offered by banks that gives a return tied to a benchmark index. The note is a debt of the bank, and is backed by the faith and credit of the issuing bank. Thus, if the bank's credit rating is lowered, the value of the ETN will fall as well - so it has credit risk. ETNs are listed on an exchange and trade, so they have minimal liquidity risk. Their return can be based on "exotic" indexes, such as a Brazil or India index, so they can give investors access to the returns of foreign markets. Finally, ETNs make no interest or dividend payments. Their value grows as they are held based on the growth of the benchmark index, with any gain at sale or redemption currently taxed at capital gains rates. Thus, they are tax-advantaged as compared to conventional debt instruments.

92. The best answer is c. An ETN is an Exchange Traded Note. It is a type of structured product offered by banks that gives a return tied to a benchmark index. The note is a debt of the bank, and is backed by the faith and credit of the issuing bank. They are not an equity security - they are a debt instrument. ETNs are listed on an exchange and trade, so they have minimal liquidity risk. Finally, ETNs make no interest or dividend payments. Their value grows as they are held based on the growth of the benchmark index, with any gain at sale or redemption currently taxed at capital gains rates. Thus, they are tax-advantaged as compared to conventional debt instruments.

93. The best answer is a. Failure to honor a stated quote is the violation known as "backing away" - as in backing away from that quote.

94. The best answer is c. The term "DNR" stands for "Do Not Reduce." On the ex-date for a cash dividend, the price of the stock is reduced by the dividend amount and the orders that are below the current market are also automatically reduced. These are Open Buy Limit orders and Open Sell Stop orders ("OBLOSS"). Because the dividend reduction reduces the opening price on ex-date, these orders could wind up being automatically filled just due to the dividend reduction - so reducing them stops this from happening. If the customer does not want the order automatically reduced, then "DNR" - Do Not Reduce - must be noted on the order.

95. The best answer is d. The Securities Information Center (SIC) is a database for reports of securities that are lost, stolen, or discovered to be counterfeit. Receipt of a bearer bond that is missing coupons is not reported to SIC. Receipt of such a bond is not a good delivery (bearer bonds must be delivered with all unpaid coupons attached) and a member firm can use the Uniform Practice Code's "Reclamation Procedure" to return the bond to the seller and replace it with another bond that has all unpaid coupons attached.

96. The best answer is d. A sell order can only be marked "long" if the representative determines the location of the securities and that they can be delivered by settlement. The location of street name securities held by the broker-dealer is known, and because these are held at the firm, they can be delivered by settlement. Customer securities held in the customer's safe deposit box are in a known location, and Choice B states that the customer will deliver by settlement, so the sell order is marked "long." Securities held at Depository Trust Corp. in book entry form have no physical certificates. As long as they are recorded as owned by the customer at DTCC, then the sell order can be marked "long." In Choice D, we have no clue as to the location of the securities, so this sell order must be marked "short."

97. The best answer is a. FINRA permits claims that would be (or that have been) submitted to arbitration to be submitted to a mediator for an attempt at resolution. The mediator is simply an impartial facilitator that attempts to get both sides to find an amicable settlement. The mediator has no decision-making authority and cannot force a resolution of the dispute. This is a voluntary process - no one can be compelled to go to mediation. Both sides must agree to mediation, and either side can exit the process at any time (at least until the point that they agree to a settlement and sign the papers!).

98. The best answer is a. Since trading has been halted in the U.S., the trading halt applies to all U.S. market participants. The fact that the issue is still trading in the foreign market is irrelevant.

99. The best answer is d. The minimum maintenance margin requirement for short positions is 30% of market value. However, because the ETF is 300% leveraged, the minimum is 3 times 30% = 90%. These leveraged ETF margin rules were put in place because of the excessive volatility that these securities have shown.

100. The best answer is b. SEC Rule 10b-5-1 allows officers of publicly held companies (statutory insiders) to establish "pre-arranged trading plans" that set future transaction dates and amounts of that issuer's securities; or that specify algorithms that establish the transaction dates and amounts. As long as the officer does not deviate from the plan, the officer is given a "safe harbor" from being accused of insider trading based on those trades.

**Series #56**  
**Final 4**

**1.**

If the NYSE halts trading in all securities due to imposition of the "circuit breaker" rule that is initiated in response to extraordinary market conditions, the CBOE will:

- a. halt trading in stock options on NYSE listed issues, but not in stock options on AMEX or NASDAQ listed issues
- b. halt trading in all stock options, but not in index options
- c. halt trading in all stock options and index options
- d. continue to trade all options contracts

**2.**

If 2 Floor Officials agree, trading in a specific options contract can be halted for a maximum of:

- a. 1 business day
- b. 2 business days
- c. 3 business days
- d. 5 business days  
with the SRO 10 days in advance of use

**3.**

Which of the following has the same breakeven point as 1 ABC Jan 50 Call @ \$3?

- a. 1 ABC Jan 50 Put @ \$7
- b. 1 ABC Jan 60 Put @ \$7
- c. 1 ABC Jan 55 Call @ \$2
- d. 1 ABC Jan 45 Call @ \$9

**4.**

The principal supervisory office having jurisdiction over the office servicing a customer's options account is obligated to perform a timely review all of the following in each customer options account **EXCEPT:**

- a. commission activity
- b. profit or loss
- c. undue concentration
- d. tax liability

**5.**

A customer owns 15,000 shares of ABC stock purchased at \$40 that has appreciated in value to \$61 per share. The customer believes that the stock may rise to \$70 per share, but wants to protect the position from downside loss at minimum cost. In order to meet the customer's objectives, the best recommendation is to:

- a. Buy 150 ABC Jan 60 Puts and Sell 150 ABC Jan 70 Calls
- b. Buy 150 ABC Jan 70 Puts and Sell 150 ABC Jan 60 Calls
- c. Sell 150 ABC Jan 60 Calls and Buy 150 ABC Jan 70 Calls
- d. Sell 150 ABC Jan 60 Puts and Buy 150 ABC Jan 70 Puts

**6.**

Exercise limits on the CBOE are applied over a time period of:

- a. 1 business day
- b. 3 business days
- c. 5 business days
- d. 10 business days

**7.**

The minimum time period for which customer options complaints must be retained is:

- a. 1 year
- b. 3 years
- c. 5 years
- d. 6 years

8.

A customer places a closing order to sell 5 ABC Jul 60 Calls @ \$5, 2 days after ABC has gone ex-dividend for a 10% stock dividend. If the order is filled at the \$5 premium, the customer will receive:

- a. \$500
- b. \$2,500
- c. \$2,750
- d. \$3,000

11.

ABCD stock is trading at \$120 on NASDAQ. The company declares a 3:2 stock split. On the ex date for the split, the holder of 1 ABCD Jan 120 Call will have:

- a. 1 ABCD Jan 120 Call with a multiplier of 100
- b. 1.5 ABCD Jan 120 Calls with a multiplier of 100
- c. 1 ABCD Jan 80 Call with a multiplier of 150
- d. 1.5 ABCD Jan 80 Calls with a multiplier of 100

9.

Which of the following allocation methods is permitted to be used by a member organization if that member receives an exercise notice from the Options Clearing Corporation?

- a. First In; First Out
- b. First In; Last Out
- c. Last In; First Out
- d. Last In; Last Out

12.

In determining whether there is a violation of position limits, options trades in which of the following accounts will be aggregated?

- I A discretionary options account where Broker "A" executes trades for a client
- II An options account owned by Broker "A" where he or she trades for his or her own account
- III An options account for an individual customer that is serviced by Broker "A"

10.

A member firm is permitted to execute an options trade for a customer outside of the exchange floor if:

- a. approval of the exchange is received prior to "executing away" from the trading floor
- b. the order is placed by the customer as a "market not-held" order
- c. a better execution can be obtained for the customer, resulting in a lower purchase price or higher sale price
- d. a narrower bid-ask spread is present in the alternate marketplace, resulting in a better execution for the member firm

13.

The last date and time to exercise an expiring equity option contract is:

- a. 4:30 PM ET on the business day prior to the last day of trading
- b. 5:30 PM ET on the business day prior to the last day of trading
- c. 4:30 PM ET on the last day of trading
- d. 5:30 PM ET on the last day of trading

14.

Options positions limits do NOT apply to:

- a. Equity Options
- b. Index Options
- c. Foreign Currency Options
- d. Flex Options

15.

All of the following are equivalent positions EXCEPT:

- a. Long Call = Long Stock + Long Call
- b. Short Call = Short Stock + Short Put
- c. Long Put = Short Stock + Long Call
- d. Short Put = Long Stock + Short Call

16.

A customer holds 1 ABC Oct 60 Call contract. The market price of ABC is currently 62. ABC declares a 2:1 stock split. On the ex date, the holder will have:

- a. 1 contract with a multiplier of 100
- b. 1 contract with a multiplier of 200
- c. 2 contracts with a multiplier of 100
- d. 2 contracts with a multiplier of 200

17.

A customer is long 10 ABC Jan 60 Call contracts. ABC Corporation has just declared a \$1 per share dividend. To receive the dividend, the customer must:

- a. sell the contracts prior to the ex-date
- b. sell the contracts prior to the record date
- c. file an effective exercise notice with the Options Clearing Corporation prior to the ex-date
- d. file an effective exercise notice with the Options Clearing Corporation after the ex-date

18.

The last time to trade an equity option that is about to expire is:

- a. 2:00 PM Central Time; 3:00 Eastern Time, on the 3rd business day prior to expiration
- b. 3:00 PM Central Time; 4:00 Eastern Time, on the 3rd business day prior to expiration
- c. 2:00 PM Central Time; 3:00 Eastern Time, on the business day prior to expiration
- d. 3:00 PM Central Time; 4:00 Eastern Time, on the business day prior to expiration

19.

A floor broker on the Chicago Board Options Exchange announces, by public outcry, that he is "crossing." This means that:

- a. The floor trader held an order to buy and sell the same option; was unable to execute the trade in the trading crowd; and therefore, is canceling the orders by crossing them off his order book
- b. The floor trader held an order to buy and sell the same option; was unable to execute the trade in the trading crowd; and therefore, executed the orders against each other by crossing them
- c. The Floor Official has declared that the trade is invalid and the trader must publicly announce that the trade is "crossed off"
- d. The floor trader, as an accommodation, is liquidating a worthless option contract for an aggregate \$1 premium

20.

Which statements are true about PHLX World Currency British Pound options?

- I The contract size is 10,000 British Pounds
  - II The contract size is 100,000 British Pounds
  - III The contract multiplier is 100
  - IV The contract multiplier is 10,000
- a. I and III
  - b. I and IV
  - c. II and III
  - d. II and IV

22.

A member firm may assume, for its own account, an option contract made for a customer after a loss to the customer has been established:

- I If the customer requests in writing and the member organization agrees in writing
  - II If the contract was made by the member organization's mistake
  - III If approval of the exchange has first been obtained
- a. I only
  - b. I and II
  - c. II and III
  - d. I, II, III

21.

Portfolio margining:

- I uses standardized stress-testing of probable price declines or increases to compute margins
  - II uses fixed percentages established by Regulation T to compute margins
  - III is mainly used by hedge funds and institutional investors seeking to increase leverage
  - IV is mainly used by smaller investors seeking to increase leverage
- a. I and III
  - b. I and IV
  - c. II and III
  - d. II and IV

23.

A customer enters an order to sell 80 OEX Jan 850 Calls @ \$10 - IOC. The order is transmitted to a floor broker on the CBOE, who is able to fill 60 contracts at \$10. Which statement is true?

- a. The floor broker will execute the trade for 60 contracts and can make additional attempts to fill the remaining 20 contracts during that trading day
- b. The floor broker will execute the trade for 60 contracts and the balance of 20 contracts that were not filled will be canceled
- c. The floor broker will execute the trade for 60 contracts and place the unfilled limit order to sell 20 contracts with the Board Broker or DPMM
- d. The floor broker cannot execute the order because it must be filled in its entirety

24.

When the price of ABC stock is \$50, on the same day in a margin account, a customer: Buys 1 ABC Jan 55 Call @ \$1; Sells 2 ABC Jan 50 Calls @ \$4; and Buys 1 ABC Jan 45 Call @ \$8. The customer has created a:

- a. combined long and short spread
- b. butterfly spread
- c. ratio write
- d. covered straddle

25.

The latest time to place a trade for an equity option on the CBOE floor is:

- a. 4:00 PM EST; 3:00 PM CST
- b. 4:15 PM EST; 3:15 PM CST
- c. 5:30 PM EST; 4:30 PM CST
- d. 11:59 PM EST; 10:59 CST

26.

A customer places an order to "Sell 10 ABC Jan 60 Calls @ Mkt" at 12:15 PM ET. The registered representative writes the order on a notepad and rushes out to a pressing lunch engagement. At 1:45 PM, the registered representative returns from lunch and enters the order, which is immediately executed at a premium of \$5 per share. The trade is reported to the customer, who complains that when the order was placed at 12:15 PM, the option was trading at \$7. The customer wants the member firm to pay for the \$2 of "lost" premium. Which statement is true?

- a. The customer is required to accept the \$5 execution price, since this was a market order
- b. The customer is required to accept the \$5 execution price, since member firms are prohibited from assuming customer losses
- c. The member firm must break the trade since the customer did not receive the desired price
- d. The member firm must credit the customer account for the \$2 per share of "lost" premiums

27.

A registered representative has been suspended for 60 days as a result of a disciplinary action taken under the Code of Procedure. Which statement is **TRUE** regarding payment of compensation to the representative during the suspension period?

- a. The representative cannot be paid during the suspension period
- b. The representative can be paid for prior business done, but cannot be paid for any current business
- c. The representative can be paid for any current business, but cannot be paid for prior business done
- d. The representative can continue to be paid in the normal manner

28.

A registered representative with your firm wishes to supplement her income by becoming a real estate agent on weekends. Which statement is **TRUE** about this activity?

- a. She is prohibited from taking an outside job
- b. She can take an outside job, but cannot be commission-based
- c. She can only take the second job if she gives written notice to the firm
- d. She can only take the second job if she gives written notice to the SRO

**29.**

A registered representative is deployed in the Army Reserves. During the length of time that the individual is in the Reserves:

- a. his registration goes into "special inactive" status and he is excused from his Regulatory Element CE obligation
- b. his registration remains active but he does not have to complete his Regulatory Element CE until his military service is completed
- c. his registration remains active and he has to complete his Regulatory Element CE obligation on-line when given notice from CRD
- d. his registration is terminated and he must file a new U-4 Form if he wishes to re-enter the securities business when his military service is completed

**30.**

A registered representative that has worked at a member firm for 3 years pleads no contest to a misdemeanor charge of bribery. Which statement is **TRUE**?

- a. There is no requirement to report this event because it is not a felony
- b. This event must be reported to the SRO promptly
- c. This event must be reported as a U-4 amendment promptly
- d. This event must be reported promptly to the SRO and as an amendment to the individual's U-4

**31.**

A block trade of a listed stock is defined as a trade of at least:

- a. 1,000 shares
- b. 5,000 shares
- c. 10,000 shares
- d. 100,000 shares

**32.**

A broker executes a trade for a customer at \$10 per share. When the customer gets the trade confirmation, it shows the cost as \$10.30 per share plus a \$.50 per share commission. Which statement is **TRUE**?

- a. This conforms with industry rules
- b. This is permitted because the mark-up is less than 5%
- c. This is permitted if the customer was informed of the mark-up in advance of trade execution
- d. This is prohibited

**33.**

The "Regulatory Element" of the Continuing Education requirement must be completed:

- a. annually
- b. semi-annually
- c. on the 2nd anniversary of registration and every 3 years thereafter
- d. on the 3rd anniversary of registration and every 5 years thereafter

**34.**

A branch issues cashier's checks to the same customer in the amounts of \$1,000, \$2,500, \$3,000 and \$5,000 during a single day. A report to FinCEN is:

- a. not required
- b. only required for the \$5,000 cashier's check
- c. required only for the \$3,000 and \$5,000 cashier's checks
- d. required for all of the transactions

35.

When XYZ is trading at \$10, a customer enters a limit order to buy 100 shares at \$10. The trade is executed and reported by the broker to the client that it was filled at \$10. When the customer gets the confirmation, it shows the trade occurring at \$10.57. The firm should:

- a. break the trade
- b. give the customer the \$10 price and charge the representative \$.57
- c. give the customer the trade at the correct price of \$10 and book the \$10.57 trade into the branch error account
- d. report the trade to the Market Operations Review Committee

37.

A customer deposits \$20,000 of cash at your firm and over the course of a week, withdraws cashier's checks in the amounts of \$1,000, \$2,500, \$3,000 and \$5,000. A report to FinCEN is:

- a. not required
- b. only required for the \$5,000 cashier's check
- c. required only for the \$3,000 and \$5,000 cashier's checks
- d. required for all of the transactions

38.

An opening rotation on the floor of the CBOE starts:

- a. prior to the opening of trading of the underlying security
- b. at the opening of trading of the underlying security
- c. after the opening of trading of the underlying security
- d. after the close of trading of the underlying security

39.

A tender offer is being made for 10% of the outstanding shares of XYZ company's stock at \$25 per share. This represents a premium of \$5 over XYZ's current market price of \$20. Officers of XYZ hold both XYZ stock and options positions. Which statement is TRUE about their ability to participate in the tender offer?

36.

Trading in a stock has been halted pending an important news announcement. A customer wishes to place a limit order to sell short listed options during this trading halt. Which statement is TRUE?

- a. The customer order cannot be accepted until trading resumes
- b. The customer order cannot be accepted because it is a short sale
- c. The customer order can be accepted by the member firm but the customer should be notified that trading is currently halted
- d. The customer order can be accepted by the member firm and executed through a foreign exchange

- a. The officers of XYZ are not permitted to participate in the tender offer
- b. The officers of XYZ can tender an amount that equals 10% of their shares and options
- c. The officers of XYZ can tender as much of their stock holdings as they wish
- d. The officers of XYZ can tender as much of their stock and options holdings as they wish

40.

Which of the following persons have potential civil liability under the Insider Trading Act of 1988?

- I A person who executes a trade while in possession of inside information
  - II A registered representative who executes a trade for his own account at the same time as executing the transaction for the insider
  - III The broker-dealer supervising the registered representative in Choice II above
  - IV The Board of Directors of the issuing corporation, whose shares were the subject of an "insider trade" by an unaffiliated person
- a. I only
  - b. II only
  - c. I, II, III
  - d. I, II, III, IV

41.

A floor broker would be permitted to initiate which one of the following transactions?

- a. Bona-fide arbitrage transaction
- b. Principal transaction in a security admitted to trading
- c. Transaction for an account in which the floor broker has an interest
- d. Discretionary transaction

42.

Which of the following receives dividend payments?

- a. Warrants
- b. Treasury Stock
- c. ADRs
- d. Rights

43.

A customer is long 1,000 shares of ABCD stock and has gone "short against the box" 400 shares of ABCD stock. If there is a tender offer for the shares of ABCD Corporation, the customer:

- a. cannot tender any shares
- b. can tender 400 shares
- c. can tender 600 shares
- d. can tender 1,000 shares

44.

A customer that wishes to effect a securities trade through an ECN in the "after-hours" market should be advised that the market is:

- I subject to high volatility
- II subject to low volatility
- III highly liquid
- IV highly illiquid

- a. I and III

- b. I and IV

- c. II and III

- d. II and IV

45.

Buy stop orders can be used to:

- I Protect a profit on short positions
- II Limit loss on short positions
- III Acquire stock if a resistance level is broken
- IV Acquire stock if a support level is broken

- a. I and II only

- b. III and IV only

- c. I, II, III

- d. I, II, III, IV

**46.**

A customer places an order to sell 100 XYZ at 38 Stop Limit. This means that the order:

- a. is elected at 38 or lower and can be executed at 38 or higher
- b. is elected at 38 or higher and can be executed at 38 or lower
- c. can only be filled at 38 exactly
- d. will be filled at 38 or better only after a trading halt

**47.**

A sell order for a customer is considered to be "long" if the customer is long:

- a. a call option on the stock being sold that has not yet been exercised
- b. the stock and will not deliver the shares on settlement
- c. a convertible bond that has been converted into the stock being sold for delivery on settlement
- d. a warrant on the stock being sold that has not yet been exercised

**48.**

Under the provisions of Regulation M, a syndicate manager is permitted to stabilize the price of a new issue offering for:

- a. the 30-day window of time following the effective date
- b. the 45-day window of time following the effective date
- c. the 90-day window of time following the effective date
- d. any length of time as determined by the manager, but stabilization must cease once the syndicate is disbanded

**49.**

Orders placed in NASDAQ Single Book are filled based on:

- a. Price priority
- b. Time priority
- c. Price priority; then Time priority
- d. Time priority; then Price Priority

**50.**

"Painting The Tape" is the:

- a. illegal practice of effecting wash trades in thinly traded issues
- b. illegal practice of matching buyers and sellers in a common trading pool
- c. legal practice of effecting both long sales and short sales subject to the "uptick" rule
- d. legal practice of taking both a stock and option position on the same "side of the market"

**51.**

Quotes disseminated by market makers under the SEC "Firm Quote Rule" - Rule 602 of Regulation NMS - cover all of the following securities **EXCEPT:**

- a. Trades of OTCBB issues effected by registered market makers
- b. Third market trades of exchange listed issues
- c. Trades of NASDAQ Global Market issues effected by registered market makers
- d. Trades of NASDAQ Capital Market issues effected by registered market makers.

**52.**

A limit order that a customer requests not be displayed is:

- I permitted under the limit order display rule
- II not permitted under the limit order display rule
- III subject to the limit order protection (Manning) rule
- IV not subject to the limit order protection (Manning) rule

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

**53.**

The inside market for ABCD stock is \$15.00 - \$15.50. If a market maker enters a bid of \$15.55 into NASDAQ Single Book, the order is:

- a. executed at \$15.00
- b. executed at \$15.50
- c. executed at \$15.55
- d. canceled

**54.**

Under SEC Rule 602 of Regulation NMS, the Firm Quote Rule, a market maker is **NOT** obligated to execute against its quote in which of the following situations?

- I The market maker has entered a revised quote price into the NASDAQ system just prior to the presentation of the customer order
  - II The market maker has entered a revised quote size into the NASDAQ system just prior to the presentation of the customer order
  - III The market maker has just executed another transaction in that security and is in the process of communicating a revised quote to NASDAQ
- a. I only
  - b. I and II
  - c. II and III
  - d. I, II, III

**55.**

All of the following are prohibited practices by market makers **EXCEPT**:

- a. lowering a bid at the request of another market maker
- b. raising an ask at the request of another market maker
- c. giving details of customer trading strategies to other market makers
- d. entering an ask at a price that is lower than the current highest ask

**56.**

Which order is **NOT** required to be included in the monthly reports required by SEC Rule 605 of Regulation NMS?

- a. Market Orders
- b. Marketable Limit Orders
- c. Limit Orders
- d. Not Held Orders

**57.**

A NASDAQ market maker is quoting ABCD stock as follows:

|                |                |
|----------------|----------------|
| <b>\$15.00</b> | <b>\$15.25</b> |
| <b>300</b>     | <b>800</b>     |

The market maker receives an order to buy 1,000 shares of ABCD at \$15.25. Which statement is true about filling this order? The market maker is:

- a. obligated to fill the entire 1,000 share order at \$15.25 and then must move its quote price up
- b. only obligated to fill 100 shares of the order at \$15.25 and can maintain the same ask quote
- c. only obligated to fill 300 shares of the order at \$15.25 and can maintain the same ask quote
- d. only obligated to fill 800 shares of the order at \$15.25 and then must increase its quote price

**58.**

In order to effect a penny stock transaction for a customer, all of the following must be given to the customer **EXCEPT**:

- a. the current bid-ask quote for that security
- b. the average daily trading volume for that security
- c. the compensation to be earned by the broker-dealer in the transaction
- d. the compensation to be earned by the registered representative in the transaction

59.

Trading has been halted in ACBD stock by NASDAQ pending the release of material information. The information is considered to be properly released when it is distributed:

- a. to a select group of research analysts
- b. to the corporation's largest shareholders
- c. to the news media
- d. over the news media

60.

A market maker would be permitted to use an automated quote update system to do all of the following EXCEPT:

- a. reflect the execution of customer limit order
- b. expose a marketable limit order, allowing for price improvement
- c. improve the price or size of either side of the NBBO
- d. maintain the market maker's quote at least \$.05 away from the NBBO

61.

Under Rule 103 of Regulation M, passive market making would be permitted by a market maker that is also a syndicate member in an "add on" offering only if:

- a. there are at least 3 other market makers quoting that issue at the time that the market maker wishes to enter his quote
- b. there is a current independent market for the subject security
- c. the bid is placed at a price that is higher than the highest current independent bid
- d. any other syndicate member is maintaining a firm 2-sided quote for that issue

62.

If a NASDAQ market maker makes a payment for order flow to an order entry firm:

- a. the market maker has violated FINRA rules and is subject to disciplinary action
- b. the payment must be reported in the TRF trade report made by the market maker
- c. the payment must be disclosed on the trade confirmation sent to the customer
- d. the market maker's bid quote in Single Book must be adjusted up and its ask quote must be adjusted down by the amount of the payment

63.

A listed company has asked a broker-dealer to buy its own shares in the market under a Treasury stock repurchase plan. The inside market in the stock is 15.00 - 15.25. The last reported sale in the stock occurred at \$15.10. At what price can the stock be purchased?

- a. \$15.00 or lower
- b. \$15.10 or lower
- c. \$15.25 or lower
- d. At any price as long as the trade is effected on an agency basis

64.

Broker-dealers are obligated to check the threshold list:

- a. daily
- b. every 24 hours
- c. every 48 hours
- d. every 72 hours

**65.**

Which of the following individuals cannot buy options for his own account?

- I Order Book Official
  - II Specialist.
  - III Market Maker
  - IV Floor Broker
- a. I and IV only
  - b. II and III only
  - c. III and IV only
  - d. I, III, IV

**66.**

A customer who is long 1 ABC Jan 50 Call contract wishes to exercise in time to receive the current dividend declared by ABC Corporation. The last day to exercise and receive the dividend is:

- a. 1 business days prior to Ex date
- b. the Ex date
- c. 1 business day after the Ex Date
- d. the Record Date

**67.**

Which of the following will cover the sale of 1 ABC Jan 50 Call contract?

- I 100 shares of ABC stock held in the customer's account
- II An Escrow receipt from a qualified depository evidencing that 100 shares of ABC are being held
- III 1 ABC Oct 50 Call Contract held long in the customer's account
- IV U.S. Government bonds with a market value equal to the aggregate exercise price of the contract held in the customer's account

- a. I only
- b. I and II
- c. I, II, III
- d. II, III, IV

**68.**

The synthetic equivalent of a long call is:

- a. long stock / long put
- b. long stock / short put
- c. long stock / long call
- d. short stock / long call

**69.**

A floor broker on the Chicago Board Options Exchange receives the following order:

**"Sell, to close, firm"**

Which statement is true?

- a. A customer of a member firm is closing a long position
- b. A customer has placed a firm order to close an existing long position
- c. A member firm is closing a long position for its own account
- d. A member firm is establishing a long position for its own account

**70.**

During an opening rotation, which of the following orders may be executed?

- I Market Orders
- II Limit orders
- III Stop orders
- IV Straddle orders

- a. I only
- b. I and II only
- c. I, II, and III
- d. II, III, and IV

71.

All of the following are true regarding the treatment of bids made on the floor of the CBOE EXCEPT:

- a. At the opening, public market orders held by the Order Book Official have priority over equivalent limit orders held by the Order Book Official
- b. The bid representing the highest price has priority over lower bids
- c. If two or more orders represent the highest price, and a bid by the Order Book Official is not involved, priority is afforded the orders based upon the sequence of the bids
- d. If two or more bids represent the highest price, and one of the bids is displayed by the Order Book Official, the other bid has priority

73.

A Floor Broker holds orders to buy and sell the same option series, and wishes to cross the orders. Which statement is true?

- a. Crossing of the orders is prohibited by CBOE rules
- b. Crossing is permitted if the trade is effected at the same price as the last reported trade in that series
- c. Crossing is permitted if the Floor Broker first request bids and offers from the trading crowd, including the Order Book Official, and there are no takers
- d. Crossing is permitted if two Floor Officials approve the transaction

72.

All of the following statements are true regarding the activities of Floor Brokers on the CBOE EXCEPT:

- a. Floor brokers directly accept and execute orders for other member firms
- b. Floor brokers directly accept and execute orders for public customers
- c. Floor brokers are prohibited from executing orders to buy and sell the security in which they are registered to trade for their own accounts
- d. Floor brokers may either be independent, or may act as nominee for member firms

74.

The appropriate order to place above a "resistance level" would be:

- a. Buy Limit
- b. Buy Stop
- c. Buy MIT
- d. Buy AON

75.

Which of the following options strategies involving stock positions has the greatest risk?

- a. long stock / short call
- b. long stock / long put
- c. short stock / long call
- d. short stock / short put

76.

The trading of an NYSE listed stock is halted on that exchange on the Thursday prior to expiration, and trading on the CBOE in that issuer's contracts is halted as well. If the trading halt continues through the expiration date, holders of contracts expiring that month may:

- I Effect closing transactions on the CBOE on first day that trading resumes
  - II Effect closing transactions on the NYSE on first day that trading resumes
  - III Exercise the contracts prior to the expiration date
  - IV Allow the contracts to expire
- a. I only
  - b. II and III only
  - c. III and IV only
  - d. I, III, IV

77.

A person associated with a member may:

- a. give gifts totaling no more than \$100 in value per person per year related to one's activities in the securities business
- b. give gifts totaling no more than \$200 in value per person per year related to one's activities in the securities business
- c. give any gift that is fair and reasonable related to one's activities in the securities business
- d. is prohibited from giving any gifts to another person related to one's activities in the securities business

78.

Which of the following individuals can be considered to be "insiders" under the Securities Exchange Act of 1934?

- I Attorney for a corporation
  - II Accountant for a corporation
  - III Research scientist for a corporation
  - IV Business journalist
- a. I and II only
  - b. II and III only
  - c. IV only
  - d. I, II, III, IV

79.

All of the following would be considered long positions in ABC stock under the Securities and Exchange Act of 1934 EXCEPT:

- a. Long ABC warrants on which notice of exercise has been served
- b. Long ABC call options on which notice of exercise has been tendered
- c. Long ABC convertible preferred stock which has been tendered for conversion
- d. Long ABC stock for which payment has not been tendered

80.

Which of the following is the definition of a "stock power"?

- a. A power of attorney given to the broker-dealer to accept dividends and interest on behalf of the customer for securities held in street name
- b. A limited power of attorney given to the broker-dealer to vote the stock if no contest exists
- c. The amount of securities that can be purchased in a margin account without making a deposit
- d. A limited power of assignment or substitution given to the broker-dealer

81.

Which of the following persons cannot be denied FINRA registration?

- a. A person who is the subject of pending litigation involving securities fraud
- b. A person who has been suspended by the Chicago Board Options Exchange
- c. A person who has been suspended by the Securities Exchange Commission
- d. A person who has been dismissed by another member firm for violating firm procedures

82.

A customer that has not signed an arbitration agreement wishes to file a lawsuit against a registered representative, alleging that the representative lied to the customer to induce trading for the purpose of earning commissions. Which statement is true?

- a. The customer is not permitted to file a lawsuit because this type of dispute must be settled by binding arbitration
- b. The customer may file a lawsuit in Federal court as long as the alleged violation did not occur more than 3 years ago
- c. The customer may file a lawsuit in Federal court as long as the alleged violation did not occur more than 5 years ago
- d. The customer may file a lawsuit in Federal court as long as the alleged violation did not occur more than 10 years ago

83.

Under Regulation M, the maximum restricted period for trading a subject security by a syndicate member that is NOT a market maker is:

- a. 1 day
- b. 5 days
- c. 10 days
- d. 20 days

84.

A customer places an order to sell \$500,000 of ABC stock at the market. The member firm receiving the order is a market maker in the stock and has a long inventory position in ABC stock of \$200,000. Because of the size of the customer order, the market making desk wishes to hedge its inventory position by purchasing 2,000 ABC Put options. Which statement is TRUE?

- a. The market making desk is prohibited from buying put options on securities held in inventory
- b. The market making desk can only buy the put options prior to placing the customer's order
- c. The market making desk can only buy the put options after placing the customer's order
- d. The market making desk can buy the put options without restriction since this is a bona-fide hedge transaction

85.

When comparing an ETN to an ETF, which statements are TRUE?

- I ETNs are a type of investment company offering
- II ETFs are a type of investment company offering
- III ETNs are a debt instrument
- IV ETFs are a debt instrument

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

86.

Which statements are **TRUE** about ETNs?

- I ETNs are a structured product
  - II ETNs are an investment company product
  - III ETNs are suitable for investors seeking income
  - IV ETNs are suitable for investors seeking long-term capital gains
- a. I and III
  - b. I and IV
  - c. II and III
  - d. II and IV

88.

A market order to buy an options contract is placed when the market maker is quoting 4.00 - 4.50. This order will **NOT** be the first to be filled on the exchange floor if:

- a. a market order to buy from another member firm is received at the same time
- b. the long leg of an unfilled spread order is received at the same time
- c. the market maker wishes to fill an order to buy for its proprietary trading account
- d. a Registered Options Trader attempts to execute a market not-held order to buy at the same time

89.

A broker-dealer wishes to execute a closing trade in its proprietary account in a cabinet transaction. Which statement is **TRUE**?

- a. The position can be closed as long as the aggregate premium is no more than \$1
- b. The position cannot be closed because cabinet transactions are not available for proprietary positions
- c. The position cannot be closed because only opening positions are permitted in cabinet transactions
- d. The position can be closed without any limitations

90.

The "Firm Element" of the Continuing Education requirement must be completed:

- a. annually
- b. semi-annually
- c. on the 2nd anniversary of registration and every 3 years thereafter
- d. on the 3rd anniversary of registration and every 5 years thereafter

87.

Which of the following is the proper description of the following order:

"Sell 10 ABC Jan 100 Calls @ 8.50 MIT"

- a. The order becomes a market order to sell if a trade occurs at 8.50 or higher
- b. The order becomes a limit order to sell at 8.50 if a trade occurs at 8.50 or higher
- c. The order becomes a market order to sell if a trade occurs at 8.50 or lower
- d. The order becomes a limit order to sell at 8.50 if a trade occurs at 8.50 or lower



91.

An associated person of ABC Securities maintains her personal account at the firm. The associated person leaves to join XYZ Securities and ABC Securities files a U-5 Form with CRD on a timely basis. Under SEC rules, ABC Securities must keep copies of the associated person's account records for:

- a. 2 years
- b. 3 years
- c. 5 years
- d. 6 years

92.

An individual that is in possession of material nonpublic information relating to a tender offer that has been received from the maker of the offer or the issuer that is the subject of the offer:

- I cannot buy the issuer's common stock, convertible securities, or options on these securities
- II can buy the issuer's common stock, convertible securities, or options on these securities
- III after public disclosure of the information and its source, cannot buy the issuer's common stock, convertible securities, or options on these securities
- IV after public disclosure of the information and its source, can buy the issuer's common stock, convertible securities, or options on these securities

- a. I and III
- b. I and IV
- c. II and III
- d. II and IV

93.

An example of a "delta neutral" options strategy is a:

- a. long call
- b. long put
- c. long straddle
- d. long spread

94.

Which of the following is NOT a reason for trading to be halted in the affected option contract?

- a. Trading has been halted on the NYSE in all stocks because the circuit breaker has been triggered
- b. NASDAQ MarketWatch has delayed the opening of a stock because of a pending news announcement
- c. The Philadelphia Stock Exchange has stopped trading its stocks due to a regional power disruption
- d. The SEC has closed the securities markets because of a national calamity

95.

A customer trade in a listed options contract is permitted to be routed away from the exchange for execution:

- a. under no circumstances
- b. if the member firm takes the other side of the trade in a principal transaction
- c. if the price of the transaction will be better than that offered on the exchange
- d. without restriction

96.

What is a "delta neutral" options strategy?

- a. An options strategy that is profitable in a sharply rising market and unprofitable in a sharply falling market
- b. An options strategy that is profitable in a sharply falling market and unprofitable in a sharply rising market
- c. An options strategy that is insensitive to small price movements either upwards or downwards
- d. An options strategy that is highly sensitive to small price movements either upwards or downwards

97.

If a CBOE member firm believes that a clearly erroneous trade occurred, which statements are true?

- I The trade in question must be reported to a Trading Official within 15 minutes of occurrence
  - II The trade in question must be reported to a Trading Official within 60 minutes of occurrence
  - III A determination is rendered by a trading official within 15 minutes of receiving the report
  - IV A determination is rendered by a trading official within 60 minutes of receiving the report
- a. I and III
  - b. I and IV
  - c. II and III
  - d. II and IV

98.

The individual that maintains a fair and orderly market on the CBOE floor is the:

- a. Designated Primary Market Maker
- b. Registered Options Trader
- c. Board Broker
- d. Competitive Trader

99.

Which of the following would be a violation of the "acting in concert" prohibitions?

- a. A registered representative receives 10 unsolicited customer orders for the same options series and enters them for execution
- b. A registered representative and 4 other associates in the branch agree to make the same trades in their discretionary options accounts
- c. An investment company takes large options positions as part of its investment objective
- d. A registered representative makes the recommendation of the same options strategy to all of his customers for which the strategy is suitable

100.

Under CBOE rules, options trade confirmations must sent to customers:

- a. promptly
- b. the next business day
- c. on T + 1
- d. on T + 3

## Series #56 - Final 4 Explanations

1. The best answer is c. If the NYSE closes its market, which will occur if the DJIA drops by 10% intra-day, the CBOE will close its market as well. The time length of the shut due to the imposition of the "circuit breaker" is either 1/2 hour or 1 hour, depending on the time of day that the halt occurs.
2. The best answer is b. The CBOE will halt trading in a specific option contract if two Floor Officials agree that trading should be halted. The length of the halt can be no more than 2 business days.
3. The best answer is b. The breakeven point on a call is the strike price plus the premium. The breakeven on a put is the strike price minus the premium.

The breakeven on the 50 Call @ 3 is  $50 + 3 = 53$ .

The breakeven on the 50 Put @ 7 is  $50 - 7 = 43$ .

The breakeven on the 60 Put @ 7 is  $60 - 7 = 53$ .

The breakeven on the 55 Call @ 2 is  $55 + 2 = 57$ .

The breakeven on the 45 Call @ 9 is  $45 + 9 = 54$ .

4. The best answer is d. The designated ROP in the supervisory office is responsible for the overall review of customer accounts and orders in customer accounts. To do this, the designated ROP must review each customer's options account on a timely basis to determine:

the compatibility of options transactions with investment objectives and with the types of transactions for which the account was approved;

the size and frequency of options transactions;

commission activity in the account;

profit or loss in the account;

undue concentration in an options class(es); and

compliance with the provisions of Regulation T of the FRB.

5. The best answer is a. The customer wishes to protect the stock from a market decline. Since the current market price is \$61 per share, the purchase of a \$60 Put gives the customer the right to sell at \$60, protecting the stock position. However, a premium must be paid for this protection. If the customer sells a \$70 Call, then he or she will receive a premium, and will only be exercised and forced to deliver the stock if the market value rises above \$70. This customer believes that the stock will not rise above \$70, so exercise of the call is not likely. The sale of the call is covered by the long stock position, so the premium received can be used to offset the cost of the protective put.

6. The best answer is c. The CBOE places limits on the number of options contracts that can be exercised, with the numerical limit tied to the trading volume of the underlying stock. The limits are applied over a 5 business day time window.

7. The best answer is b. Copies of customer complaints about options must be retained by the member firm for 3 years.
8. The best answer is b. The multiplier and strike price are not adjusted for stock dividends and fractional stock splits. If there is an exercise, then the "deliverable" is adjusted. So this contract stays with a multiplier of  $100 \times \$5$  premium  $\times 5$  contracts =  $\$2,500$  received.
9. The best answer is a. Do not confuse the OCC's allocation method for assigning exercise notices to member firms (which is done by random selection) with the CBOE's rule on how a member firm, upon receipt of such an exercise notice, should allocate that notice to one of its customers. The CBOE states that the member firm may choose to allocate the notice by either "first in; first out;" or an automated random selection basis. Since random selection is not offered as a choice, we must go with "first in; first out."
10. The best answer is c. Under the "best execution" rule, a member firm must send a customer order to the market venue that is posting the best price. There is competition for the CBOE floor in the form of the other options trading floors (such as the AMEX - now being merged into the NYSE) and the ISE - the International Securities Exchange - the all electronic options exchange. These market venues compete with each other for options trading business.
11. The best answer is a. For stock dividends and fractional stock splits, there is no adjustment to the contract by the OCC. Only if the contract is exercised, then the "deliverable" is adjusted. So the contract stays as 1 ABCD Jan 120 Call with a multiplier of 100. If there is an exercise, the multiplier becomes  $100 \times 1.5 = 150$  and the exercise price becomes  $\$120/1.5 = 80$ .
12. The best answer is b. The accounts that are aggregated are the ones where the investment decisions are being made independently by the broker - these include discretionary accounts managed by the broker and the broker's own personal account. An individual customer account serviced by the broker will not be aggregated since the investment decision is being made by the customer, not the broker.
13. The best answer is d. The exercise cut-off for expiring equity options is 5:30 PM ET; 4:30 PM CT; on the expiration date (which is the 3rd Friday of the month).
14. The best answer is d. Because FLEX options are custom contracts with "flexible terms," they do not come under the regular standardized options contract position limits. FLEX option contracts allow for flexible contract terms and are mainly designed for institutional use with minimum trades of \$1,000,000. They are mainly used as hedging vehicles and there is no "trading" unless a request is made.
15. The best answer is a. The equivalent position to a Long Call is: Long Stock + Long Put. The equivalent to a Short Call is: Short Stock + Short Put. The equivalent to a Long Put is: Short Stock + Long Call. The equivalent to a Short Put is: Long Stock + Short Call.
16. The best answer is c. Options contracts are adjusted for 2:1 and 4:1 stock splits. They are not adjusted for stock dividends or other stock splits (however, for these, if there is an exercise, the "deliverable" is adjusted). This is 1 ABC Jan 60 Call. If the stock splits 2:1, on the ex date the contract becomes 2 ABC Jan 30 Calls, each with a multiplier of 100.

17. The best answer is c. To receive a dividend, the holder of call contracts must exercise the contract **prior** to the ex-date (set at 2 business days prior to Record Date). Since exercise settlement takes 3 business days, the holder would settle on or before the Record Date, and would receive the distribution.
18. The best answer is d. The last time to trade equity options just prior to expiration is 4:00 PM Eastern Time on the Friday prior to expiration (which occurs on the Saturday immediately following).
19. The best answer is b. If a floor broker on the CBOE holds an order to buy and another order to sell the same option contract, he must first attempt to trade each order independently on the floor with another trader, Order Book Official or Market Maker. If he cannot execute the trades because their Offer is too high; or their Bid is too low; then he must Offer to sell at the minimum trading increment below that lowest offer; and offer to buy at the minimum trading increment above the highest bid. If there are no takers, he may cross the orders himself at one of these "in-between" prices, and must, by public outcry, announce that he is "crossing," with the size and price of the trade. (Note: If you find this hard to understand, just consider yourself to be normal.)
20. The best answer is a. The contract size for PHLX World Foreign Currency option contracts is 10,000 units of currency (for the major world currencies, with the exception of the Japanese Yen, where the contract size is 1,000,000 units of currency). The contract multiplier for calculating the premium is 100 (except for Japanese yen), where an extra "00" is added to the multiplier for calculating the premium to account for the larger contract size.
21. The best answer is a. Portfolio margin is a "risk" based margin method that gives substantially lower margin requirements for lower risk positions. It recognizes that if positions are hedged, such as a stock position hedged by the purchase of a put, then the loss potential of the combined position is much lower, and a lower margin is applied. It also applies margin to unhedged positions based on the probable price movement of a given security in "stress" conditions of large overall market price movements. In essence, it will produce a lower margin for a low beta stock; and a higher margin for a high beta stock. Lower margin requirements mean that customers who use portfolio margin get greater leverage. Note that portfolio margin can only be used by institutional or wealthy sophisticated individual customers.
22. The best answer is c. A member firm cannot assume a customer loss in an options account, unless the loss was due to a mistake made by the member firm; or the CBOE gives approval for the member firm to assume the loss (which would be unlikely). The member firm cannot assume a loss in a customer account simply because the customer makes such a request!
23. The best answer is b. An IOC order is an "Immediate or Cancel" order. With this order type, the floor broker attempts to fill the entire order in one shot; if only part of the order can be filled, the unfilled portion is canceled. Subsequent reattempts to complete the unfilled portion of the order are not permitted.

24. The best answer is b. To analyze this strategy, for calls, stack the positions from "low to high" strike prices. This customer has taken the following positions when ABC stock is at \$50:

|  |            |
|--|------------|
| Buy 1 ABC Jan 45 Call @ \$8                          |            |
| Sell 2 ABC Jan 50 Calls @ \$4                        |            |
| Buy 1 ABC Jan 55 Call @ \$1                          |            |
| <hr/> <td style="text-align: right;">-\$1 Debit</td> | -\$1 Debit |

This is a "butterfly spread," which is a combination of a bull call spread and a bear call spread. This is a market neutral strategy that is profitable when the market stays close to \$50. If the market stays at \$50, the short 50 Calls expire "out the money," as does the long 55 Call. The long 45 Call is "in the money" and is exercised. The stock is purchased at 45 through the exercise and can be sold at \$50 for a 5 point gain, partially offset by the initial \$1 debit paid, for a maximum gain of 4 points or \$400. If the market falls below 45, all of the contracts expire "out the money" and the customer loses the \$1 debit. If the market rises above \$55, all of the contracts are exercised. Through the exercises, 100 shares of stock are bought at 45 and delivered at \$50; and another 100 shares are delivered at \$50 that are purchased at \$55, for no gain or loss. Since \$1 was paid in net debit (\$100), this is the loss.

25. The best answer is a. CBOE equity options trading is open during the same hours as the NYSE, so trades can be placed until 4:00 PM Eastern Standard Time; 3:00 PM Central Time. Note, in contrast, that index options trading on the CBOE floor takes place until 4:15 PM.

26. The best answer is d. This situation clearly is an execution error on the part of the firm, and any loss is the responsibility of the firm. The customer market order should have been entered at 12:15 PM at the time that the customer placed the order. It is the representative's (and hence the firm's) fault that the order was not placed until 1:45 PM and the customer received an inferior execution because of this. Note that the trade cannot be "broken" since there was no execution error on the trading floor itself. The error occurred because of a communication delay at the member firm entering the order.

27. The best answer is b. If a registered representative is suspended, that individual cannot work or be paid during the suspension period. However, that individual can be compensated for work completed prior to the suspension period.

28. The best answer is c. If a registered individual wishes to take a second job, prior written notice must be given to the employing member firm and the registered individual must follow any instructions of the employing member firm. There is no requirement to give notice to the SRO, such as FINRA or the CBOE.

29. The best answer is c. "Special inactive" registered status is only given to registered representatives that are called for active military duty. If a registered representative is in the Army Reserves, he or she still holds a regular job in the U.S. and only goes on military duty on specified weekends. So there is no reason why this individual can't complete Regulatory Element CE just like everyone else!



30. The best answer is d. On the list of "reportable events" is a conviction, indictment or no contest plea for any felony; or for specified misdemeanors. The specified misdemeanors involve securities or money, and bribery is on the list! This must be reported to the SRO promptly (which they define as within 10 business days); and also must be reported as an amendment to that individual's U-4 Form, since this is a question that is asked on the Form and which must be explained on the Form.
31. The best answer is c. A "block" is defined as a trade of 10,000 shares or more; or a trade of \$200,000 or more.
32. The best answer is d. Charging a customer both a mark-up and a commission on the same trade is prohibited. Either the firm acts as a principal, charging a fair and reasonable mark-up; or it acts as an agent, charging a fair and reasonable commission.
33. The best answer is c. The Regulatory Element of Continuing Education is delivered by FINRA to each registered person on their second anniversary of initial registration and every 3 years thereafter.
34. The best answer is a. A "CTR" - Currency Transaction Report - is only required if the customer deposits or withdraws cash. In these transactions, the question says nothing about "cash." If the customer has an account and asks for a cashier's check (or multiple checks), there is no CTR report filed. However, if the firm is suspicious about these, it can file an SAR (Suspicious Activities Report) report with FinCEN.
35. The best answer is c. In this example, the trade was executed at \$10. This is the price that the customer specified in the buy order and this is the price that the customer pays. If the shares really were purchased at \$10.57, then the trade is taken to the branch error account.
36. The best answer is c. There is nothing prohibiting a member firm from accepting an order for a security that is subject to a trading halt. The order will be executable when trading resumes. However, the customer should be notified that there is a trading halt and that the order cannot be filled currently. If there is a trading halt, that means that there is no trading in that security anywhere in the U.S.
37. The best answer is d. A "CTR" - Currency Transaction Report - is required if the customer deposits or withdraws cash in an amount of over \$10,000. Because this customer deposited \$20,000 of cash, the Form CTR must be filed with FinCEN within 15 days.
38. The best answer is b. The CBOE uses an opening rotation to open trading in each options series. At the market opening (9:30 AM ET), all options series do not start trading. Rather, trading rotates through each series individually, with all executable orders filled for that series before moving on to the next series, and so on. Once the rotation has been completed covering all options series, then at 9:45 AM, all options series begin trading simultaneously.
39. The best answer is c. Only shares owned can be tendered in a tender offer. Call options don't count unless they are exercised. The officers can tender the shares that they own; but cannot tender the call options.

40. The best answer is c. This is a very subjective question. Clearly, a person who executes a transaction based on "inside information" is in violation of the Insider Trading Act of 1988. A registered representative who trades for his own account based on the trading of a customer that he knows to be an "insider" would also be in violation if he knew that the customer was trading based on "inside information." Since the question is not clear on this point, let's crucify the guy anyway! Under the Insider Trading Act of 1988, broker-dealers must have written procedures in place to detect and prevent Insider Trading by their employees. Thus, the broker-dealer has potential liability if it did not enforce these procedures over the registered representative. The Board of Directors of the issuer does not have liability since it is not a "controlling person" in any of these transactions.

41. The best answer is a. Rule 11a-1 of the Securities Exchange Act of 1934 states that it is unlawful for any floor member of an exchange to initiate, directly or indirectly, any transaction for any account in which the member has an interest or where the member exercises investment discretion. This means that a floor broker must always put the client's interest first. Floor brokers are prohibited from exploiting their time and place advantage to their own benefit through proprietary or discretionary trading (this is the SEC's wording). Thus, a floor broker cannot initiate a trade as a principal (this is proprietary trading); cannot initiate a trade for an account in which he or she has an interest; and cannot initiate discretionary transactions. These prohibitions do not apply to specialists on the exchange floor; to odd lot transactions; to stabilizing transactions; and to bona-fide arbitrage transactions.

42. The best answer is c. American Depository Receipt holders receive dividends. The bank that issues the receipts against the foreign securities "passes through" dividends paid on the stock to the receipt holders. Warrants and rights do not receive dividends; nor is a dividend paid on Treasury shares which have been repurchased by the issuer.

43. The best answer is c. A customer is only considered to be "long" to the extent of his or her "net" long position in a security. This customer is long 1,000 shares of ABCD and short 400 shares of ABCD, for a net long position of 600 shares. This is the amount that can be tendered (remember that the customer must replace the 400 shares borrowed to sell short, leaving him or her with the remaining 600 shares out of the 1,000 owned).

44. The best answer is b. ECNs are Electronic Communications Networks - which match trades for institutional customers at low cost. Trades that are effected through ECNs "after-hours" are only filled if there is a "match." There is no specialist or market maker that must take the opposite side to the trade and that will "smooth" price movements. Thus, the market is not nearly as liquid as an exchange and price movements can be volatile.

45. The best answer is c. Buy stop orders are placed above the current market and are triggered when the market rises. In a rising market, short sellers lose money. To limit the loss, a buy stop is placed to buy in the stock if the market rises to the stop price. Profits on short positions are lost if the market begins to rise from a low point. To protect the profit, a buy stop order is placed higher than the current market. If the market rises, the stock will be bought in and the profit is protected. Resistance levels are higher than the current market. The theory is that if the market breaks the resistance level, the price will rise rapidly. To buy at a price higher than the current market, a buy stop order is used. Buy limit orders are placed below the current market and are triggered as the market falls. Support levels are lower than the current market. To buy stock below a support level, a buy limit order would be used..

46. The best answer is a. Sell stop orders are placed below the current market and are triggered as the market drops. An order to sell at 38 stop limit is elected if the market drops to 38 or lower; then the order becomes a limit order to sell at 38 - meaning sell for at least \$38 per share (38 or higher).

47. The best answer is c. A customer order to sell can only be marked "long" if the customer will deliver the shares being sold on settlement. For a customer that is long a call option or a warrant, these must be exercised and the stock delivered for the sell order to be "long." A customer that is long the stock, but will not deliver the shares on settlement, is "going short against the box." Since he is not delivering the shares, this is a short sale. A customer that is long a convertible bond that has been converted into the stock being sold, and that will deliver the converted shares on settlement, is selling "long."

48. The best answer is d. There is no stated maximum length of time where the manager can stabilize the price of a new issue offering. The manager can start stabilizing and stop stabilizing at any time once registration is effective. However, stabilization must stop once the manager disbands the syndicate. (Also note that there is a related FINRA rule that requires syndicate managers to disband and settle syndicates no later than 90 days from the effective date.)

49. The best answer is c. For all exchanges (not only NASDAQ), orders are filled based on best price first. If 2 orders are placed at the same price, then they are filled on a First In, First Out basis. Thus, the priority of filling orders is first Price; then Time.

50. The best answer is a. In the "old" days, stock trade reporting was done mechanically through the "ticker tape." The "ticker" was a machine similar to a telegraph, that received reported trades and printed them on a paper tape. A manipulative practice was "painting the tape" - that is, effecting a series of buy and sell trades in a stock where there is no change of ownership (so-called "wash" trades) just to show trading activity coming across the tape. The increased trading activity would attract other traders to buy the stock (since they would think that "something was going on with the stock"), and the price would rise - at which point, the manipulator would unload his stock position.

51. The best answer is a. The SEC Firm Quote Rule requires that only firm 2-sided quotes can be posted in active trading markets. Backing away from a quote is prohibited. The rule applies to market maker quotes for exchange listed and NASDAQ issues. It applies to market makers on the floor of the exchange and to Third Market makers that trade exchange listed issues OTC. It applies to quotes by market makers for all NASDAQ issues (both Global Market and Capital Market). Note, however, that the rule does not apply to quotes for OTCBB or Pink Sheet issues. These can be quite illiquid and quotes need not be firm.

52. The best answer is a. If a customer requests, that customer's limit order is not required to be displayed under the Limit Order Display Rule. However, the Manning Rule still applies - all customer limit orders must be protected and cannot be "front run" by the firm. It makes no difference if the order is displayed or undisplayed.

53. The best answer is b. Any orders entered into NASDAQ Single Book during regular market hours that would lock or cross the market are automatically matched and filled at the inside market. This customer places an order to buy at \$15.55 (meaning at \$15.55 or lower). Since the inside ask is at \$15.50, the order will be filled at the lower price of \$15.50 - a better execution for the buyer.

54. The best answer is d. Exemptions are granted to the requirement not to back away from a firm quote for 2 reasons.

First, if the member firm is in the process of updating its quote price or size, it does not have to honor the previous quote - but it must honor orders that come in against the updated quote.

Second, if the firm has just executed an order against its previous quote, and is in the process of communicating the trade report and will update its quote, then the rule applies to the updated quote - not to the "old" quote.

55. The best answer is d. Market makers cannot collude to move prices higher or lower, making Choices a and b violations. Market makers have a fiduciary responsibility to their customers, so disclosing customer trading strategies is illegal as well. A market maker entering an ask quote at a price lower than the current ask will narrow the spread between high bid and low ask - this is a very nice thing to do!

56. The best answer is d. SEC Rule 605 of Regulation NMS requires exchanges to prepare monthly reports of statistical information concerning their order executions, covering execution speed, price, including any price improvement and bid-ask spreads. This information is available to the public. The types of orders "covered" by this rule are market orders and limit orders (including marketable limit orders). In addition, "IOC" - Immediate or Cancel orders are covered by the rule (since they allow for partial execution if the full amount of the order cannot be filled). However, other special instruction orders are excluded from the rule because either they can take longer periods of time to fill and would distort the "speed of execution" statistics that are compiled; or they might never be filled. The excluded orders include All or None (AON) orders; At the Open and At the Close orders; Stop orders; and Not Held orders.

57. The best answer is d. SEC Rule 602 of Regulation NMS prohibits backing away from firm quotes. If a market maker is posting a quote on NASDAQ (which must be firm), the market maker is obligated to trade the display size shown at that price (which is 800 shares at \$15.25). If the market maker receives a larger size order, which is the case here, it has either of 2 choices. In this example, the market maker received an order to buy 1,000 shares. The market maker can either fill the entire 1,000 share order at \$15.25 and has no obligation to move its quote; or it can fill 800 shares at \$15.25 and must worsen its quote by at least 1 trading increment (\$.01). This is known as the "Trade or Fade" rule - which requires a market maker to worsen its quote if it can't handle the entire size of an order. On the other hand, if the market maker fills the entire order size, it is under no obligation to worsen its quote.

58. The best answer is b. Under the "Penny Stock" rules (Rules 15g-1 through 15g-6), when effecting a transaction for a customer in a non-exchange listed, non-NASDAQ stock under \$5, the customer must be given the current bid-ask quote for the issue; and must be given the compensation amounts to be earned by the registered representative and brokerage firm. This is intended to stop sleazy penny stock boiler rooms from overcharging customers or from taking excessive spreads. There is no requirement to disclose average daily trading volume in the issue to the customer.

59. The best answer is d. Until material non-public information has been broadly disseminated over the news media, those persons in possession of the information are considered to be "insiders" and are prohibited from trading on the information.

60. The best answer is d. Automated updating of quotes is permitted, and this functionality is built into NASDAQ Single Book. However, this feature cannot be used to automatically maintain a market maker's quoted prices away from the "inside market." If this were permitted, then the market maker would never be obligated to trade!

61. The best answer is b. Rule 103 of Regulation M places limits on market makers who are also syndicate members in an "add on" (secondary offering) during the 20 day cooling off period. The underlying problem is that the issue has yet to be priced, and it would be in the syndicate's interest to move that price up - and this is prohibited. Thus, any market maker that is also a syndicate member can either resign as a market maker until the effective date; or can act as a PSMM - Passive Market Maker, where that market maker is prohibited from bidding higher than the highest current independent bid in that issue. Thus, in order to act as a PSMM, there currently must be an independent market for that issue - which means at least 1 other market maker that is not a member of the syndicate is quoting that issue.

62. The best answer is c. The SEC permits payment for order flow, however it requires that disclosure of the payment be made on the confirmation sent to the customer. In essence, a market maker that is "paying for order flow" is giving up a portion of his spread to the order entry firm. The economic argument for the practice is that, since exchanges only allow price increments of 1 cent, this allows the market maker to narrow the spread in increments of less than 1 cent, with the narrowing amount paid to the order entry firm. In turn, the order entry firm, because it is being compensated out of the market maker's spread, can reduce the commission cost to the customer.

63. The best answer is b. Rule 10b-18 gives an issuer a "safe harbor" from being accused of market manipulation when it buys its own stock in the market, typically to fund stock option plans and Treasury stock repurchase plans. As long as the issuer does not buy the stock at the market open or within 1/2 hour of market close (this is reduced to 10 minutes for very actively traded stocks) and effects the purchase at the higher of the current independent bid (\$15.00) or the last reported sale (\$15.10), then the issuer will not be accused of trying to manipulate the price higher. Since the last reported sale is at \$15.10, and this is higher than the current independent bid of \$15.00, the stock can be purchased at \$15.10 or lower.

64. The best answer is a. Under Regulation SHO, each exchange must prepare a "threshold" list of "hard-to-borrow" securities. The list is published each morning by the exchange, and must be checked by member firms each day.

If a security is on the list for that day; and

a short sale is effected in that security on that day; and

the customer fails to deliver the security on settlement; then

Regulation SHO requires mandatory buy-in of the position in "13 settlement days."

65. The best answer is a. The Order Book Official on the CBOE maintains a book of limit orders that are "away from the market" for public customers. He executes these orders on an agency basis, and is prohibited from trading for his own account. The Floor Broker acts as an agent, handling transactions for his firm, or for other firms. Floor brokers are also prohibited from trading for their own accounts. On the American Stock Exchange and the Philadelphia Stock Exchange, there are Specialists that are market

makers in options. They can buy for their own account. On the CBOE, there is no Specialist. Instead, there is a Designated Primary Market Maker, who performs the same functions as a Specialist, and other competing market makers, who only buy and sell from their inventory accounts.

66. The best answer is a. To receive a dividend, a customer must be on the record books of the issuer. A customer is recorded on the Record Book if he has settled by the Record Date. The Ex date is set by the exchange at the first day that a regular way trade will settle after the record date. Since exercise settlement is "regular way," a customer that exercises a long call prior to the Ex date will settle on, or before, the Record Date and will receive the dividend. If he exercises on, or after, this date, he would not be on the Record Books to receive the dividend.

67. The best answer is b. The sale of a call contract can be covered by being long that stock position (with the stock either held at the broker or held in a depository, as evidenced by a proper escrow receipt). The sale of 1 ABC Jan 50 Call is **not** covered by the purchase of 1 ABC Oct 50 Call, because the long call expires prior to the short call. Once the October call expires, the writer is naked on the short call until its expiration in January. To be covered, the long call must have **the same or later** expiration than the short call. U.S. Government bonds or cash will not cover the sale of a call. If a call writer is exercised, **that stock** must be delivered; delivery of U.S. Government bonds or cash is not acceptable.

68. The best answer is a. The holder of a long call has unlimited upside gain potential. To match this characteristic, the customer must be long the stock. On the other hand, the holder of a long call can only lose the premiums if the market drops; while the holder of stock has increasing loss as the market drops. To match this characteristic, the customer must take a position that limits loss as the market drops - such as a long put on that stock. To illustrate, assume that ABC stock is trading at \$50. To create a synthetic long call, the customer buys 100 shares of ABC at \$50 and buys 1 ABC Jan 50 Put @ \$5. If the market rises, the long put expires, and the customer has unlimited gain on the long stock. If the market falls, the long put is exercised and the customer sells the stock at the strike price, for no gain or loss. Since \$5 was paid in premiums, this is the amount lost.

69. The best answer is c. All options orders must be marked as "opening" or "closing." Thus, this is an order for a closing sale transaction. "Firm" in this case means that the order is placed for the account of a member firm (this is noted since customer orders have priority over equivalent orders for the firm's account). Please note that this is not a "firm" quote - this is an order to be executed against the quote (which must be a "firm" quote) of a market maker of another broker on the floor.

70. The best answer is b. During the opening and closing rotations, only market and limit orders may be executed at the bids and offers made. No stop orders, spread orders, or straddle orders are executed during the rotations. Rotations are used daily to insure orderly openings; and are used at the close on the business day prior to expiration to insure an orderly close.

71. The best answer is d. Since orders held by the Order Book Official are those from the **public**, these orders always have priority over equivalent orders from other sources (e.g., market makers or floor brokers). Therefore, Choice **d** is false. The other statements are true. At the opening, public market orders held by the Order Book Official have priority over equivalent limit orders held by the Order Book Official, since market orders always have priority over limit or stop orders at the same price. The bid representing

the highest price has priority over lower bids, and the ask representing the lowest price has priority over higher asking prices. Finally, if two or more orders represent the highest price, and a bid by the Order Book Official is not involved, priority is afforded the orders based upon the sequence of the bids (first come, first served!).

72. The best answer is b. Floor brokers effect trades **only** for other member firms - they are prohibited from accepting orders directly from public customers. Thus, a customer calls his member firm to place the order. The firm then routes the order to a floor broker on the Exchange. This floor broker can either be an "independent" - that is, an individual who solely effects trades for retail member firms for a commission; or the floor broker can be a "nominee" of the member - that is a floor broker who is actually an employee of that member, and who only effects trades for that member. Floor brokers are prohibited from acting as market makers in the same security.

73. The best answer is c. If a floor broker holds an order to buy an options contract at the market; and also holds an order to sell the equivalent contract at the market, he is only permitted to "cross" the orders if the following procedure is used:

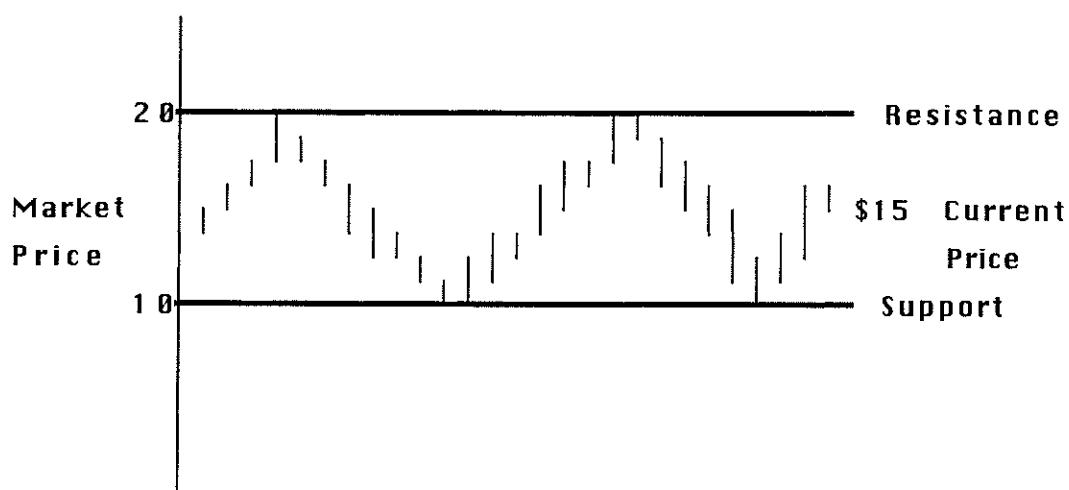
The floor broker must first request bids and offers for those contracts from the trading crowd, **including** the Order Book Official;

The floor broker must then bid above the highest bid received by the minimum fraction; and must offer below the lowest offer received by the minimum fraction;

If this higher bid or lower offer is not taken, he may cross the orders at such higher bid or lower offer by announcing by public outcry that he is crossing, and giving the quantity and price.

Essentially, this procedure forces the floor broker to first attempt an execution with other traders before crossing the orders himself; and also forces the floor broker to cross the orders at a price that truly reflects the current market.

74. The best answer is b. Following is a picture of support and resistance levels:



If a security "breaks" a resistance level, it is expected that the price will rise rapidly. To profit from this, an order would be placed to buy if the stock breaks through resistance (say at \$21). The buy orders that are placed **higher** than the current market, and would

be executed if the market moves up, are buy stop orders. The buy orders that allow the stock to be purchased at a price lower than the current market are buy limit and buy MIT orders.

75. The best answer is d. If one has shorted stock (let us say at \$50) and sells 1 ABC Jan 50 Put @ \$5, and if the market rises above \$50, the put expires and the \$5 premium is retained. However, the customer is left with a short stock position that must be bought in. This price could be "sky-high" and the customer has potentially unlimited loss on this position.

76. The best answer is c. If an option stops trading, closing transactions cannot be effected since there is no market on the Exchange floor. However, holders can still exercise their contracts (since this goes directly to the O.C.C. and does not involve the Exchange floor), or can let them expire.

77. The best answer is a. Each SRO limits gifts related to one's activity in the industry to \$100 in value per person per year.

78. The best answer is d. Anyone who has material information about a publicly traded company, that has not been distributed to the public can be considered to be an "insider," under the court rulings that accompany the formal definition of an insider under the Securities and Exchange Act of 1933. Thus, an attorney for the corporation; an accountant for the corporation; a research scientist for the corporation; and a business journalist can all be considered to be insiders.

79. The best answer is d. A customer is considered long if he owns option or warrants and has exercised; or if he owns convertible securities and has tendered the securities for conversion. A customer is not considered to be long for a position that is unpaid.

80. The best answer is d. A stock power is a form that is separate from a stock certificate on which the assignment can be performed. Transfers of ownership are effected by naming the old and new holders on the stock power. In this way, a new stock certificate does not have to be issued each time there is a change of ownership. Instead, a new stock power is used.

81. The best answer is d. If a person fails to follow firm procedures and is dismissed, this is not a cause for FINRA to deny registration of that person with another firm. A person being subject to litigation for securities fraud, or a person who has been suspended or expelled by another self regulatory organization, is likely to be denied registration.

82. The best answer is c. As long as the customer has not signed an arbitration agreement, the customer can sue the broker-dealer. Under the Act of 1934, any suits must be brought within 2 years of discovery, but no later than 5 years after the violation occurred.

83. The best answer is b. During the cooling off period for "add-on" offerings, Regulation M places restrictions on syndicate members that are not market makers from trading that issuer's securities. The idea is that the syndicate members will not attempt to bid up the price of the issuer's outstanding shares, in order to be able to raise the POP of the additional issue. The rule states that:

If the security is actively traded (average daily trading volume of \$1,000,000 or more and public float of at least \$150,000,000), there are **no** restrictions placed on market makers trading the issue prior to the distribution. The idea here is that this issue is too big for the price to be manipulated. This is called a "Tier 1" issue.

If the security has an average daily trading volume of \$100,000 and a public float of at least \$25,000,000, the restricted period is the business day prior to the effective date. This is called a "Tier 2" issue.

Any other security not meeting these minimums is a "Tier 3" issue and is subject to a restricted period of 5 business days prior to the effective date.

84. The best answer is c. This is a large customer order to sell, which will likely have a negative impact on the price of the stock. The firm's market making desk is not permitted to use its knowledge of the order to make a trading profit, or to avoid a trading loss (as in this example). If the market making desk does so, it is "front running" the customer order, which is a violation. The put options can only be purchased after the customer order is placed. They cannot be purchased prior to placing the customer sell order.

85. The best answer is c. An ETN is an Exchange Traded Note. It is a type of structured product offered by banks that gives a return tied to a benchmark index. The note is a debt of the bank, and is backed by the faith and credit of the issuing bank. An ETF is an Exchange Traded Fund. It is an investment company that owns an underlying portfolio of securities. The shares of the ETF are listed and trade like any other stock.

86. The best answer is b. An ETN is an Exchange Traded Note. It is a type of structured product offered by banks that gives a return tied to a benchmark index. The note is a debt of the bank, and is backed by the faith and credit of the issuing bank. ETNs make no interest or dividend payments, so they are not suitable for an investor seeking income. Their value grows as they are held based on the growth of the benchmark index, with any gain at sale or redemption currently taxed at capital gains rates. Thus, they are tax-advantaged as compared to conventional debt instruments.

87. The best answer is a. A sell MIT (market if touched) order is similar to a sell limit in that it is also placed higher than the prevailing market. Assume that the market is trading at \$50 and a customer places the following order: "Sell 100 ABC @ \$60 MIT GTC." This is a sell "Market If Touched" order and is placed higher than the current market price. If the stock trades up to \$60 or higher, the order **becomes a market order to sell.** If a trade occurred at \$60 (not this order) and the stock then moved below \$60, this order would still be filled because it became a market order to sell - there is no limit on the price.

88. The best answer is b. Normally, customer market orders have priority on the trading floor and are filled first. Member firms cannot "trade ahead" of customer orders at the same price - customer orders are filled first! However, an exception to this rule is permitted under the "Spread Priority Rule." To facilitate the filling of spread orders, which need to have both legs filled to complete the spread position, the CBOE permits the uncompleted leg of a spread order to "trade ahead" of an existing customer order at the same premium.

89. The best answer is a. In a cabinet trade, a worthless option position is closed by a specialist or market maker as an "accommodation liquidation" at an aggregate premium of \$1 (\$.01 per share). This can be done for both customer and proprietary positions that are worthless.

90. The best answer is a. The Firm Element of Continuing Education is delivered by the member firm to each registered person annually.

91. The best answer is d. All of the information about the associated person leaving the firm and a U-5 being filed has nothing to do with this question. Customer account records must be retained for 6 years - it makes no difference that the customer was an associated person. Remember that there are six - 6 year records to be retained by member firms. These are:

3 Blotters of Original Entry;

General Ledger;

Customer Account Records; and

Securities Record.

The 3 blotters of original entry are the cash receipts and disbursements blotter; the securities received and delivered blotter; and the purchase and sales blotter.

92. The best answer is b. Under SEC Rule 14e-3, during the life of a tender offer, an individual that receives material nonpublic information from the maker of the offer relating to that offer and how it is progressing, is treated as an "insider." Therefore, that individual cannot buy the issuer's common stock, convertible securities or options on these securities. However, if the information is publicly disclosed, then it is no longer treated as "inside" information and that individual is permitted to buy that issuer's securities.

93. The best answer is c. "Delta" is the measure of an option's premium movement as compared to the movement of the price of the underlying stock. It is a correlation coefficient.

A "deep in the money call" has a delta of very close to +1 = for every dollar that the market price of the stock rises, the premium will move up by the same dollar;

A "deep out the money" call has a delta of very close to 0 = for every dollar that the market price of the stock rises, the premium of the option does not move at all, since it is essentially worthless;

"At the money" call options tend to have deltas around +.5 = for every dollar that the stock price rises, the options premium moves up by \$.50.

The delta movement of put options is similar, except that the deltas are negative instead of positive.

A "delta neutral" strategy is one that profits from volatility - one is not taking a market direction. It requires 2 legs and attempts to make the strategy delta "0" - which makes the strategy relatively insensitive to small price movements. However, it is strongly

profitable if the market moves sharply in either direction. For example, a long "at the money straddle" is delta neutral.

Assume that when the market price of ABC is 50, a customer:

|                              |              |
|------------------------------|--------------|
| Buys 1 ABC Jan 50 Call @ \$3 | Delta = +.50 |
| Buys 1 ABC Jan 50 Put @ \$2  | Delta = -.50 |

Initially, the strategy delta is "0" (+.5 offset by -.5).

If the market moves a bit up or a bit down, the customer loses the combined premium paid, less any small gain on the side of the straddle that is "in the money."

If the market rises sharply, the delta of the 50 call goes towards +1, and the delta of the 50 put goes towards 0, so the strategy delta heads towards +1. The call premium keeps increasing by \$1 for each \$1 increase in the stock price.

If the market falls, the delta of the 50 put goes towards -1, and the delta of the 50 call goes towards 0, so the strategy delta heads towards -1. The put premium keeps increasing by \$1 for each \$1 decrease in the stock price.

As a practical matter, options market makers try to remain delta neutral across all positions that they take - long versus short. This makes their overall positions relatively immune to small price changes, giving them time to respond if there are sharp market moves that could hurt them.

94. The best answer is c. If trading of a stock is halted on the stock's principal exchange (NYSE, NASDAQ or AMEX), then trading in the option is halted. Cessation of trading on a regional exchange, such as the PHLX, will not stop the option from trading - since it will still be trading in its principal market.

95. The best answer is c. "Best execution" rules of the exchanges state that if the price on the exchange where an option trades is not the "best price," then the order can be executed away from the principal exchange.

96. The best answer is c. "Delta" is the measure of an option's premium movement as compared to the movement of the price of the underlying stock. It is a correlation coefficient.

A "deep in the money call" has a delta of very close to +1 = for every dollar that the market price of the stock rises, the premium will move up by the same dollar;

A "deep out the money" call has a delta of very close to 0 = for every dollar that the market price of the stock rises, the premium of the option does not move at all, since it is essentially worthless;

"At the money" call options tend to have deltas around +.5 = for every dollar that the stock price rises, the options premium moves up by \$.50.

The delta movement of put options is similar, except that the deltas are negative instead of positive.

A "delta neutral" strategy is one that profits from volatility - one is not taking a market direction. It requires 2 legs and attempts to make the strategy delta "0" - which makes the strategy relatively insensitive to small price movements. However, it is strongly profitable if the market moves sharply in either direction. For example, a long "at the money straddle" is delta neutral.

Assume that when the market price of ABC is 50, a customer:

|                              |              |
|------------------------------|--------------|
| Buys 1 ABC Jan 50 Call @ \$3 | Delta = +.50 |
| Buys 1 ABC Jan 50 Put @ \$2  | Delta = -.50 |

Initially, the strategy delta is "0" (+.5 offset by -.5).

If the market moves a bit up or a bit down, the customer loses the combined premium paid, less any small gain on the side of the straddle that is "in the money."

If the market rises, the delta of the 50 call goes towards +1, and the delta of the 50 put goes towards 0, and the strategy delta heads towards +1. The call premium keeps increasing by \$1 for each \$1 increase in the stock price.

If the market falls, the delta of the 50 put goes towards -1, and the delta of the 50 call goes towards 0, and the strategy delta heads towards -1. The put premium keeps increasing by \$1 for each \$1 decrease in the stock price.

97. The best answer is b. The CBOE rule for resolution of "clearly erroneous trades" requires that the trade be reported to a Trading Official within 15 minutes of execution. The Trading Official must review the circumstances of the trade and make a determination within 60 minutes. If either party disagrees with the determination, an appeal can be made to the Obvious Error Panel within 30 minutes. The Obvious Error Panel reviews the complaint and makes a final determination by the end of that trading day. (Also note that if a trade occurs after 2:30 PM CT, either party has until 8:30 AM CT the next day to request the review, in which case, the determination is made by the end of that day.)

98. The best answer is a. On the CBOE, the market maker function is handled by the "DPM" - the designated Primary Market Maker. The DPM maintains the bid-ask quote in the contract and must maintain a fair and orderly market. The DPM cannot act as a floor broker in the options classes to which it is assigned. Floor brokers, also called ROTs (Registered Options Traders), handle customer agency orders but cannot maintain a bid-ask quote.

99. The best answer is b. The "acting in concert" prohibition applies to individuals that group together in an attempt to avoid position limits or exercise limits. For individual to be acting in concert, there must be an individual or group that is coordinating the trading, which is the case in Choice "b."

100. The best answer is a. CBOE rules require that options trade confirmations be sent "promptly" - but the rule does not actually set a date. In practice, the confirmation is sent no later than the business day after trade date (which is the same as settlement date for options traded "regular way"). In this question, the best answer is to use the CBOE wording of their rule (Rule 9.11) - which is "promptly."