# Question block created by wizard

You have 180 minutes to complete this session.

**1.** Linda Chin, CFA, is a member of a political group advocating less governmental regulation in all aspects of life. She works in a country where local securities laws are minimal and insider trading is not prohibited. Chin's politics are reflected in her investment strategy, where she follows her country's mandatory legal and regulatory requirements. Which of the following actions by Chin would be *most* consistent with the CFA Institute Standards of Professional Conduct?

    A. Continuing her current investment strategy
    B. Following the CFA Institute Standards of Professional Conduct
    C. Disclosing her political advocacy to clients

    Answer = B

    "Guidance for Standards I–VII," CFA Institute
    Standard I(A): Knowledge of the Law, Standard II(A): Material Nonpublic Information

    Standard I(A): Knowledge of the Law requires members and candidates to comply with the more strict law, rules, or regulations and follow the highest requirement, which in this case would be the CFA Institute Standards of Professional Conduct. Standard II(A): Material Nonpublic Information would also apply because members and candidates who possess material nonpublic information that could affect the value of an investment must not act or cause others to act on the information. Disclosure that she meets local mandatory legal requirements—versus the more strict law, rules, or regulations mandate of the Standards of Professional Conduct—would not excuse the member from following the Standards of Professional Conduct.

**2.** Colleen O'Neil, CFA, manages a private investment fund with a balanced global investment mandate. Her clients insist that her personal investment portfolio replicate the investments within their portfolios to assure them she is willing to put her own money at risk. By undertaking which of the following simultaneous investment actions for her own portfolio would O'Neil *most likely* be in violation of Standard VI(B): Priority of Transactions?

    A. Sale of a listed US blue chip value stock
    B. Purchase of a UK government bond in the primary market
    C. Participation in a popular frontier market IPO

    Answer = C

    "Guidance for Standards I–VII," CFA Institute
    Standard VI(B): Priority of Transactions

    Standard VI(B): Priority of Transactions dictates members and candidates give their clients and employer priority when making personal investment transactions. Even when clients allow or insist the manager invest alongside them, the manager's transactions must never adversely affect the interests of the clients. A popular or "hot" IPO in a frontier market is likely to be oversubscribed. In such cases, Standard VI(B) dictates that the manager should not participate in this event to better ensure clients will have a higher probability of getting their full subscription allotment, even though clients have allowed or dictated that she participate alongside them.

**3.** Millicent Plain has just finished taking Level II of the CFA examination. Upon leaving the examination site, she meets with four Level III candidates who also just sat for their exams. Curious about their examination experience, Plain asks the candidates how difficult the Level III exam was and how they did on it. The candidates say the essay portion of the examination was much harder than they had expected and that they were not able to complete all questions as a result. The candidates go on to tell Plain about broad topic areas that were tested and complain about specific formulas they had memorized that did not appear on the exam. The Level III candidates *least likely* violated the CFA Institute Standards of Professional Conduct by discussing:

    A. specific formulas.
    B. the examination essays.
    C. broad topic areas.

    Answer = B

    "Guidance for Standards I–VII," CFA Institute
    Standard VII(A): Conduct as Members and Candidates in the CFA Program

    Discussing the level of difficulty of the essay portion of the examination did not violate Standard VII(A): Conduct as Members and Candidates in the CFA Program. Standard VII(A) and the Candidate Pledge were violated by candidates when they revealed broad topic areas and formulas tested or not tested on the exam.

**4.** Heidi Halvorson, CFA, is the chief investment officer for Tukwila Investors, an asset management firm specializing in fixed-income investments. Tukwila is in danger of losing one of its largest clients, Quinault Jewelers, which accounts for nearly one-third of its revenues. Quinault recently told Halverson that Tukwila would be fired unless the performance of Quinault's portfolio improves significantly. Shortly after this conversation, Halvorson purchases two corporate bonds she believes are suitable for any of her clients based on third-party research from a reliable and diligent source. Immediately after the purchase, one bond increases significantly in price while the other bond declines significantly. At the end of the day, Halvorson allocates the profitable bond trade to Quinault and the other bond to two of her largest institutional accounts. Halvorson *most likely* violated the CFA Institute Standards of Professional Conduct in regard to:

    A. client suitability.
    B. third-party research.
    C. trade allocations.

    Answer = C

    Guidance for Standards I–VII," CFA Institute
    Standard III(B): Fair Dealing, Standard III(C): Suitability, Standard V(A): Diligence and Reasonable Basis

    The investment officer failed to deal fairly by allocating profitable trades to a favored client at the expense of others, a violation of Standard III(B): Fair Dealing. The standard requires members and candidates to treat all clients fairly when taking investment action. Tukwila should have a systematic approach to allocating trades, such as pro rata, before or at the time of trade execution, or as soon as possible after trades are executed. The analyst believes the bonds are suitable for any of her clients, so she has not violated Standard III(C): Suitability.

**5.** Jack Steyn, CFA, recently became the head of the trading desk at a large investment management firm that specializes in domestic equities. While reviewing the firm's trading operations, he notices clients give discretion to the manager to select brokers on the basis of their overall services to the management firm. Despite the client directive, Steyn would *most likely* violate Standard III(A): Loyalty, Prudence, and Care if he pays soft commissions for which of the following services from the brokers?

    A. Database services for offshore investments
    B. Equity research reports
    C. Investment conference attendance

    Answer = A

    "Guidance for Standards I–VII," CFA Institute
    Standard III(A): Loyalty, Prudence, and Care

    Standard III(A): Loyalty, Prudence, and Care stipulates that the client owns the brokerage. Therefore, members and candidates are required to use client brokerage only to the benefit of the clients (soft commissions policy). Because the firm specializes in domestic equities, an offshore investment database service would not benefit the clients.

**6.** Based on his superior return history, Vijay Gupta, CFA, is interviewed by the First Faithful Church to manage the church's voluntary retirement plan's equity portfolio. Each church staff member chooses whether to opt in or out of the retirement plan according to his or her own investment objectives. The plan trustees tell Gupta that stocks of companies involved in the sale of alcohol, tobacco, gambling, or firearms are not acceptable investments given the objectives and constraints of the portfolio. Gupta tells the trustees he cannot reasonably execute his strategy with these restrictions and that all his other accounts hold shares of companies involved in these businesses because he believes they have the highest alpha. By agreeing to manage the account according to the trustees' wishes, does Gupta violate the CFA Institute Standards of Professional Conduct?

    A. Yes, because the restrictions provided by the trustees are not in the best interest of the members
    B. Yes, because the manager was hired based on his previous investment strategy
    C. No

    Answer = C

    "Guidance for Standards I–VII," CFA Institute
    Standard III(A): Loyalty, Prudence, and Care

    A is correct. According to Standard III(A): Loyalty, Prudence, and Care, Gupta's duty of loyalty, prudence, and care is owed to the participants and beneficiaries (members) of the pension plan. As a church plan, the restrictions are appropriate given the objectives and constraints of the portfolio.

**7.** Jorge Lopez, CFA, is responsible for proxy voting on behalf of his bank's asset management clients. Lopez recently performed a cost–benefit analysis that showed the proxy-voting policies might not benefit the bank's clients. As a result, Lopez immediately changes the proxy-voting policies and procedures without informing anyone. Lopez now votes client proxies on the side of management on all issues, with the exception of major mergers in which a significant impact on the stock price is expected. Lopez *least likely* violated the CFA Institute Standards of Professional Conduct in regard to:

A. cost–benefit analysis.
B. voting with management.
C. proxy-voting policy disclosures.

Answer = A

"Guidance for Standards I–VII," CFA Institute
Standard III(A): Loyalty, Prudence, and Care

Performing a cost–benefit analysis showing that voting all proxies might not benefit the client and concluding that voting proxies may not be necessary in all instances is not a violation of Standard III(A): Loyalty, Prudence, and Care. However, even though voting proxies may not be necessary in all instances, part of a member's or candidate's duty of loyalty under Standard III(A) includes voting proxies in an informed and responsible manner, which is not being done when Lopez automatically votes with management on the majority of issues. In addition, members and candidates should disclose to clients their proxy-voting policies, including any changes to that policy, as required by Standard III(A), which has not been done.

**8.** Chris Rodriguez, CFA, is a portfolio manager at Nisqually Asset Management, which specializes in trading highly illiquid shares. Rodriguez has been using Hon Securities Brokers almost exclusively when making transactions for Nisqually clients, as well as for his own relatively small account. Hon always executes Rodriguez's personal trades at a more preferential price than for Rodriguez's clients' accounts. This special pricing occurs regardless of whether or not Rodriguez personally trades before or after clients. Rodriguez should *least likely* do which of the following in order to comply with the CFA Institute Standards of Professional Conduct?

A. Trade client accounts before his own account.
B. Eliminate the exclusive trading arrangement.
C. Average trade prices across all trading accounts.

Answer = C

"Guidance for Standards I–VII," CFA Institute
Standard III(A): Loyalty, Prudence, and Care; Standard IV(A): Loyalty; Standard VI(B): Priority of Transactions

Rodriguez is in violation of Standard IV(A): Loyalty, which requires that, in matters related to their employment, members and candidates must act for the benefit of their employer and not deprive their employer of the advantage of their skills and abilities, divulge confidential information, or otherwise cause harm to their employer. Rodriguez should not accept the special treatment from Hon; instead, he should ask Hon to lower costs for the transactions of his Nisqually clients. Rodriguez should not average transaction costs because his clients should be given the lower preferential prices according to Standard III(A): Loyalty, Prudence, and Care.

**9.** When Abdullah Younis, CFA, was hired as a portfolio manager at an asset management firm two years ago, he was told he could allocate his work hours as he saw fit. At that time, Younis served on the board of three non-public golf equipment companies and managed a pooled investment fund for several members of his immediate family. Younis was not compensated for his board service or for managing the pooled fund. Younis's investment returns attract interest from friends and co-workers who persuade him to include their assets in his investment pool. Younis recently retired from all board responsibilities and now spends more than 80% of his time managing the investment pool for which he charges non-family members a management fee. Younis has never told his employer about any of these activities. To comply with the CFA Institute Standards of Professional Conduct with regard to his business activities over the past two years, Younis would *least likely* be required to disclose which of the following to his employer?

    A. Family investment pool management
    B. Board activities
    C. Non-family member management fees

    Answer = B

    "Guidance for Standards I–VII," CFA Institute
    Standard IV(B): Additional Compensation Arrangements, Standard VI(A): Disclosure of Conflicts

    Golf equipment is a business independent of the financial services industry such that any board obligations would not likely be considered a conflict of interest requiring disclosure according to Standard IV(B): Additional Compensation Arrangements. Standard IV(B) requires members and candidates to obtain permission from their employer before accepting compensation or other benefits from third parties for the services that might create a conflict with their employer's interests. Managing investments for family and non-family members could likely create a conflict of interest for Younis's employer and should be disclosed to his employer.

**10.** Tamlorn Mager, CFA, is an analyst at Pyallup Portfolio Management. CFA Institute recently notified Mager that his CFA Institute membership was suspended for a year because he violated the CFA Institute Code of Ethics. A hearing panel also came to the same conclusion. Mager subsequently notified CFA Institute that he does not accept the sanction or the hearing panel's conclusion. Which of the following actions by Mager would be *most* consistent with the CFA Institute Professional Conduct Program?

    A. Providing evidence for his position to an outside arbitration panel
    B. Using his CFA designation upon expiration of the suspension period
    C. Presenting himself to the public as a CFA charterholder

    Answer = B

    "Code of Ethics and Standards of Professional Conduct," CFA Institute
    Code of Ethics and Standards of Professional Conduct, CFA Institute Professional Conduct Program

    The Designated Officer may impose a summary suspension on a member or candidate that may be rejected or accepted by the member or candidate. If the member or candidate does not accept the proposed sanction, the matter is referred to a hearing panel composed of Disciplinary Review Committee (DRC) members and CFA Institute member volunteers affiliated with the DRC. In this case, the hearing panel also affirmed the suspension decision by the Designated Officer, and

therefore, the member loses the right to use his designation for a one-year period. Upon expiration of the suspension period, the analyst would be able to use his CFA designation.

**11.** Elbie Botha, CFA, an equity research analyst at an investment bank, disagrees with her research team's buy recommendation for a particular company's rights issue. She acknowledges the team's recommendation is based on a well-developed process and extensive research, but she feels the valuation is overpriced based on her assumptions. Despite her contrarian view, her name is included on the research report to be distributed to all of the investment bank's clients. To avoid violating any CFA Institute Standards of Professional Conduct, it would be *least* appropriate for Botha to undertake which of the following?

    A. Insist her name be removed from the report
    B. Leave her name on the report
    C. Issue a new report

    Answer = C

    "Guidance for Standards I–VII," CFA Institute
    Standard IV(A): Loyalty, Standard V(A): Diligence and Reasonable Basis

    Standard IV(A): Loyalty calls for employees to be loyal to their employer by not causing harm. If Botha released a contradictory research recommendation report to clients, it could possibly cause confusion amongst clients and embarrassment to the firm.

**12.** Thomas Turkman recently hired Georgia Viggen, CFA, as a portfolio manager for North South Bank. Although Viggen worked many years for a competitor, West Star Bank, the move was straightforward because she did not have a non-compete agreement with her previous employer. Once Viggen starts working for Turkman, the first thing she does is bring to her new employer a trading software package she developed and used at West Star. Using public information, Viggen contacts all of her former clients to convince them to move with her to North South. Viggen also convinces one of the analysts she worked with at West Star to join her at her new employer. Viggen *most likely* violated the CFA Institute Standards of Professional Conduct concerning her actions involving:

    A. clients.
    B. trading software.
    C. the analyst.

    Answer = B

    "Guidance for Standards I–VII," CFA Institute
    Standard IV(A): Loyalty

    The portfolio manager violated Standard IV(A): Loyalty by taking proprietary trading software from her former employer. Although the manager created the software, it was during a period of time when she was employed at West Star, so the software is not her property to take with her to her new employer. The member contacted clients using public information, so she did not violate Standard IV(A): Loyalty. Because Viggen was not obligated to abide by a non-compete agreement that would likely restrict recruitment of former colleagues, Viggen is most likely free to recruit the analyst from her former employer.

**13.** Lisa Hajak, CFA, specialized in research on real estate companies at Cornerstone Country Bank for 20 years. Hajak recently started her own investment research firm, Hajak Investment Advisory. One of her former clients at Cornerstone asks Hajak to update a research report she wrote on a real estate company when she was at Cornerstone. Hajak updates the report, which she had copied to her personal computer without the bank's knowledge, and replaces references to the bank with her new firm, Hajak Investment Advisory. Hajak also incorporates the conclusions of a real estate study conducted by the Realtors Association that appeared in the *Wall Street Journal*. She cites the *Wall StreetJournal* as her source in her report. She provides the revised report free of charge along with a cover letter for the bank's client to become a client of her firm. Concerning the reissued research report, Hajak *least likely* violated the CFA Institute Standards of Professional Conduct because she:

A. did not cite the actual source of the real estate study.
B. solicited the bank's client.
C. used the bank report without consent.

Answer = B

"Guidance for Standards I–VII," CFA Institute
Standard I(C): Misrepresentation, Standard IV(A): Loyalty, Standard V(C): Record Retention

Soliciting the bank's client did not violate Standard IV(A): Loyalty because the manager is no longer an employee of the bank and there is no indication she obtained the client information from bank sources. But Hajak has violated Standard V(C): Record Retention because when she left the bank, she took the property of the bank without express permission to do so. In addition, she violated Standard I(C): Misrepresentation by creating research materials without attribution, which is demonstrated when she adds to the new report a real estate study she saw in the *Wall Street Journal* and only references the *Journal*. In all instances, a member or candidate must cite the actual source of the information. If she does not obtain the report and review the information, the manager runs the risk of relying on secondhand information that may misstate facts. Best practice would be either to obtain the complete study from its original author and cite only that author or to use the information provided by the intermediary and cite both sources.

**14.** Henrietta Huerta, CFA, writes a weekly investment newsletter to market her services and obtain new asset management clients. A third party distributes the free newsletter on her behalf to those individuals on its mailing list. As a result, it is widely read by thousands of individual investors. The newsletter recommendations reflect most of Huerta's investment actions. After completing further research on East-West Coffee Roasters, Huerta decides to change her initial buy recommendation to a sell. To avoid violating the CFA Institute Standards of Professional Conduct, it would be *most* appropriate for Huerta to distribute the new investment recommendation to:

A. newsletter recipients and asset management clients simultaneously.
B. asset management clients first.
C. newsletter recipients first.

Answer = B

"Guidance for Standards I–VII," CFA Institute
Standard III(A): Loyalty, Prudence, and Care

According to Standard III(A): Loyalty, Prudence, and Care, members and candidates must place their clients' interests before their own interests. The temptation may be to release the changed

recommendation to newsletter recipients simultaneously with or even before the asset management clients to try to obtain new clients. But to avoid violating Standard III(A), Huerta must ensure any change in an investment recommendation is first distributed to her asset management clients before any newsletter recipients, who are not necessarily clients (that is, they receive the newsletter for free from a third-party distribution list).

**15.** Suni Kioshi, CFA, is an analyst at Pacific Asset Management, where she covers small-capitalization companies. On her own time, Kioshi often speculates in low-price thinly traded stocks for her own account. Over the last three months, Kioshi has purchased 50,000 shares of Basic Biofuels Company, giving her a 5% ownership stake. A week after this purchase, Kioshi is asked to write a report on stocks in the biofuels industry, with a request to complete the report within two days. Kioshi wants to rate Basic Biofuels as a buy in this report but is uncertain how to proceed. Concerning the research report, what action should Kioshi *most likely* take to prevent violating any of the CFA Institute Standards of Professional Conduct?

A. Not recommend a buy
B. Disclose her stock ownership
C. Sell her shares

Answer = B

"Guidance for Standards I–VII," CFA Institute
Standard V(A): Diligence and Reasonable Basis, Standard VI(A): Disclosure of Conflicts

The manager's ownership stake is a potential conflict of interest, which should be disclosed as required by Standard VI(A): Disclosure of Conflicts, but there is no requirement to sell the shares. As long as the analyst has completed a well-informed investment recommendation consistent with Standard V(A): Diligence and Reasonable Basis and disclosed her ownership position, she could include the buy recommendation in her report.

**16.** Edo Ronde, CFA, an analyst for a hedge fund, One World Investments, is attending a key industry conference for the microelectronics industry. At lunch in a restaurant adjacent to the conference venue, Ronde sits next to a table of conference attendees and is able to read their nametags. Ronde realizes the group includes the president of a publicly traded company in the microelectronics industry, Fulda Manufacturing, a company Ronde follows. Ronde overhears the president complain about a production delay problem Fulda's factories are experiencing. The president mentions that the delay will reduce Fulda's earnings by more than 20% during the next year if not solved. Ronde relays this information to the portfolio manager he reports to at One World explaining that in a recent research report he recommended Fulda as a buy. The manager asks Ronde to write up a negative report on Fulda so the fund can sell the stock. According to the CFA Institute Standards of Professional Conduct, Ronde should *least likely*:

A. request the portfolio manager not act on the information.
B. leave his research report as it is.
C. revise his research report.

Answer = C

"Guidance for Standards I–VII," CFA Institute
Standard II(A): Material Nonpublic Information

Ronde should refuse to follow his supervisor's request. If Ronde revises his research report based on the information he overheard at the industry conference, he would violate Standard II(A): Material Nonpublic Information. The production delay information is material and considered nonpublic until it is widely distributed. Therefore, it should not be included in Ronde's research report or acted on until it becomes public. Ronde should try to encourage Fulda to make the information public.

**17.** Victoria Christchurch, CFA, is a management consultant currently working with a financial services firm interested in curtailing its high staff turnover, particularly among CFA charterholders. In recent months, the company lost 5 of its 10 most senior managers, all of whom have cited systemic unethical business practices as the reason for their leaving. To curtail staff turnover by encouraging ethical behavior, it would be *least* appropriate for Christchurch to recommend the company do which of the following?

A. Implement a whistleblowing policy
B. Create, implement, and monitor a corporate code of ethics
C. Encourage staff retention by offering increased benefits

Answer = C

"Guidance for Standards I–VII," CFA Institute
Standard I(A): Knowledge of the Law

Offering increased benefits to encourage staff retention would not necessarily stop the unethical behavior causing staff turnover and would effectively be asking the ethical employees to ignore the unethical behavior, thus being complicit in the behavior. Under Standard I(A): Knowledge of the Law, CFA charterholders and candidates must disassociate themselves from unethical behavior. Because the unethical business practices are seen as systemic, it would likely require them to leave the firm. Implementing a whistleblowing policy and adopting a corporate code of ethics would likely help to build a foundation of strong ethical behavior.

**18.** Dilshan Kumar, CFA, is a world-renowned mining analyst based in London. Recently, he received an invitation from Cerberus Mining, a company listed on the London Stock Exchange with headquarters in Johannesburg, South Africa. Cerberus asked Kumar to join a group of prominent analysts from around the world on a tour of its mines in South Africa, some of which are in remote locations and not easily accessible. The invitation also includes an arranged wildlife safari to Krueger National Park for the analysts. Kumar accepts the invitation, planning to visit other mining companies he covers in Namibia and Botswana after the safari. To prevent violating any CFA Institute Standards of Professional Conduct, it is *most* appropriate for Kumar to only accept which type of paid travel arrangements from Cerberus?

A. Flights on a private airplane to the remote mining sites in South Africa
B. Economy class round trip ticket from London to Johannesburg
C. Ground transportation to Krueger National Park

Answer = A

"Guidance for Standards I–VII," CFA Institute
Standard I(B): Independence and Objectivity

Standard I(B): Independence and Objectivity requires members and candidates to use reasonable care and judgment to maintain their independence and objectivity in their professional

activities. Best practice dictates that Kumar only accept transportation to the remote mining sites because it is unlikely he would be able to source commercial flights to the locations and ground transportation may not be viable. Because Kumar would normally visit mining sites around the world as part of his job and because he is combining this trip with trips to other mine sites in different countries, it would be inappropriate for Cerberus to pay for the analyst's travel expenses from London. Although Kumar could go on safari with the group of analysts, he should pay his own way so as to restrict any influence such a gift could possibly have when making his investment recommendations on Cerberus.

**19.** Which method of calculating the firm's cost of equity is most likely to incorporate the long-run return relationship between the firm's stock and the market portfolio?

    A.  Capital asset pricing model
    B.  Dividend discount model
    C.  Bond yield plus risk premium approach

    Answer = A

    "Cost of Capital," Yves Courtois, Gene C. Lai, and Pamela Peterson Drake
    Section 3.3

    The capital asset pricing model uses the firm's equity beta, which is computed from a market model regression of the company's stock returns against market returns.

**20.** A project has the following annual cash flows:

| Year 0 | Year 1 | Year 2 | Year 3 | Year 4 |
|---|---|---|---|---|
| –$4,662,005 | $22,610,723 | –$41,072,261 | $33,116,550 | –$10,000,000 |

    Which of the following discount rates *most likely* produces the highest net present value (NPV)?

    A.  8%
    B.  10%
    C.  15%

    Answer = C

    "Capital Budgeting," John D. Stowe and Jacques R. Gagné
    Sections 4.1, 4.7

    The NPV at 15% is $99.93. The NPV at 10% is -$0.01. The NPV at 8% is -$307.59.

**21.** Which action is *most likely* considered a secondary source of liquidity?

    A. Increasing the efficiency of cash flow management
    B. Increasing the availability of bank lines of credit
    C. Renegotiating current debt contracts to lower interest payments

    Answer = C

    "Working Capital Management," Edgar A. Norton, Jr., Kenneth L. Parkinson, and Pamela Peterson Drake
    Sections 2.1.1, 2.1.2

    Renegotiating debt contracts is a secondary source of liquidity because it may affect the company's operating and/or financial positions.

**22.** Financial risk is *least likely* affected by:

    A. debentures.
    B. long-term leases.
    C. dividends.

    Answer = C

    "Measures of Leverage," Pamela Peterson Drake, Raj Aggarwal, Cynthia Harrington, and Adam Kobor
    Section 3.4

    By taking on fixed obligations, such as debt (including debentures) and long-term leases, a company increases its financial risk. Dividends will not increase financial risk.

**23.** Which of the following is the *least* appropriate method for an external analyst to use to estimate a company's target capital structure for determining the weighted average cost of capital (WACC)?

    A. Using averages of comparable companies' capital structure
    B. Using the company's current capital structure at book value weights
    C. Using statements made by the company's management regarding capital structure policy

Answer = B

"Cost of Capital," Yves Courtois, Gene C. Lai, and Pamela Peterson Drake
Section 2.2

An external analyst does not know a company's actual target capital structure. Consequently, the analyst should rely on market value (not book value) weights for the components of the company's current capital structure.

**24.** Based on best practices in corporate governance procedures, it is *most* appropriate for a company's compensation committee to:

A. include some non-independent members.
B. be aware of any final payments to which executives might be entitled.
C. rely on management to communicate compensation philosophy to shareholders.

Answer = B

"The Corporate Governance of Listed Companies: A Manual for Investors," Kurt Schacht, James C. Allen, and Matthew Orsagh
Section: Board Committees

Under best practices of corporate governance, the compensation committee should be aware of any final payments that might be made to executives under both best-case and worst-case scenarios.

**25.** Other factors held constant, the reduction of a company's average accounts payable because of suppliers offering less trade credit will *most likely*:

A. increase the operating cycle.
B. not affect the operating cycle.
C. reduce the operating cycle.

Answer = B

"Financial Analysis Techniques," Thomas R. Robinson, Jan Hendrik van Greuning, Elaine Henry, and Michael A. Broihahn
Section 4.3.2

"Working Capital Management," Edgar A. Norton, Jr., Kenneth L. Parkinson, and Pamela Peterson Drake
Section 2.2

Payables are not part of the operating cycle calculation, which includes receivables and inventory.

**26.** Assume a 365-day year and the following information for a company:

|  | Current Year | Previous Year |
|---|---|---|
| **Sales** | $12,000 | $10,000 |
| **Cost of goods sold** | $9,000 | $7,500 |
| **Inventory** | $1,200 | $1,000 |
| **Accounts payable** | $600 | $600 |

The firm's days of payables for the current year is *closest* to:

A. 18.3.
B. 23.8.
C. 24.9.

Answer = B

"Financial Analysis Techniques," Elaine Henry, Thomas R. Robinson, and Jan Hendrik van Greuning
Section 4.2.2

"Working Capital Management," Edgar A. Norton, Jr., Kenneth L. Parkinson, and Pamela Peterson Drake
Section 7.3

The number of days of payables =

$$\frac{\text{Accounts payable}}{(\text{Purchases}/365)} = \frac{\text{Accounts payable}}{[(\Delta\text{inventory} + \text{COGS})/365]} =$$

$$\frac{\$600}{[(\$1,200 - \$1,000 + \$9000)/365]} = 23.8$$

**27.** Which of the following statements is the *most* appropriate treatment of flotation costs for capital budgeting purposes? Flotation costs should be:

A. incorporated into the estimated cost of capital.
B. expensed in the current period.
C. deducted as one of the project's initial-period cash flows.

Answer = C

"Cost of Capital," Yves Courtois, Gene C. Lai, and Pamela Peterson Drake
Section 4.4

Flotation costs are an additional cost of the project and should be incorporated as an adjustment to the initial-period cash flows in the valuation computation.

**28.** A small country has a comparative advantage in the production of pencils. The government establishes an export subsidy for pencils to promote economic growth. Which of the following will be the *most likely* result of this policy?

A. The increase in the domestic producer surplus will exceed the sum of the subsidy and the decrease in the domestic consumer surplus.
B. As new domestic producers enter the pencils market, supply will increase and domestic prices will decline.
C. Although domestic producers will receive a net benefit, the policy will give rise to inefficiencies that cause a deadweight loss to the national welfare.

Answer = C

"International Trade and Capital Flows," Usha Nair-Reichert and Daniel Robert Witschi
Section 3.3

Export subsidies interfere with the functioning of the free market and result in a deadweight loss to society. The deadweight loss arises on the producer side because the higher subsidized price causes inefficient producers to remain in the market. On the consumer side, the higher price causes those that would have purchased at the lower price to be shut out of the market.

**29.** The following data are for a basket of three consumption goods used to measure the rate of inflation:

| Goods | Prior Year | | Current Year | |
| --- | --- | --- | --- | --- |
| | Quantity | Price | Quantity | Price |
| 5 lb. bag sugar | 150 bags | $3.12 | 180 bags | $2.92 |
| 5 lb. bag flour | 800 bags | $2.18 | 750 bags | $3.12 |
| Frozen pizza (each) | 250 | $2.90 | 250 | $3.00 |

Using the consumption basket for the current year, the Paasche Index is *closest* to:

A. 125.4.
B. 123.7.
C. 124.6.

Answer = B

"Understanding Business Cycles," Michele Gambera, Milton Ezrati, and Bolong Cao
Section 4.2.2

The Paasche Index uses the current composition of the basket.

$$\text{Paasche Index} = \frac{180 \times 2.92 + 750 \times 3.12 + 250 \times 3.00}{180 \times 3.12 + 750 \times 2.18 + 250 \times 2.90} \times 100 = 123.75$$

**30.** A country having a current account deficit *most likely* will still be able to consume more output than it produces by:

A. restricting foreign direct investment.
B. adjusting interest rates to stimulate higher domestic savings.
C. increasing its net foreign liabilities.

Answer = C

"International Trade and Capital Flows," Usha Nair-Reichert and Daniel Robert Witschi
Sections 4.3, 4.4

"Currency Exchange Rates," William A. Barker, Paul D. McNelis, and Jerry Nickelsburg

Section 5

A current account deficit must be offset by a capital account surplus. Only by borrowing money from foreigners can a country have a current account deficit and consume more output than it produces. An increase in net foreign liabilities is the result of borrowing from foreigners.

**31.** In an effort to influence the economy, a central bank conducted open market activities by selling government bonds. This action implies that the central bank is *most likely* attempting to:

A. contract the economy through a lower policy interest rate.
B. expand the economy through a lower policy interest rate.
C. contract the economy by reducing bank reserves.

Answer = C

"Monetary and Fiscal Policy," Andrew Clare and Stephen Thomas
Sections 2.3.2.1, 2.3.2.2

Selling government bonds results in a reduction of bank reserves and reduces their ability to lend, causing a decline in money growth through the multiplier mechanism and hence a contraction in the economy.

**32.** Which of the following government interventions in market forces is *most likely* to cause overproduction?

A. Price floors
B. Imposing an additional per-unit tax of $1 on sellers
C. Price ceilings

Answer = A

"Demand and Supply Analysis: Introduction," Richard V. Eastin and Gary L. Arbogast
Section 3.13

Price floors lead to overproduction.

**33.** An expansionary fiscal policy is *most likely* associated with:

A. an increase in government spending on social insurance and benefits.
B. crowding out of private investments.
C. an increase in capital gains tax rates.

Answer = B

"Monetary and Fiscal Policy," Andrew Clare and Stephen Thomas
Sections 3.1.1, 3.1.2, 3.1.3

Expansionary policy increases government borrowing, which may divert private sector investment from taking place, which results in an effect known ascrowding out. Increases in capital gains tax rates and increases in public spending are forms of contractionary fiscal policy; they serve as automatic stabilizers and thus do not coincide with discretionary fiscal expansion.

**34.** Which of the following would be *most* useful as a leading indicator to signal the start of an economic recovery?

    A. The narrowing of the spread between the 10-year Treasury yield and the federal funds rate
    B. A decrease in average weekly initial claims for unemployment insurance
    C. An increase in aggregate real personal income (less transfer payments)

    Answer = B

    "Understanding Business Cycles," Michele Gambera, Milton Ezrati, and Bolong Cao
    Section 5.1

    Average weekly initial claims for unemployment insurance is a leading indicator of economic activity. A decrease in these claims is an indicator of rehiring, which signals the start of an economic recovery.

**35.** A household has a total monthly budget of $110 to spend on chicken and lamb. Per kilogram, the price of chicken is $7.50 and the price of lamb is $10. The quantity of chicken consumed is 35% less than that for lamb. The quantity of chicken (in kilograms) consumed by the household in a month is *closest* to:

    A. 4.8 kg.
    B. 5.1 kg.
    C. 2.6 kg.

    Answer = A

    "Demand and Supply Analysis: Consumer Demand," Richard V. Eastin and Gary L. Arbogast
    Section 4.1

    The formula for the budget constraint is given by:

    $P_{chicken} \times Q_{chicken} + P_{lamb} \times Q_{lamb} = Income$

    $7.5 \times 0.65 Q_{lamb} + 10 \times Q_{lamb} = 110$

    $14.875 \times Q_{lamb} = 110$

    $Q_{lamb} = 7.39$ kilograms; $Q_{chicken} = 0.65 Q_{lamb} = 4.81$ kilograms.

**36.** According to the Fisher effect, an increase in expected inflation will *most likely* increase:

    A. both nominal and real interest rates.
    B. the nominal interest rate.
    C. the real interest rate.

    Answer = B

    "Monetary and Fiscal Policy," Andrew Clare and Stephen Thomas
    Section 2.1.7

    The Fisher effect states that the nominal interest rate is the sum of the real rate of interest and
    the expected rate of inflation over a given time horizon. An increase in expected inflation will
    result in a higher nominal rate.

**37.** The price of a good falls from $15 to $13. Given this decline in price, the quantity demanded of the
    good rises from 100 units to 120 units. The arc price elasticity of demand for the good is *closest* to:

    A. 1.3.
    B. 1.5.
    C. 10.0.

    Answer = A

    "Demand and Supply Analysis: Introduction," Richard V. Eastin and Gary L. Arbogast
    Section 4.1

    Arc price elasticity of demand is calculated as: $\%\Delta Q/\%\Delta P = (\Delta Q/Q_{avg}) / (\Delta P/P_{avg})$.

    In this case, $(20/110)/(2/14) = 1.27$ rounded to 1.3.

**38.** Which of the following statements concerning the Herfindahl–Hirschman Index (HHI) is *most*
    accurate?

    A. The HHI is a useful measure of potential barriers to entry.
    B. An HHI of 0.05 would be analogous to having the market shared equally by 20 firms.
    C. The HHI is usually unaffected by mergers among the top market incumbents.

    Answer = B

    "The Firm and Market Structures," Richard G. Fritz and Michele Gambera
    Section 7.2

    If there are $M$ firms in the industry with equal market shares, the HHI equals $1/M$. With 20 firms
    having equal shares, the HHI = $1/20 = 0.05$.

**39.** The following diagram illustrates a market that had been in equilibrium at ($P_E$, $Q_E$) prior to the imposition of a price ceiling, $P_C$. The deadweight loss that arises because of this market intervention is best described by the area defined by:
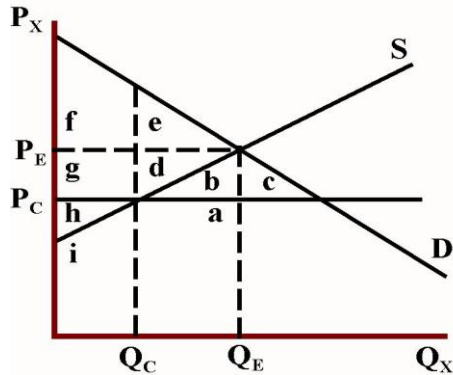


- A.  $d + b$.
- B.  $d + e$.
- C.  $d + g$.

Answer = B

"Demand and Supply Analysis: Introduction," Richard V. Eastin and Gary L. Arbogast
Section 3.13

Prior to the price ceiling, the total surplus was $d + e + f + g + h$, consisting of consumer surplus of $f + e$ and producer surplus of $d + g + h$. The price ceiling causes the quantity supplied to decrease to $Q_C$ and for those consumers who can find supply to gain consumer surplus of $g$ at the expense of producers. With the decline in supply, consumers lose consumer surplus $e$ and producers lose producer surplus $d$ for a combined deadweight loss of **$d + e$**.

**40.** By themselves, financial ratios are *least likely* to be sufficient in determining a company's:

- A.  past performance.
- B.  current financial condition.
- C.  creditworthiness.

Answer = C

"Financial Analysis Techniques," Elaine Henry, Thomas R. Robinson, and Jan Hendrik van Greuning
Sections 3.1.2, 6.1

Financial ratios alone are not sufficient to determine the creditworthiness of a company. Other factors must also be considered, such as examining the entire operation of the company, meeting with management, touring company facilities, and so forth.

**41.** Unused tax losses and credits that a company expects to use in future periods will *most likely* give rise to:

   A.  valuation allowances.
   B.  deferred tax liabilities.
   C.  deferred tax assets.

   Answer = C

   "Understanding Balance Sheets," Elaine Henry and Thomas R. Robinson
   Section 3.1.5

   "Income Taxes," Elbie Antonites and Michael A. Broihahn
   Section 2

   Deferred tax assets arise from carrying forward unused tax losses and credits but are only recognized if there is an expectation that the company will be able to use them in the future.

**42.** The following information about a company is provided:

| Account | $ Thousands |
|---|---|
| Contributed capital, beginning of the year | 50 |
| Retained earnings, beginning of the year | 225 |
| Sales revenues earned during the year | 450 |
| Investment income earned during the year | 5 |
| Total expenses paid during the year | 402 |
| Dividends paid during the year | 10 |
| Total assets, end of the year | 800 |

Total liabilities (in $ thousands) at the end of the year are *closest* to:

   A.  482.
   B.  472.
   C.  487.

   Answer = A

   "Financial Reporting Mechanics," Thomas R. Robinson, Jan Hendrik van Greuning, Karen O'Connor Rubsam, Elaine Henry, and Michael A. Broihahn
   Sections 3.2, 4.2

   Given Assets = Liabilities + Equity. First calculate ending equity ($318, see calculation in the following table).

$800 = Liabilities + $318,  Total liabilities = **$482**.

|  |  | $ Thousands |
| --- | --- | --- |
| Contributed capital |  | 50 |
| Initial retained earnings |  | 225 |
| Sales revenues | 450 |  |
| Investment income | 5 |  |
| Total expenses | (402) |  |
| Net income for the year | 53 |  |
| Dividends paid | (10) |  |
| Increase in retained earnings | 43 | 43 |
| Ending owners' equity |  | $318 |

**43.** A company that prepares its financial statements in accordance with IFRS incurred and capitalized €2 million of development costs during the year. These costs were fully deductible immediately for tax purposes, but the company is depreciating them over two years for financial reporting purposes. The company has a long history of profitability, which is expected to continue. Which is the *most* appropriate way for an analyst to incorporate the differential tax treatment in his analysis? He should include it in:

A. liabilities when calculating the company's current ratio.
B. equity when calculating the company's return-on-equity ratio.
C. liabilities when calculating the company's debt-to-equity ratio.

Answer = C

"Income Taxes," Elbie Antonites and Michael A. Broihahn
Sections 2.2, 7

The different treatment for tax purposes and financial reporting purposes is a temporary difference and would create a deferred tax liability. Deferred tax liabilities should be classified as debt if they are expected to reverse with subsequent tax payments. The long history of profitability implies the company will likely be paying taxes in the following years, and hence an analyst could reasonably expect the temporary difference to reverse. Under IFRS, all deferred tax liabilities are non-current.

**44.** The following information is available from a company's current financial data, prepared according to US GAAP:

|  | $ Thousands |
| --- | --- |
| **Defined Contribution Plan:** |  |
| Contributions to defined contribution plan | 1,000 |
|  |  |
| **Defined Benefit Plan:** |  |
|  |  |

| Contributions to defined benefit plan | 1,500 |
|---|---|
| Employees' service cost for the period | 1,400 |
| Interest expense accrued on the beginning pension obligation | 200 |
| Expected return on plan assets | 400 |
| Actuarial gains for the period | 100 |

The pension expense (in $ thousands) reported in the current year is *closest* to:

A. 2,200.
B. 2,500.
C. 2,400.

Answer = A

"Non-Current (Long-Term) Liabilities," Elizabeth A. Gordon and Elaine Henry
Section 4

The pension expense would be the sum of the expense for the defined contribution plan and the defined benefit plan as follows:

| Plan | Expense Components under US GAAP | $ Thousands |
|---|---|---|
| Defined contribution plan | Contributions | 1,000 |
| | | |
| Defined benefit plan | Employee service costs | 1,400 |
| | Interest expense accrued on beginning pension obligation | 200 |
| | Less expected ROA on plan assets | (400) |
| Total Expense | | 2,200 |

**45.** A company purchased equipment for $50,000 on 1 January 2011. It is depreciating the equipment over a period of 10 years on a straight-line basis for accounting purposes, but for tax purposes it is using the declining balance method at a rate of 20%. Given a tax rate of 30%, the deferred tax liability at the end of 2013 is *closest* to:

A. $6,720.
B. $420.
C. $2,820.

Answer = C

"Income Taxes," Elbie Antonites and Michael A. Broihahn
Section 2.2

The deferred tax liability is equal to the Tax rate × Temporary difference between the carrying amount of the asset and the tax base.

| | | |
|---|---|---|
| Value for accounting purposes after three years | 50,000 – [3 × (50,000/10)] = | $35,000 |
| Value for tax purposes:<br>Carrying amount = Start of year balance × (1 – 0.20)<br>After three years: | 50,000 × 0.8 × 0.8 × 0.8 = | 25,600 |
| Temporary difference | | 9,400 |
| Deferred tax liability at 30%: | 30% × 9,400 = | **$2,820** |

**46.** Under the IFRS Framework for the Preparation and Presentation of Financial Statements, it is *most* appropriate to recognize a financial statement element in the financial statements if it:

A.  provides certainty that any future economic benefit associated with the item will flow to or from the enterprise.
B.  is normally carried at historical cost, current cost, or fair market value.
C.  has a cost or value that can be measured with reliability.

Answer = C

"Financial Reporting Standards," Elaine Henry, Jan Hendrik van Greuning, and Thomas R. Robinson
Section 5.4.2

For recognition in the financial statements, an element must have a cost or value that can be measured with reliability. Certainty is not a requirement for economic benefits associated with an item to flow to or from the enterprise; all that is required is the probability that they will.

**47.** Compared with classifying a lease as a financing lease, if a lessee reports the lease as an operating lease, it will *most likely* result in:

A.  a higher debt-to-equity ratio.
B.  a lower return on assets.
C.  lower cash from operations.

Answer = C

"Non-Current (Long-Term) Liabilities," Elizabeth A. Gordon and Elaine Henry
Sections 3.2.1, 3.2.2

The cash from operations is lower if the lease is classified as an operating lease because the full lease payment is shown as an operating cash outflow. If it is classified as a financing lease, only the portion of the lease payment relating to interest expense reduces the operating cash flow and the portion of the lease payment that reduces the lease liability is classified as a financing cash flow. Therefore, the lessee's cash from operations tends to be lower under operating leases.

**48.** At the beginning of the year, a company had total shareholders' equity consisting of ¥200 million in common share capital and ¥50 million in retained earnings.

During the year, the following events occurred:

| | ¥ Millions |
|---|---|
| Net income reported | 42 |
| Dividends paid | 7 |
| Unrealized loss on available-for-sale investments | 3 |
| Repurchase of company stock, to be held as Treasury stock | 6 |

The total shareholders' equity (in ¥ millions) at the end of the year is *closest* to:

A. 276.
B. 279.
C. 282.

Answer = A

"Understanding Balance Sheets," Elaine Henry and Thomas R. Robinson
Sections 4.5, 6.1, 6.2

| Shareholders' Equity (¥ millions) | | |
|---|---|---|
| Start-of-year share capital | | 200 |
| Less Treasury stock | | (6) |
| Beginning retained earnings | 50 | |
| Plus net income | 42 | |
| Less dividends paid | (7) | |
| Ending retained earnings | 85 | 85 |
| Accumulated other comprehensive income | | |
| Unrealized loss on available-for-sale investments | | (3) |
| End-of-year shareholders' equity | | **276** |

**49.** Which of the following statements is *most* accurate?

A. A classified balance sheet arises when in an auditor's opinion the financial statements materially depart from accounting standards and are not presented fairly.
B. Non-controlling interest on the balance sheet represents a position the company owns in other companies.
C. Treasury stock is non-voting and receives no dividends.

Answer = C

"Understanding Balance Sheets," Elaine Henry and Thomas R. Robinson
Section 6.1

Treasury stock is non-voting and does not receive dividends.

**50.** A company that prepares its financial statements according to IFRS owns several investment properties on which it earns rental income. It values the properties using the fair value model based on prevailing rental markets. After two years of increases, the market softened in 2014 and values decreased. A summary of the properties' valuations follows:

Original cost (acquired in 2012)  €50.0 million
Fair value valuation at 31 December 2012        €50.5 million
Fair value valuation at 31 December 2013        €54.5 million
Fair value valuation at 31 December 2014        €48.0 million

Which of the following *best* describes the impact of the revaluation on the 2014 financial statements?

A.  €6.5 million charge to net income
B.  €6.5 million charge to revaluation surplus
C.  €4.5 million charge to revaluation surplus and €2.0 million charge to net income

Answer = A

"Long-Lived Assets," Elaine Henry and Elizabeth A. Gordon
Section 8

For investment properties, when using the fair value model of valuing assets (as opposed to the revaluation model, which is not allowed by IFRS for investment properties), all increases and decreases affect net income.

**51.** Using the following information, a Mexican corporation is computing the depreciation expense for a piece of manufacturing equipment that it purchased at the start of the current year. The company takes a full year's depreciation in the year of acquisition.

| | |
|---|---|
| Cost of equipment | MXN2,000,000 |
| Estimated residual value | MXN200,000 |
| Expected useful life | 10 years |
| Total productive capacity | 5,000,000 units |
| Production during year | 800,000 units |

The depreciation expense (in MXN) will *most likely* be higher by:

A.  112,000, using the double-declining method compared with the units-of-production method.
B.  140,000, using the units-of-production method compared with the straight-line method.
C.  180,000, using the double-declining balance method compared with the straight-line method.

Answer = A

"Long-Lived Assets," Elaine Henry and Elizabeth A. Gordon
Section 3.1

The difference between the double-declining balance method and the units-of-production method (in MXN) is 400,000 – 288,000 = 112,000.

| | Straight Line | Units of Production | Declining Balance |
|---|---|---|---|
| Rate | 1/10 | 5,000,000 units | 1/10 × 2 = 20% |
| Annual expense | $\dfrac{2,000,000 - 200,000}{10}$ = 180,000 | (2,000,000 – 200,000) × (800,000/5,000,000) = 288,000 | 0.20 × 2,000,000 = 400,000 |

**52.** A company suffered a substantial loss when its production facility was destroyed in an earthquake against which it was not insured. Geological scientists were surprised by the earthquake because there was no evidence that one had ever occurred in that area in the past. Which of the following statements is *most* accurate? The company should report the loss on its income statement:

A.  as an unusual item if it reports under US GAAP.
B.  net of taxes if it reports under US GAAP.
C.  as an extraordinary item net of taxes if it reports under IFRS.

Answer = B

"Understanding Income Statements," Elaine Henry and Thomas R. Robinson
Sections 5.2, 5.3

Under US GAAP, the earthquake would qualify as an extraordinary item because it is both unusual in nature and infrequent in occurrence. Extraordinary items are reported on the income statement net of tax.

**53.** A Canadian printing company that prepares its financial statements according to IFRS has experienced a decline in the demand for its products. The following information (in Canadian dollars) relates to the company's printing equipment as of the current fiscal year end:

| | C$ |
|---|---|
| Carrying value of equipment (net book value) | 500,000 |
| Undiscounted expected future cash flows | 550,000 |
| Present value of expected future cash flows | 450,000 |
| Fair value | 480,000 |
| Costs to sell | 50,000 |
| Value in use | 440,000 |

The impairment loss (in C$) is *closest* to:

A. 0.
B. 60,000.
C. 70,000.

Answer = B

"Long-Lived Assets," Elaine Henry and Elizabeth A. Gordon
Section 5.1

Under IFRS, an asset is considered to be impaired when its carrying amount exceeds its recoverable amount (the higher of fair value less cost to sell or value in use).

Fair value less costs to sell: 480,000 – 50,000 = 430,000
Value in use = 440,000
Recoverable amount (higher value of the above two amounts) = 440,000
Impairment loss under IFRS = Carrying value (net book value) – recoverable amount
Impairment loss = 500,000 – 440,000 = C$60,000

**54.** If a non-financial company securitizes its accounts receivable for less than their book value, the *most likely* effect on the financial statements is to increase:

A. cash from operations.
B. net income.
C. cash from financing activities.

Answer = A

"Accounting Shenanigans on the Cash Flow Statement," Marc A. Siegel
Section 5

The securitization of accounts receivable for less than book value would result in a loss on the income statement but an increase in the cash from operations, reflecting the proceeds received.

**55.** Updated information on a company's performance and financial position since the last annual report is *most likely* found in:

A. management discussion and analysis.
B. proxy statements.
C. interim reports.

Answer = C

"Financial Statement Analysis: An Introduction," Elaine Henry and Thomas R. Robinson
Sections 3.1.6, 3.2

Interim reports, either quarterly or semi-annual, contain updated information on a company's performance and financial position since the last annual report.

**56.** An analyst has calculated the following ratios for a company:

| | |
|---|---|
| Operating profit margin | 17.5% |
| Net profit margin | 11.7% |
| Total asset turnover | 0.89 times |
| Return on assets (ROA) | 10.4% |
| Financial leverage | 1.46 |
| Debt to equity | 0.46 |

The company's return on equity (ROE) is *closest* to:

A. 15.2%.
B. 22.7%.
C. 4.8%.

Answer = A

"Financial Analysis Techniques," Elaine Henry, Thomas R. Robinson, and Jan Hendrik van
Greuning
Section 4.6.2

Using DuPont analysis, there are two ways to calculate ROE from the information provided:

| | | |
|---|---|---|
| ROE = Net profit margin × Asset turnover × Financial leverage | 11.7 × 0.89 × 1.46 | **15.2%** |
| ROE = ROA × Financial leverage | 10.4 × 1.46 | **15.2%** |

**57.** During 2013, the following events occurred at a company:

| | |
|---|---|
| 1. | It purchased a customer list for $100,000, which is expected to provide equal annual benefits for the next four years. |
| 2. | It recorded $200,000 of goodwill in the acquisition of a competitor. It is estimated that the acquisition would provide substantial benefits for the company for at least the next 10 years. |
| 3. | It spent $300,000 on media placements announcing that the company had donated products and services to the community. The CEO believes the firm's reputation was enhanced substantially and that the company will likely benefit from it for the next five years. |

Based on those events, the amortization expense that the company should report in 2014 is *closest*
to:

A. $85,000.
B. $25,000.
C. $45,000.

Answer = B

"Understanding Balance Sheets," Elaine Henry and Thomas R. Robinson
Sections 4.3, 4.4

The customer list is the only identifiable intangible asset, and it should be amortized on a straight-line basis over its expected future life: $100,000/4 = $25,000/year. Goodwill is an unidentifiable intangible and should be tested for impairment but not amortized. All advertising and promotion costs, such as the media placements, are typically expensed. If the reputation of the company has been enhanced as the CEO suggests, it is an internally generated intangible that is not recorded on the balance sheet and is thus not amortized.

**58.** An analyst has gathered the following information about a company:

|  | Canadian Dollars (millions) |
|---|---|
| Cash flow from operating activities (CFO) | $105.9 |
| Cash flow from investing activities | (11.8) |
| Cash flow from financing activities | 46.5 |
| Net change in cash for the year | $140.6 |
| Interest paid (included in CFO) | 22.4 |
| Taxes paid (tax rate of 30%) | 18.0 |
| Total debt, end of year | $512.8 |

The cash flow debt coverage ratio for the year is *closest* to:

A. 20.6%.
B. 27.4%.
C. 23.7%.

Answer = A

"Understanding Cash Flow Statements," Elaine Henry, Thomas R. Robinson, Jan Hendrik van Greuning, and Michael A. Broihahn
Section 4.4

Cash flow debt coverage ratio = CFO/Total debt = 105.9/512.8 = **20.6%.**

**59.** The following financial information is available at the end of the year.

| Security | Share Information | | Other Features |
|---|---|---|---|
| | Authorized | Issued and Outstanding | |
| Common stock | 500,000 | 250,000 | Currently pays a dividend of $1 per share. |
| Preferred stock, Series A | 50,000 | 12,000 | Nonconvertible, cumulative; pays a dividend of $4 per share. |
| Preferred stock, Series B | 50,000 | 30,000 | Convertible; pays a dividend of $7.50 per share. Each share is convertible into 2.5 common shares. |
| **Additional information**: | | | |
| Reported income for the year | | $1,000,000 | |

The diluted EPS (earnings per share) is *closest* to:

A. $2.91.
B. $3.08.
C. $2.93.

Answer = A

"Understanding Income Statements," Elaine Henry and Thomas R. Robinson
Sections 6.2, 6.3

The convertible preferred shares are anti-dilutive, as shown in the following table. Therefore, the diluted EPS is the same as the basic EPS, $2.91.

| | Basic EPS | Diluted EPS (using if-converted method) | |
|---|---|---|---|
| Net income | $1,000,000 | $1,000,000 | |
| Preferred stock, Series A | (48,000) | (48,000) | 12,000 shares × $4/share |
| Preferred stock, Series B | (225,000) | 0 | 30,000 shares × $7.50/share |
| Earnings available to common shareholders | $727,000 | $952,000 | |
| | | | |
| **Weighted Average Number of Common Shares (WACS)** | | | |

| Shares outstanding | 250,000 | 250,000 | |
| If converted | _____ | 75,000 | 2.5 common/preferred × 30,000 preferred |
| WACS | 250,000 | 325,000 | |
| EPS = Earnings available to common shareholders/WACS | **$2.91** | **$2.93*** | |

\* Exceeds Basic EPS; Series B is anti-dilutive and is thus not included.

**60.** A company that prepares its financial statements in accordance with IFRS issues £5,000,000 face value 10-year bonds on 1 January 2013 when market interest rates for such bonds are 5.50%. The bonds carry a coupon of 6.50%, with interest paid annually on 31 December. The carrying value of the bonds as of 31 December 2014 will be *closest* to:

A. £4,695,000.
B. £5,316,000.
C. £5,301,000.

Answer = B

"Non-Current (Long-Term) Liabilities," Elizabeth A. Gordon and Elaine Henry
Sections 2.1, 2.2

There are two ways to determine the value of the bonds on 31 December 2014.

First method:
Calculate the present value (PV) of the cash flows over the remaining eight years at 5.5%:
£5,000,000 × 6.5% × PVA(8 years, 5.5%) + £5,000,000 × PV(8 years, 5.5%) = **£5,316,728**.
Or using a financial calculator:
PMT = £325,000, *i* = 5.5%, *n* = 8 years, Future value = £5,000,000. Compute PV; PV = £5,316,728.

Second method:
Determine the initial bond proceeds and then the amortization of the premium or discount during the first two years. The initial bond proceeds are determined using a financial calculator:
PMT = £325,000, *i* = 5.5%, *n* = 10 years, Future value = £5,000,000. Compute PV;
PV = £5,376,881.

Using the effective annual interest rate method, which is required under IFRS, to amortize the premium gives the following:

| Year | Carrying Amount at Start of Year | Interest Expense at EAI | Interest Payment at Coupon Rate | Amortization of Premium | Carrying Amount at End of Year |
|---|---|---|---|---|---|
| 2013 | 5,376,881 | 295,728 | 325,000 | 29,272 | 5,347,609 |
| 2014 | 5,347,609 | 294,119 | 325,000 | 30,881 | £5,316,728 |

**61.** Interest payable decreased during a company's fiscal year. Compared with the amount of cash interest payments made, interest expense is *most likely*:

    A. lower.
    B. higher.
    C. the same.

    Answer = A

    "Understanding Cash Flow Statements," Elaine Henry, Thomas R. Robinson, Jan Hendrik van Greuning, and Michael A. Broihahn
    Section 3.2.1.5

    If the interest payable decreases during the year, then the interest expense on an accrual basis will be lower than the amount of cash interest payments. The cash paid would be the full amount of the expense plus the amounts paid to reduce the interest payable. For example,

| | |
|---|---|
| Interest expense | 100 |
| Plus decrease in interest payable | +12 |
| Cash paid for interest | 112 |

**62.** A company has operated at full capacity throughout the year, and a review of its inventory records for that period indicate that the following costs were incurred:

| | |
|---|---|
| Fixed production overhead | $500,000 |
| Direct material and direct labor | $300,000 |
| Storage costs incurred during production | $25,000 |
| Abnormal waste costs | $30,000 |

The total capitalized costs to inventory during the year are *closest* to:

    A. $855,000.
    B. $825,000.
    C. $800,000.

    Answer = B

    "Inventories," Michael A. Broihahn
    Section 2

    The total capitalized costs include fixed production costs, the direct conversion costs of material and labor, and storage costs required as part of production. They do not, however, include abnormal waste costs. $500,000 + $300,000 + $25,000 = $825,000.

**63.** A company's balance sheet at the end of the year shows the following:

| Current Assets | |
|---|---|
| Cash and cash equivalents | $2,950 |
| Marketable securities | 730 |
| Notes and accounts receivable, trade | 5,740 |
| Less allowance for doubtful accounts and sales returns | (650) |
| Inventories | 1,320 |
| Other current assets | 1,850 |
| **Total current assets** | **$11,940** |
| | |
| **Current Liabilities** | |
| Accounts payable and other accrued liabilities | $5,100 |
| Current portion of borrowings | 1,820 |
| Other current liabilities | 2,560 |
| **Total current liabilities** | **$9,480** |

The company's quick ratio is *closest* to:

A.  1.26.
B.  0.93.
C.  0.99.

Answer = B

"Understanding Balance Sheets," Elaine Henry and Thomas R. Robinson
Sections 2.2, 7.2

"Financial Analysis Techniques," Elaine Henry, Thomas R. Robinson, and Jan Hendrik van Greuning
Sections 4.3.1, 4.3.2

Correct.

| Ratio | Formula | Calculation |
|-------|---------|-------------|
| Quick ratio | $\dfrac{\text{Cash} + \text{Marketable securities} + \text{Receivables}}{\text{Current liabilities}}$ | $\dfrac{(2950 + 730 + 5740 - 650)}{9480} = 0.93$ |

**64.** An investor purchases one share of stock for $85. Exactly one year later, the company pays a dividend of $2.00 per share. This is followed by two more annual dividends of $2.25 and $2.75 in successive years. Upon receiving the third dividend, the investor sells the share for $100. The money-weighted rate of return on this investment is *closest* to:

    A.  7.97%.
    B.  8.63%.
    C.  8.15%.

    Answer = C

    "Discounted Cash Flow Applications," Richard A. DeFusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkle
    Section 3.1

    The money-weighted rate of return is the internal rate of return (IRR) of the cash flows associated with the investment. The following figure represents the timeline for the problem:

| Years: | 0 | 1 | 2 | 3 |
|--------|-----|------|------|--------|
| Cash Flows (in $): | (85) | 2.00 | 2.25 | 102.75 |

    Using the cash flow (CF) function of a financial calculator: $CF_0 = -85$, $CF_1 = 2$, $CF_2 = 2.25$, $CF_3 = 102.75$; and solving for IRR: IRR = 8.15%.

**65.** An individual wants to be able to spend €80,000 per year for an anticipated 25 years in retirement. To fund this retirement account, he will make annual deposits of €6,608 at the end of each of his working years. He can earn 6% compounded annually on all investments. The minimum number of deposits that are needed to reach his retirement goal is *closest* to:

    A.  40.
    B.  51.
    C.  28.

    Answer = A

    "The Time Value of Money," Richard A. DeFusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkle
    Sections 4.1, 6.1

    The following figure represents the timeline for the problem:

| 0 | 1 | ... | R | R+1 | ... | R+25 |
|---|---|---|---|---|---|---|
| | (€6,608) | ... | (€6,608) | €80,000 | ... | €80,000 |

Using a financial calculator, the funds needed at retirement (R on the timeline) are calculated: $N = 25$, $I/Y = 6\%$, PMT = €80,000, Future value (FV) = €0; Mode = End. The calculated present value (PV) is €1,022,668.

$$PV = A\left[\frac{1 - \frac{1}{(1+r)^N}}{r}\right] \quad 80,000\left[\frac{1 - \frac{1}{(1.06)^{25}}}{.06}\right] = 1,022,668$$

Then, €1,022,668 is used as the FV (at R on the timeline) for the accumulation phase annuity as per: $I/Y = 6\%$, PV = €0, PMT = –€6,608, FV = €1,022,668; Mode = End. The computed $N$ is **40.**

Alternatively, 40 could be calculated with the formula:

$$FV = A\left[\frac{(1+r)^N - 1}{r}\right] \quad 1,022,668 = 6608\left[\frac{(1+0.06)^N - 1}{0.06}\right]$$

**66.** Equity return distributions are *best* described as being:

A. mesokurtotic.
B. leptokurtotic.
C. platykurtotic.

Answer = B

"Statistical Concepts and Market Returns," Richard A. DeFusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkle
Section 9

Most equity return distributions are best described as being leptokurtotic (i.e., more peaked than normal).

**67.** For a positively skewed unimodal distribution, which of the following measures is *most* accurately described as the largest?

A. Mode
B. Median
C. Mean

Answer = C

"Statistical Concepts and Market Returns," Richard A. DeFusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkle
Section 8

For a positively skewed unimodal distribution, the mode is less than the median, which is less than the mean.

**68.** If the distribution of the population from which samples of size *n* are drawn is positively skewed and given that the sample size, *n*, is large, the sampling distribution of the sample means is *most likely to* have a:

A. mean smaller than the mean of the entire population.
B. variance equal to that of the entire population.
C. distribution that is approximately normal.

Answer = C

"Sampling and Estimation," Richard A. DeFusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkle
Section 3.1

Given a population that has a finite variance and a large sample size, the central limit theorem establishes that the sampling distribution of sample means will be approximately normal, will have a mean equal to the population mean, and will have a variance equal to the population variance divided by the sample size.

**69.** The arithmetic and geometric mean are calculated for the same data. If there is variability in the data, compared with the arithmetic mean, the geometric mean will *most likely* be:

A. smaller.
B. equal.
C. greater.

Answer = A

"Statistical Concepts and Market Returns," Richard A. DeFusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkle
Section 5.4.2

The geometric mean is always less than or equal to the arithmetic mean. The only time the two means will be equal is when there is no variability in the observations.

**70.** The following 10 observations are a sample drawn from a normal population: 25, 20, 18, –5, 35, 21, –11, 8, 20, and 9. The fourth quintile (80th percentile) of the sample is *closest* to:

A. 8.
B. 24.
C. 21.

Answer = C

"Statistical Concepts and Market Returns," Richard A. DeFusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkle
Section 6.1

The observations, when ranked from smallest to largest, are: –11, –5, 8, 9, 18, 20, 20, 21, 25, and 35. The fourth quintile (80th percentile) is the eighth largest of these ordered numbers. The eighth largest number is 21.

**71.** A fund manager would like to estimate the probability of a daily loss higher than 5% on the fund he manages. He decides to use a method that uses the relative frequency of occurrence based on historical data. The resulting probability is *best* described as a(n):

   A. subjective probability.
   B. a priori probability.
   C. empirical probability.

   Answer = C

   "Probability Concepts," Richard A. DeFusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkle
   Section 2

   An empirical probability is a probability estimated from data as a relative frequency of occurrence.

**72.** In generating an estimate of a population parameter, a larger sample size is *most likely* to improve the estimator's:

   A. efficiency.
   B. consistency.
   C. unbiasedness.

   Answer = B

   "Sampling and Estimation," Richard A. DeFusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkle
   Section 4.1

   A consistent estimator is one for which the probability of estimates close to the value of the population parameter increases as the sample size increases. Unbiasedness and efficiency are properties of an estimator's sampling distribution that hold for any size sample.

**73.** The following is an excerpt from the cumulative distribution function for the standard normal random variable table:

**Cumulative Probabilities for a Standard Normal Distribution**

$P(Z \leq x) = N(x)$ for $x \geq 0$ or $P(Z \leq z) = N(z)$ for $z \geq 0$

| x or z | 0 | 0.01 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.08 |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0.10 | 0.5398 | 0.5438 | 0.5478 | 0.5517 | 0.5557 | 0.5596 | 0.5636 | 0.5675 | 0.5714 |
| 0.20 | 0.5793 | 0.5832 | 0.5871 | 0.5910 | 0.5948 | 0.5987 | 0.6026 | 0.6064 | 0.6103 |
| 0.30 | 0.6179 | 0.6217 | 0.6255 | 0.6293 | 0.6331 | 0.6368 | 0.6406 | 0.6443 | 0.6480 |
| 0.40 | 0.6554 | 0.6591 | 0.6628 | 0.6664 | 0.6700 | 0.6736 | 0.6772 | 0.6808 | 0.6844 |
| … | | | | | | | | | |
| 1.10 | 0.8643 | 0.8665 | 0.8686 | 0.8708 | 0.8729 | 0.8749 | 0.8770 | 0.8790 | 0.8810 |
| 1.20 | 0.8849 | 0.8869 | 0.8888 | 0.8907 | 0.8925 | 0.8944 | 0.8962 | 0.8980 | 0.8997 |
| 1.30 | 0.9032 | 0.9049 | 0.9066 | 0.9082 | 0.9099 | 0.9115 | 0.9131 | 0.9147 | 0.9162 |
| 1.40 | 0.9192 | 0.9207 | 0.9222 | 0.9236 | 0.9251 | 0.9265 | 0.9279 | 0.9292 | 0.9306 |
| … | | | | | | | | | |
| 1.80 | 0.9641 | 0.9649 | 0.9656 | 0.9664 | 0.9671 | 0.9678 | 0.9686 | 0.9693 | 0.9699 |
| 1.90 | 0.9713 | 0.9719 | 0.9726 | 0.9732 | 0.9738 | 0.9744 | 0.9750 | 0.9756 | 0.9761 |
| 2.00 | 0.9772 | 0.9778 | 0.9783 | 0.9788 | 0.9793 | 0.9798 | 0.9803 | 0.9808 | 0.9812 |
| 2.10 | 0.9821 | 0.9826 | 0.9830 | 0.9834 | 0.9838 | 0.9842 | 0.9846 | 0.9850 | 0.9854 |

A variable is normally distributed with a mean of 2.00 and a variance of 16.00. Using the excerpt, the probability of observing a value of 7.40 or less is *closest* to:

A. 96.8%.
B. 91.2%.
C. 63.3%.

Answer = B

"Common Probability Distributions," Richard A. DeFusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkle
Section 3.2

First the outcome of interest, 7.40, is standardized for the given normal distribution:

$Z = (X - \mu) / \sigma = (7.40 - 2.00)/\sqrt{16} = 1.35$.

Then, the given table of values is used to find the probability of a $Z$-value being less than or equal to 1.35 standard deviations *above* the mean. The value is $P(Z \leq 1.35) = 0.9115 = 91.2\%$.

**74.** Which of the following is the *least likely* characteristic of the normal probability distribution? The normal probability distribution:

A.  has kurtosis of 3.0.
B.  has the same value for mean, median, and mode.
C.  is more suitable as a model for asset prices than for returns.

Answer = C

"Common Probability Distributions," Richard A. DeFusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkle
Section 3.2

A normal distribution is less suitable as a model for asset prices than as a model for returns. The reason is that an asset price has a lower limit that corresponds to zero (it becomes worthless) and cannot be negative, whereas a normal distribution has no lower limit. Asset returns, on the other hand, can be negative.

**75.** A financial contract offers to pay €1,200 per month for five years with the first payment made immediately. Assuming an annual discount rate of 6.5%, compounded monthly the present value of the contract is *closest* to:

A.  €61,330.
B.  €63,731.
C.  €61,663.

Answer = C

"The Time Value of Money," Richard A. DeFusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkle
Section 6.1

Using a financial calculator: $N = 60$; the discount rate, $I/Y = (6.5\%/12) = 0.54166667$; PMT = €1,200; Future value = €0; Mode = Begin; Calculate present value (PV): PV = €61,662.62.

Alternatively: Treat the stream as an ordinary annuity of 59 periods and add the current value of €1,200 to the derived answer. Using a financial calculator: $N = 59$; the discount rate, $I/Y = (6.5\%/12) = 0.54166667$; PMT = €1,200; Future value = €0; Mode = End; Calculate PV: PV = €60,462.62; Total PV = €1,200 + €60,462.62 = €61,662.62.

**76.** The probability of Event A is 40%. The probability of Event B is 60%. The joint probability of AB is 40%. The probability (P) that A or B occurs, or both occur, is *closest* to:

A.  40%.
B.  60%.
C.  84%.

Answer = B

"Probability Concepts," Richard A. DeFusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkle
Section 2

P(A or B) = P(A) + P(B) − P(AB) = 0.40 + 0.60 − 0.40 = 0.60 or 60%.

**77.** The following information is available on three portfolios:

| Portfolio | Mean Return on the Portfolio (%) | Standard Deviation of the Return on the Portfolio (%) |
|---|---|---|
| D | 10 | 20 |
| E | 18 | 15 |
| F | 6 | 3 |

The risk-free rate is 4%. The portfolio that has the *best* risk-adjusted performance as measured by the Sharpe ratio is:

A. Portfolio D.
B. Portfolio F.
C. Portfolio E.

Answer = C

"Statistical Concepts and Market Returns," Richard A. DeFusco, Dennis W. McLeavey, Jerald E. Pinto, and David E. Runkle
Section 7.8

The Sharpe ratio is defined as: $S_p = (R_p − R_F)/s_p$ .

In this case, $S_D = (10 − 4)/20 = 0.30$

$S_E = (18 − 4)/15 = 0.9333$

$S_F = (6 − 4)/3 = 0.6667$

The portfolio with the best risk-adjusted performance as measured by the Sharpe ratio is the one with the highest Sharpe ratio: Portfolio E.

**78.** The three main sources of return for commodities futures contracts *most likely* are:

A.  collateral yield, roll yield, and spot price return.
B.  convenience yield, dividend yield, and spot price return.
C.  collateral yield, convenience yield, and roll yield.

Answer = A

"Introduction to Alternative Investments," Terri Duhon, George Spentzos, and Scott D. Stewart
Section 6.4.1

The three main sources of return for a commodities futures contract are collateral yield, roll yield, and spot price return.

**79.** The value at risk of an alternative investment is *best* described as the:

A.  minimum amount of loss expected over a given time period at a given probability level.
B.  time period during which a fixed amount is lost at a given probability level.
C.  probability of losing a fixed amount of money over a given time period.

Answer = A

"Introduction to Alternative Investments," Terri Duhon, George Spentzos, and Scott D. Stewart
Section 8.2

Value at risk is defined as the minimum amount of loss expected over a given time period at a given probability level.

**80.** Investors in alternative assets who seek liquidity are *most likely* to invest in:

A.  real estate investment trusts.
B.  private equity.
C.  hedge funds.

Answer = A

"Introduction to Alternative Investments," Terri Duhon, George Spentzos, and Scott D. Stewart
Section 8.1.1

Real estate investment trusts are publicly traded and thus provide liquidity.

**81.** The intrinsic value of an option is always zero:

A.  when it is out of the money.
B.  at expiration.
C.  when its time value is zero.

Answer = A

"Option Markets and Contracts," Don M. Chance
Section 5.1

An out-of-the-money option will have an intrinsic value of zero at all times.

82. An investor has purchased a share of stock for $190. A call option on this stock, expiring in seven months and with an exercise price of $200, is priced at $11.40. If the investor enters into a covered call now, the profit on this strategy if the stock price at expiration is $215 is *closest* to:

A. –$3.60.
B. $21.40.
C. $28.60.

Answer = B

"Risk Management Applications of Option Strategies," Don M. Chance
Section 2.2.1

The profit on a covered call is calculated as follows:

$$\Pi = S_T - S_0 - \max(0, S_T - X) + c_0$$

$\Pi = \$215 - \$190 - \max(0, \$215 - \$200) + \$11.40 = \$21.40$.

83. A forward rate agreement (FRA) that expires in 180 days and is based on 90-day LIBOR is quoted at 2.2%. At expiration of the FRA, 90-day LIBOR is 2.8%. For a notional principal of $1,000,000, the payoff of this FRA is *closest* to:

A. $1,469.31.
B. $1,500.00.
C. $1,489.57.

Answer = C

"Forward Markets and Contracts," Don M. Chance
Section 3.2.2

$1,000,000 × (0.028 − 0.022) × (1/4)/(1 + (0.028/4)) = $1,489.57.

84. A corporation issues five-year fixed-rate bonds. Its treasurer expects interest rates to decline for all maturities for at least the next year. She enters into a one-year agreement with a bank to receive quarterly fixed-rate payments and to make payments based on floating rates benchmarked on three-month LIBOR. This agreement is *best* described as a:

A. futures contract.
B. forward contract.
C. swap.

Answer = C

"Derivative Markets and Instruments," Don M. Chance
Section 4.1

A swap is a series of forward payments. Specifically, a swap is an agreement between two parties to exchange a series of future cash flows. The corporation receives fixed interest rate payments and makes variable interest rate payments. Given that the contract is for one year and the floating rate is based on three-month LIBOR, at least four payments will be made during the year.

**85.** When purchasing a futures contract, the initial margin requirement is *best* described as the:

A. amount needed to finance the purchase of the underlying asset.
B. minimum account balance required as prices change.
C. performance bond ensuring fulfillment of the obligation.

Answer = C

"Futures Markets and Contracts," Don M. Chance
Section 3

The initial margin required is a good faith deposit or performance bond.

**86.** Two parties agree to a forward contract on a non-dividend-paying stock at a price of $103.00. At contract expiration, the stock trades at $105.00. In a cash-settled forward contract, the:

A. short pays the long $2.00.
B. short pays the long $103.00.
C. long pays the short $105.00.

Answer = A

"Forward Markets and Contracts," Don M. Chance
Section 1.1

A cash-settled forward permits the long and short to pay the net cash value of the position on the delivery date. The long is due to receive a stock from the short with a market value of $105.00. Through the forward contract, the long agreed to purchase the stock at $103.00. Therefore, the short must pay the net cash value of $2.00 to the long.

**87.** The financial systems that are operationally efficient are *most likely* characterized by:

A. the use of resources where they are most valuable.
B. security prices that reflect fundamental values.
C. liquid markets with low commissions and order price impacts.

Answer = C

"Market Organization and Structure," Larry Harris
Section 9

Operationally efficient markets are liquid markets in which the costs of arranging trades, commissions, bid–ask spreads, and order price impacts, are low

**88.** A market has the following limit orders standing on its book for a particular stock:

| Buyer | Bid Size (# of shares) | Limit Price ($) | Seller | Offer Size (# of shares) | Limit Price ($) |
|---|---|---|---|---|---|
| 1 | 500 | 18.5 | 1 | 200 | 20.2 |
| 2 | 300 | 18.9 | 2 | 300 | 20.35 |
| 3 | 400 | 19.2 | 3 | 400 | 20.5 |
| 4 | 200 | 20.1 | 4 | 100 | 20.65 |
| 5 | 100 | 20.15 | 5 | 200 | 20.7 |

If a trader submits an immediate-or-cancel limit buy order for 700 shares at a price of $20.50, the average price the trader would pay is *closest* to:

A. $20.35.
B. $20.58.
C. $20.50.

Answer = A

"Market Organization and Structure," Larry Harris
Sections 6.1, 8.2.2.1

The limit buy order will be filled first with the most aggressively priced limit sell order and will be followed by filling with the higher priced limit sell orders that are needed up to and including the limit buy price until the order is filled.
Average price = [(200 × $20.20) + (300 × $20.35) + (200 ×$20.50)]/700 = $20.35.

**89.** The following data pertain to a company that can be appropriately valued using the Gordon growth model. The dividend is expected to grow indefinitely at the existing sustainable growth rate.

| | |
|---|---|
| EPS growth rate (three-year average) | 7.50% |
| Current dividend per share | $3.00 |
| Return on equity | 15% |
| Dividend payout ratio | 45% |
| Investors' required rate of return | 16% |

The stock's intrinsic value is *closest* to:

A. $41.90.
B. $34.62.
C. $37.94.

Answer = A

"Equity Valuation: Concepts and Basic Tools," John J. Nagorniak and Stephen E. Wilcox
Section 4.2

$V_0 = D_0 (1 + g)/(r - g)$, where
Sustainable growth rate = $g = b \times$ ROE; $b = (1 -$ Payout ratio$)$
$g = (1 - 0.45) \times 15\% = 8.25\%$;
$V_0 = (\$3 \times 1.0825) \div (0.16 - 0.0825) = \$41.90$.

90. The following information is available about a company:

| | |
|---|---|
| Next year's sales revenue | $180 million |
| Next year's net profit margin | 15% |
| Dividend payout ratio | 60% |
| Dividend growth rate expected during Years 2 and 3 | 25% |
| Dividend growth rate expected after Year 3 | 5% |
| Investors' required rate of return | 12% |
| Number of outstanding shares | 8.1 million |

The current value per share of the company's common stock according to the two-stage dividend discount model is *closest* to:

A. $52.86.
B. $49.20.
C. $39.36.

Answer = C

"Equity Valuation: Concepts and Basic Tools," John J. Nagorniak and Stephen E. Wilcox
Section 4.3

Net profit margin = Net earnings/Sales
Net earnings = Net profit margin × Sales;
Dividends per share ($D_n$) = (Net earnings × Payout ratio)/Number of outstanding shares;
Therefore, $D_1$ = ($180 million × 0.15 × 0.60)/8.1 million = $2.00
$D_2 = \$2.00(1 + 0.25) = \$2.50$
$D_3 = \$2.00(1 + 0.25)^2 = \$3.13$

$D_4 = \$2.00(1 + 0.25)^2 (1 + 0.05) = \$3.28$

$$V_3 = \frac{\dfrac{\$3.28}{(0.12-0.05)}}{} = \$46.86$$

$$V_0 = \frac{\$2.00}{(1+0.12)} + \frac{\$2.50}{(1+0.12)^2} + \frac{\$3.13}{(1+0.12)^2} + \frac{\$46.86}{(1+0.12)^2} = \$39.36.$$

**91.** A fund manager gathers the following data to assess a stock's potential for a possible addition to her portfolio:

| | |
|---|---|
| Company's net income | $20 million |
| Company's equity at the beginning of the year | $140 million |
| Company's weighted average cost of capital (WACC) | 10.75% |
| Stock's beta | 1.80 |
| Market risk premium | 5.25% |
| Risk-free rate | 3.50% |
| Fund manager's required rate of return | 13.60% |

Which of the following is the *most* appropriate decision for the fund manager?

A. Invest in the stock because the required rate of return is greater than the company's WACC.
B. Invest in the stock because the company's ROE is greater than the required rate of return.
C. Do not invest in the stock.

Answer = C

"Cost of Capital," Yves Courtois, Gene C. Lai, and Pamela Peterson Drake
Section 3.3

"Overview of Equity Securities," Ryan C. Fuhrmann and Asjeet S. Lamba
Section 7

A company's cost of equity is often used as a proxy for the investor's minimum required rate of return because it is the minimum expected rate of return that a company must offer its investors to purchase its shares in the primary market and to maintain its share price in the secondary market.

Using the CAPM, the company's cost of equity = 3.50% + 1.80(5.25%) = **12.95%.**

Comparing this result with the fund manager's required rate of return of 13.60%, the fund manager should not invest in the stock.

**92.** Returns from a depository receipt are *least likely* affected by which of the following factors?

    A. Exchange rate movements
    B. Analysts' recommendations
    C. Number of depository receipts

    Answer = C

    "Overview of Equity Securities," Ryan C. Fuhrmann and Asjeet S. Lamba
    Section 5.2

    The price of each depository receipt (and, in turn, returns) will be affected by factors that affect
    the price of the underlying shares—such as company fundamentals, market conditions, analysts'
    recommendations, and exchange rate movements. The number of depository receipts issued
    affects their price but does not affect the returns.

**93.** A stop-buy order is *most likely* placed when a trader:

    A. wants to limit the loss on a long position.
    B. thinks that the stock is overvalued.
    C. wants to limit the loss on a short position.

    Answer = C

    "Market Organization and Structure," Larry Harris
    Section 6.2.1

    A trader who has entered into a short sale will incur losses if the stock price begins to increase. A
    stop-buy order helps limit the loss on a short position because it becomes valid for execution
    when the stock price rises above the specified stop price.

**94.** The advantages to an investor owning convertible preference shares of a company *most likely*
include:

    A. an opportunity to receive additional dividends if the company's profits exceed a pre-specified
       level.
    B. less price volatility than the underlying common shares.
    C. preference dividends that are fixed contractual obligations of the company.

    Answer = B

    "Overview of Equity Securities," Ryan C. Fuhrmann and Asjeet S. Lamba
    Section 3.2

    Convertible preference shares tend to exhibit less price volatility than the underlying common
    shares because the dividend payments are known and more stable.

**95.** An investor who wants to estimate the enterprise value multiple (EV/EBITDA) of a company has gathered the following data:

| | |
|---|---|
| Market value (MV) of debt | $10 million |
| Market capitalization | $45 million |
| Cash and short-term investments | $2.5 million |
| EBITDA | $15 million |
| Firm's marginal tax rate | 40% |

The company's EV/EBITDA multiple is *closest* to:

A. 2.5.
B. 5.8.
C. 3.5.

Answer = C

"Equity Valuation: Concepts and Basic Tools," John J. Nagorniak and Stephen E. Wilcox
Section 5.4

Enterprise Value (EV) = Market capitalization + MV of debt + MV of preferred stock – Cash and short-term investments.
EV = 45 + 10 – 2.5 = 52.5; EV/EBITDA = 52.5/15 = 3.5.

**96.** The index weighting that results in portfolio weights shifting away from securities that have increased in relative value toward securities that have fallen in relative value whenever the portfolio is rebalanced is *most* accurately described as:

A. float-adjusted market-capitalization weighting.
B. equal weighting.
C. fundamental weighting.

Answer = C

"Security Market Indices," Paul D. Kaplan and Dorothy C. Kelly
Section 3.2.4

Fundamentally weighted indices generally will have a contrarian "effect" in that the portfolio weights will shift away from securities that have increased in relative value and toward securities that have fallen in relative value whenever the portfolio is rebalanced.

**97.** A fund manager compiles the following data on two companies:

|  | Company A | Company B |
|---|---|---|
| Return on assets (ROA) | 10.9% | 9.0% |
| Return on equity (ROE) | 15.4% | 14.3% |
| Dividend payout ratio | 0.35 | 0.30 |
| Required rate of return | 13.0% | 12.4% |
| Weighted average cost of capital | 11.8% | 11.7% |

The *best* conclusion the fund manager can make is that Company A's stock is more attractive than Company B's stock because of its:

A. greater financial leverage.
B. smaller price-to-earnings ratio (P/E).
C. higher dividend growth rate.

Answer = B

"Financial Analysis Techniques," Elaine Henry, Thomas R. Robinson, and Jan Hendrik van Greuning
Section 4.6.2

"Equity Valuation: Concepts and Basic Tools," John J. Nagorniak and Stephen E. Wilcox
Section 5.1

From the following computations, Company A's stock is more attractive than Company B's stock because of its smaller P/E.

|  | Company A | Company B |
|---|---|---|
| Dividend growth rate (*g*)<br>*g* = ROE × (1 – Dividend payout ratio) | 15.4 × (1 – 0.35) = 10.0% | 14.3 × (1 – 0.30) = 10.0% |
| P/E = Dividend payout ratio / (*r* – *g*) | 0.35/(0.13 – 0.10) = **11.7x** | 0.30/(0.124 – 0.10) = **12.5x** |
| Financial leverage (ROE/ROA) | 15.4/10.9 = 1.4x | 14.3/9.0 = 1.6x |

**98.** Which of the following statements is *most* accurate with respect to rebalancing and reconstitution of security market indices?

A. Turnover within an index results from a reconstitution but not from rebalancing.
B. A price-weighted index requires rebalancing more than a market-capitalization-weighted index.
C. Equal-weighted indices require frequent rebalancing.

Answer = C

"Security Market Indices," Paul D. Kaplan and Dorothy C. Kelly
Section 3.2.2

After an equal-weighted index is constructed and the prices of constituent securities change, the index is no longer equally weighted. Therefore, maintaining equal weights requires frequent adjustments (rebalancing) to the index.

**99.** Which of the following bonds is *most likely* to trade at a lower price relative to an otherwise identical option-free bond?

A. Putable bond
B. Callable bond
C. Convertible bond

Answer = B

"Fixed-Income Securities: Defining Elements," Moorad Choudhry and Stephen E. Wilcox
Section 5.1

A callable bond benefits the issuer because it gives the issuer the right to redeem all (or part) of the bonds before the maturity date. Thus, the price of a callable bond will typically be lower than the price of an otherwise identical non-callable bond.

**100.** If the yield-to-maturity on an annual-pay bond is 7.75%, the bond-equivalent yield is *closest* to:

A. 7.90%.
B. 7.61%.
C. 8.05%.

Answer = B

"Introduction to Fixed-Income Valuation," James F. Adams and Donald J. Smith
Section 3.3

The bond-equivalent yield =
$$2 \times \left(1.0775^{0.5} - 1\right) = 0.07605 \text{ or } 7.61\%$$

**101.** Compared with an otherwise identical option-free bond, when interest rates fall, the price of a callable bond will:

A. rise more.
B. fall less.
C. rise less.

Answer = C

"Fixed-Income Securities: Defining Elements," Moorad Choudhry and Stephen E. Wilcox
Section 5.1

When interest rates fall, the price of the embedded call option increases. The price of a callable bond equals the price of an option-free bond minus the price of the embedded call option. So, the price of the callable bond will not increase as much as an option-free bond because the price of

the call option is increasing. As interest rates fall, the bond is more likely to be called, limiting the upside price increase potential.

**102.** A two-year spot rate of 5% is *most likely* the:

A. yield to maturity on a coupon-paying bond maturing at the end of Year 2.
B. coupon rate in Year 2 on a coupon-paying bond maturing at the end of Year 4.
C. yield to maturity on a zero-coupon bond maturing at the end of Year 2.

Answer = C

"Introduction to Fixed-Income Valuation," James F. Adams and Donald J. Smith
Section 2.4

A spot rate is defined as the yield to maturity on a zero-coupon bond maturing at the date of that cash flow.

**103.** Credit spreads are *most likely* to narrow during:

A. economic contractions.
B. a period of flight to quality.
C. economic expansions.

Answer = C

"Fundamentals of Credit Analysis," Christopher L. Gootkind
Section 6

Credit spreads narrow during economic expansions and widen during economic contractions. During an economic expansion, corporate revenues and cash flows rise, making it easier for corporations to service their debt, and investors purchase corporates instead of Treasuries, thus causing spreads to narrow.

**104.** An investor is *least likely* exposed to reinvestment risk from owning a(n):

A. zero-coupon bond.
B. amortizing security.
C. callable bond.

Answer = A

"Understanding Fixed-Income Risk and Return," James F. Adams and Donald J. Smith
Section 2

There are no interim cash flows for a zero-coupon bond until the maturity.

**105.** Which bonds *most likely* rank the highest with respect to priority of claims?

    A. Senior unsecured bond
    B. Subordinated debt
    C. Second lien debt

    Answer = C

    "Fundamentals of Credit Analysis," Christopher L. Gootkind
    Section 3.2

    Second lien debt has a secured interest in the pledged assets and ranks higher than the unsecured debt, such as senior unsecured bonds and subordinated debt.

**106.** The duration and convexity of an option-free bond priced at $90.25 are 10.34 and 151.60, respectively. If yields increase by 200 bps, the percentage change of the price is *closest* to:

    A. −17.65%.
    B. −20.68%.
    C. −23.71%.

    Answer = A

    "Understanding Fixed-Income Risk and Return," James F. Adams and Donald J. Smith
    Section 4.1

    The percentage change in price is calculated as follows: Duration effect :

$$-10.34 \times (0.02) = -20.68\%$$

    and convexity effect: = $\dfrac{1}{2} * 151.60 * (0.02)^2 = 3.03\,\%$ .

    total percentage change is the sum of duration effect and convexity effect:
    −20.68% + 3.03% **= −17.65%**

**107.** A fixed-income security's current price is $101.45. The manager estimates that the price will rise to $103.28 if interest rates decrease 0.25% or fall to $100.81 if interest rates increase 0.25%. The security's effective duration is *closest* to:

    A. 1.22.
    B. 9.74.
    C. 4.87.

    Answer = C

    "Understanding Fixed-Income Risk and Return," James F. Adams and Donald J. Smith
    Section 3.2

    The effective duration is defined as:

$$\frac{(PV_-)-(PV_+)}{2\times(\Delta Curve)\times(PV_0)}$$

Effective duration = (103.28 − 100.81)/(2 × 0.0025 × 101.45) = 4.87.

**108.** The market value of an 18-year zero-coupon bond with a maturity value of $1,000 discounted at a 12% annual interest rate with semi-annual compounding is *closest* to:

A. $192.86.
B. $130.04.
C. $122.74.

Answer = C

"Introduction to Fixed-Income Valuation," James F. Adams and Donald J. Smith
Section 2.1

The value of a zero-coupon bond is,

$$=\frac{Face\ value}{(1+r)^N}$$

where $r$ is the market discount rate per period and $N$ is the number of evenly spaced periods to maturity. The value of the zero-coupon bond is,

$$=\frac{\$1,000}{(1+0.12/2)^{18\times2}}=\$122.74.$$

**109.** Using the "Four Cs of Credit Analysis" framework, which of the following is the *least likely* factor to be considered under the category of "capacity"?

A. Level of competition
B. Industry fundamentals
C. History of fraud or malfeasance

Answer = C

"Fundamentals of Credit Analysis," Christopher L. Gootkind
Section 5.2

Any history of fraud or malfeasance is a major warning flag to credit analysis under the category of "character."

**110.** A bond with a par value of $100 matures in 10 years with a coupon of 4.5% paid semiannually; it is priced to yield 5.83% and has a modified duration of 7.81. If the yield of the bond declines by 0.25%, the approximate percentage price change for the bond is *closest* to:

A. 1.95%.
B. 3.91%.

C.  0.98%.

Answer = A

"Understanding Fixed-Income Risk and Return," James F. Adams and Donald J. Smith
Section 4.1

Approximate percentage price change = –[7.81 × (–0.0025)] = 0.01953 or 1.95%.

**111.**    One limitation as to why using the average duration of the bonds in a portfolio does not properly reflect that portfolio's yield curve risk is that the approach assumes:

A.  a non-parallel shift in the yield curve.
B.  all the bonds have the same discount rate.
C.  a parallel shift in the yield curve.

Answer = C

"Understanding Fixed-Income Risk and Return," James F. Adams and Donald J. Smith
Section 3.4

A limitation to using the average duration approach in calculating portfolio duration is that it assumes all interest rates across the yield curve change by the same amount and, therefore, each bond's price changes by the same percentage.

**112.**    Consider two bonds that are identical except for their coupon rates. The bond that will have the highest interest rate risk *most likely* has the:

A.  highest coupon rate.
B.  coupon rate closest to its market yield.
C.  lowest coupon rate.

Answer = C

"Introduction to Fixed-Income Valuation," James F. Adams and Donald J. Smith
Section 2.3

A lower coupon rate means that more of the bond's value comes from repayment of face value, which occurs at the end of the bond's life.

**113.**    All else being equal, the difference between the nominal spread and the Z-spread for a non-Treasury security will *most likely* be larger when the:

A.  yield curve is steep.
B.  yield curve is flat.
C.  security has a bullet maturity rather than an amortizing structure.

Answer = A

"Introduction to Fixed-Income Valuation," James F. Adams and Donald J. Smith
Section 5.2

The main factor causing any difference between the nominal spread and the Z-spread is the shape of the Treasury spot rate curve. The steeper the spot rate curve, the greater the difference.

**114.** Which of the following is *most likely* associated with an investor's ability to take risk rather than the investor's willingness to take risk?

A. The investor has a long investment time horizon.
B. Safety of principal is very important to the investor.
C. The investor believes earning excess returns on stocks is a matter of luck.

Answer = A

"Basics of Portfolio Planning and Construction," Alistair Byrne and Frank E. Smudde
Section 2.2.1

Investment time horizon is an objective factor that measures the investor's ability to take risk.

**115.** A portfolio manager decides to temporarily invest more of a portfolio in equities than the investment policy statement prescribes because he expects equities will generate a higher return than other asset classes. This decision is *most likely* an example of:

A. rebalancing.
B. tactical asset allocation.
C. strategic asset allocation.

Answer = B

Basics of Portfolio Planning and Construction," Alistair Byrne and Frank E. Smudde
Section 3.3

Tactical asset allocation is the decision to deliberately deviate from the policy exposures to systematic risk factors with the intent to add value based on forecasts of the near-term returns of those asset classes.

**116.** A portfolio with equal parts invested in a risk-free asset and a risky portfolio will *most likely* lie on:

A. the efficient frontier.
B. the security market line.
C. a capital allocation line.

Answer = C

"Portfolio Risk and Return: Part II," Vijay Singal
Section 2.1

A capital allocation line shows possible combinations of a risky portfolio and the risk-free asset.

**117.** The correlation between the historical returns of Stock A and Stock B is 0.75. If the variance of Stock A is 0.16 and the variance of Stock B is 0.09, the covariance of returns of Stock A and Stock B is *closest* to:

    A.  0.09.
    B.  0.16.
    C.  0.01.

    Answer = A

    "Portfolio Risk and Return: Part I," Vijay Singal
    Section 2.3.3

    $Cov(A,B) = \rho_{AB}\sigma_A\sigma_B = 0.75 \times 0.4 \times 0.3 = 0.09$.

**118.** Which of the following is *least likely* an assumption of the capital asset pricing model (CAPM)?

    A.  An investor can invest as much as he or she desires in any asset.
    B.  Investors are different only with respect to their unique holding periods.
    C.  Security prices are not affected by investor trades.

    Answer = B

    "Portfolio Risk and Return: Part II," Vijay Singal
    Section 4.1

    One of the assumptions of the CAPM is that investors plan for the same single holding period.

**119.** The point of tangency between the capital allocation line (CAL) and the efficient frontier of risky assets *most likely* identifies the:

    A.  global minimum-variance portfolio.
    B.  optimal risky portfolio.
    C.  optimal investor portfolio.

    Answer = B

    "Portfolio Risk and Return: Part I," Vijay Singal
    Section 5.4

    The optimal risky portfolio lies at the point of tangency between the capital allocation line and the efficient frontier of risky assets.

**120.** The stock of GBK Corporation has a beta of 0.65. If the risk-free rate of return is 3% and the expected market return is 9%, the expected return for GBK is *closest* to:

    A.  10.8%.
    B.  3.9%.
    C.  6.9%.

Answer = C

"Portfolio Risk and Return: Part II," Vijay Singal
Section 3.2.6

$$E(R_{\text{GBK}}) = R_f + \beta_{\text{GBK}} \times [E(R_{\text{Mkt}}) - R_f] =$$

$$0.03 + 0.65 \times (0.09 - 0.03) = 0.069 \text{ or } 6.9\,\% \ .$$