1. Which of the following statements is true about limit orders?

    a) A limit order controls the price but does not guarantee that the order will be filled.

        Yes, this is a true statement. A limit order is price contingent order. It will get filled if the price meets the conditions of the order.

    b) Limit orders are executed at the best price available.

        No, this is not correct.

    c) A limit order is recorded in the limit order book until it can be executed.

        Yes, this is a true statement. Limit orders are entered into the limit order book until they can be executed.

    d) Both a and c

        Yes, both a and c are correct statements. By definition a limit order is an order to buy or sell at a maximum or minimum price, therefore it will guarantee the execution price of the order, but this type of order does not guarantee that the order will be filled. The limit order book is the collection of limit orders waiting to be executed.

    Answer:

    The correct answer is **d**.

2. You are concerned about the value of your holdings in company A shares. You instruct your broker to sell your shares when the price falls down to $30 per share. What type of order is this?

    a) A market order

        No, that is not correct. Market orders are executed at the best possible price. They are not price contingent.

    b) A stop-loss order

        Yes, this is correct. Stop-loss orders ask that the stock be sold if its price falls below a certain level.

    c) A stop-buy order

No, that is not correct. A stop-buy order specifies that a stock should be bought when its price rises above a certain limit.

Answer:

The correct answer is **b**.

3. You would like to liquidate your shares in company B, but you only want to sell them if the price is at least $25 per share. What kind of order would you place with your broker?

   a) A market order

      No that is not correct. A market order is executed at the best possible price. It is used for immediacy.

   b) A limit order

      Yes, that is correct. Limit orders are price contingent orders.

   c) A stop-loss order

      No, that is not correct. Stop-loss orders specify that the stock be sold if its price falls below a certain level.

   d) A stop buy order

      No, that is not correct. A stop-buy order specifies that a stock should be bought when its price rises above a certain limit.

Answer:

The correct answer is **b**.

4. Which of the following is true?

   a) A maintenance margin is the minimum amount the margin account can decline to without an investor having to take any action.

      Yes, maintenance margin is the threshold that indicates that an investor's margin account has fallen to its lowest permissible level.

   b) A maintenance margin is the maximum amount the margin account can decline to without an investor having to take any action.

      No, that is not correct.

c) A maintenance margin is the amount that the margin account must be kept at all times.

No, that is not correct.

Answer:

The correct answer is **b**.

5. Which of the following statements is true?

a) A margin call is a request to sell the securities that you have on your account

No, that is not correct. You do not need to sell the securities when you receive a margin call.

b) A margin call is a request to buy more of the securities you already have.

No, that is not correct. A margin call is not a request to buy more of the securities you already have.

c) A margin call is a request to add more capital to your margin account indicating that the investor's margin balance has fallen below the maintenance requirement.

Yes, that is correct. You receive a margin call, if your equity in your margin account falls below the maintenance requirement and you are asked to add more cash or cash like securities to bring up your equity share to a required level.

d) A margin call is prank call by marginal investors.
e)

No, a margin call is not a prank call.

Answer:

The correct answer is **c**.

6. Suppose the initial margin requirement is 5% and you want to purchase 100 shares of Beta stock currently trading at $20 a share. How much would you have to deposit in the margin account to meet this requirement?

Answer:

The correct answer is **100**.

When you purchase securities, you can borrow part of the cost. The initial margin requirement is the amount you have to deposit into margin account when you are borrowing the rest.
The value of your holdings is \$20 x 100 = \$2000. A 5% initial margin requirement means that you have to put at least 5% in your own cash or cash equivalents. 5%x 2000 = \$100. The rest can be borrowed from the broker which gives you a levered position.

7. Consider your holdings in Beta stock in Question 6. Let's suppose that the maintenance margin requirement is 4%. If you get a margin call stating that your margin has fallen down to 2.564%, what is the current price of Beta stock?

   Answer:

   The correct answer is **19.5**.

   Think about what is the fraction of your equity in the account? How would you solve for the price that makes your equity as a fraction of your holdings equal to 2.564%?

   Recall that initially you had to put \$100 and borrow \$1900 when you bought the shares on margin. That met the initial margin requirement:100/(100x\$20) = 5%.

   Let P be the price of the stock. The value of your 100 shares is then 100P and the equity in the account is 100P - 1900.

   The margin is equal to = (100P - 1900)/100P

   If your margin has fallen to 2.564%, it must be:

   2.564% = (100 x P - 1900)/(100xP)

   Solving for P = 19.5

8. Suppose that you expect that Bubblenet stock price is going to decline. So you decide to ask your broker to short sell 1000 shares. The current market price is \$50. The proceeds from the short sale \$50,000 is credited into your account. A few days later the market price of the stock declines to \$30 per share. What is your profit from this transaction?

   Answer:

   The correct answer is **20,000**.

Recall that short-selling is borrowing shares to sell now with the expectation to replace them later when the price has declined.

The proceeds from the short selling is $50 x 1000= 50,000. You will have to cover the short position buying 100 shares at $30 each share: 1000 x $30= 30,000. The profits from this transaction is the difference between $50,000 and $30,000, which is $ 20,000 or equivalently $20 per share.

9. Suppose your broker has 50% margin requirements for short sales and you short 500 shares of GS-Biz Inc., currently trading at $50 per share. What is the amount that you need to deposit in the margin account to serve as margin on the short sale?

   Answer:

   The correct answer is **12,500**.

   The broker has 50% margin requirement on short sales. This means that you must have other cash or securities in your account worth at least 50% of the short sale.

   When you short-sell 500 shares at $50, 500 x $50= $25,000 is deposited to your account. Because the broker has 50% margin requirement on short sales, this means that you must have other cash or securities in your account worth at least $12,500 that can serve as the margin on the short sale.

10. Suppose you happened to be wrong on the direction of GS-Biz in Question 9. Instead of falling in value, GS-Biz price starts climbing. If the broker has 30% maintenance margin requirement, how much can the price of GS-BIz rise before you get a margin call?

    Round off to one decimal points. (i.e. "x.x")

    Answer:

    The correct answer is **57.7**.

    Your short position margin is equal to your equity/value of stock. What price would make this fall below the 30% level?

    Let P be the price of GS-Biz. Then the value of the shares you must pay back is 500P, and the equity in your account is 37,500 - 500P. Your short position margin is equal to equity/value of stock = (37,500 - 500P)/500P

    The critical value of P is then: 0.3 = (37,500 - 500P)/500P

    P = 57.69