

Chapter 02 The Investment Process

Multiple Choice Questions

1. Market timing is the:
 - A. placing of an order within the last half-hour of trading for a day.
 - B. period of time between the placement of a short sale and the covering of that sale.
 - C. buying and selling of securities in anticipation of the overall direction of the market.
 - D. staggering of either buy or sell orders to mask the total size of a large transaction.
 - E. placing of trades within the last half-hour prior to the commencement of daily trading.

2. Asset allocation is the:
 - A. selection of specific securities within a particular class or industry.
 - B. division of a purchase price between a cash payment and a margin loan.
 - C. division of a portfolio into short and long positions.
 - D. distribution of investment funds among various broad asset classes.
 - E. dividing of assets into those that are hypothecated and those that are not.

3. Jesse is researching chemical companies in an effort to determine which company's stock he should purchase. This process is known as:
 - A. market timing.
 - B. purchase shorting.
 - C. marketing research.
 - D. asset allocation.
 - E. security selection.

4. A Roth IRA:
 - A. is a form of "tax-deferred" account
 - B. funds are taxed at the time you begin withdrawals
 - C. are well-suited to investors nearing retirement
 - D. invests after-tax dollars
 - E. is the type of account offered by most employers

5. A brokerage account in which purchases can be made using credit is referred to as which type of account?

- A. clearing
- B. funds available
- C. cash
- D. call
- E. margin

6. Kate just purchased \$7,000 worth of stock. She paid \$5,000 in cash and borrowed \$2,000. In this example, the term margin refers to:

- A. the total amount of the purchase.
- B. the percentage of the purchase that was paid in cash.
- C. the percentage of the purchase paid with borrowed funds.
- D. any future increase in the value of the stock.
- E. any future decrease in the value of the stock.

7. Which one of the following best describes the term "initial margin"?

- A. Amount of money that must be deposited to open a margin account with a broker
- B. Amount of cash that must be paid to purchase a security on margin
- C. Amount of cash that must be paid when a broker issues a margin call
- D. Amount of money borrowed when a security is purchased
- E. Total loan amount offered to a customer by a brokerage firm to cover future purchases

8. The minimum equity that must be maintained at all times in a margin account is called the:

- A. initial margin.
- B. initial equity position.
- C. maintenance margin.
- D. call requirement.
- E. margin call.

9. When your equity position in a security is less than the required amount, your brokerage firm will issue a:

- A. margin call.
- B. margin certificate.
- C. cash certificate.
- D. limit order.
- E. leverage call.

10. Stuart purchased 300 shares of Microsoft stock which he has pledged to his broker as collateral

for the loan in his margin account. This process of pledging securities is called:

- A. margin calling.
- B. hypothecation.
- C. leveraging.
- D. maintaining the margin.
- E. street securitization.

11. Staci owns 1,000 shares of stock in a margin account. Those shares are most likely held in:

- A. transit.
- B. her registered name.
- C. street name.
- D. a wrap account.
- E. a discretionary account.

12. This morning, Josh sold 800 shares of stock that he did not own. This sale is referred to as a:

- A. margin sale.
- B. long position.
- C. wrap trade.
- D. hypothecated sale.
- E. short sale.

13. The amount of common stock held in short positions is referred to as the short:

- A. margin.
- B. shares.
- C. proceeds.
- D. sale.
- E. interest.

14. A company that owns income-producing real estate such as an apartment complex or a retail shopping center is called a(n):

- A. REIT.
- B. SIPC.
- C. REEF.
- D. EAR.
- E. SPIC.

15. An investor who has a resource constraint:

- A. pays no income taxes.
- B. has insufficient funds to purchase a security.
- C. has a relatively high marginal tax rate.
- D. has only one source of income.
- E. will only invest in socially acceptable securities.

16. To be considered liquid, a security must:

- A. be held in a cash account.
- B. pay dividends.
- C. be able to be sold on short notice.
- D. be held for less than one year.
- E. be able to be sold quickly with little, if any, price concession.

17. Wythe is trying to decide whether he wants to purchase shares in General Motors, Ford, or Honda, all of which are auto manufacturers. Wythe is making a(n) _____ decision.

- A. security selection
- B. tax-advantaged
- C. risk aversion
- D. active strategy
- E. asset allocation

18. Brooke has decided to invest 55 percent of her money in large company stocks, 40 percent in small company stocks, and 5 percent in cash. This is a(n) _____ decision.

- A. market timing
- B. security selection
- C. tax-advantaged
- D. active strategy
- E. asset allocation

19. Kay plans to retire in two years and wishes to liquidate her account at that time. Kay has a _____ constraint.

- A. resource
- B. horizon
- C. liquidity
- D. tax
- E. special circumstances

20. The SIPC:

- A. guarantees investors against any loss related to an investment account held at a brokerage firm.
- B. guarantees cash balances held in brokerage accounts up to \$500,000.
- C. is an agency of the federal government.
- D. protects private brokerage firms from bankruptcy.
- E. protects investors from missing assets when a brokerage firm closes.

21. The determination of which individual stocks to purchase within a particular asset class is referred to as:

- A. security selection.
- B. asset allocation.
- C. security analysis.
- D. market timing.
- E. market selection.

22. An investor who follows a fully active strategy will:

- A. move money between asset classes as well as try to select the best performers in each class.
- B. move money between asset classes but will not be concerned about which individual securities are owned.
- C. focus on picking individual stocks only.
- D. maintain a relatively constant mix of asset classes while continually buying and selling individual securities.
- E. concentrate solely on asset allocation to maximize potential returns.

23. Which one of the following decisions falls under the category of asset allocation?

- A. Purchasing Ford stock rather than General Motors stock
- B. Determining that thirty percent of a portfolio should be invested in bonds
- C. Adopting a passive investment strategy
- D. Deciding to actively analyze individual securities
- E. Deciding to use an online broker

24. Ted recently inherited a large sum of money that he wants to invest in the stock market. Since he has no investment experience, he has decided that he would like to work with a professional who can explain the market to him and also manage his funds for him. Ted most likely needs the services offered by a(n):

- A. deep-discount broker.
- B. discount broker.
- C. full-service broker.
- D. online broker.
- E. cyberbroker.

25. Which one of the following statements is correct?

- A. Most brokerage agreements require disputes be settled in a court of law.
- B. Arbitration is a formal legal process for settling disputes related to brokerage accounts.
- C. Churning is the preferred method of providing deep-discount brokerage services.
- D. Discount brokers only provide order execution services.
- E. Full service brokers frequently provide financial planning services to clients.

26. Martin has an investment account with William, who is a broker with City Brokerage. Martin believes that William has mishandled his account by churning it. If he files a complaint against William seeking compensation, the case will most likely be decided by:

- A. the office manager of City Brokerage.
- B. a civil suit judge.
- C. a jury.
- D. an arbitration panel.
- E. the SEC Hearing Board.

27. You currently have \$5,000 in cash in your brokerage account. You decide to spend \$8,000 to purchase shares of stock and borrow \$3,000 from your broker to do so. Which type of brokerage account do you have?

- A. Cash
- B. Wrap
- C. Margin
- D. Short
- E. Asset allocation

28. Which one of the following statements is correct?

- A. The call money rate is the rate of interest brokerage firms charge on margin loans.
- B. The spread is the fee a deep-discount broker charges to execute a trade.
- C. The percentage of a purchase paid for with borrowed funds is referred to as the margin.
- D. A margin loan is treated as an asset on an account balance sheet.
- E. Margin is equal to account equity divided by the value of the securities owned.

29. Staci just used \$6,000 of cash plus a \$3,000 margin loan to purchase \$9,000 worth of stock. This is the only transaction in her brokerage account. According to her account balance sheet, she now has account equity of:

- A. \$3,000.
- B. \$6,000.
- C. \$9,000.
- D. \$12,000.
- E. \$15,000.

30. Amy just purchased \$12,000 of stock. She paid \$9,000 in cash and borrowed the remaining \$3,000 needed to pay for this purchase. If you constructed a balance sheet reflecting this transaction, the total assets would be:

- A. \$3,000.
- B. \$9,000.
- C. \$12,000.
- D. \$15,000.
- E. \$21,000.

31. Anita wants to buy \$10,000 of securities in her margin account. Her advisor has informed her that she must pay a minimum of \$7,000 in cash and maintain a minimum equity position of 30 percent. The initial margin requirement is _____ percent and the maintenance margin is _____ percent.

- A. 30; 30
- B. 30; 70
- C. 70; 30
- D. 70; 50
- E. 70; 70

32. The absolute minimum initial margin requirement is set by the:

- A. individual investor.
- B. brokerage firm.
- C. Federal Reserve.
- D. Security Investors Protection Corporation.
- E. Securities and Exchange Commission.

33. You open a margin account with a local broker and purchase shares of stock. The house maintenance margin requirement for your account is set by:

- A. your broker.
- B. the stock exchange.
- C. the SEC.
- D. the SIPC.
- E. the Federal Reserve.

34. If you opt to purchase shares of stock on margin rather than with cash, you will:

- A. decrease your maximum potential rate of return.
- B. increase your maximum potential rate of return.
- C. guarantee yourself a profit.
- D. eliminate any potential profit.
- E. have equal rates of return regardless of how the purchase is made.

35. What is the purpose of a margin call?

- A. to inform you that your margin loan is due and payable
- B. to demand funds to increase your margin position
- C. to let you know the amount of funds that are now available for you to borrow
- D. to advise you that the interest rate on your loan has changed
- E. to remind you of the upcoming monthly payment due on your margin loan

36. If you ignore a margin call, your broker:

- A. will seize all the assets in your account.
- B. will close your account.
- C. may place a short sale on your behalf to cover the amount of the call.
- D. may sell some of your securities to repay the margin loan.
- E. will increase both your margin loan and the rate of interest on that loan.

37. Lauren Mitchell has a margin account with a local brokerage firm, RL Brokers. She recently purchased 200 shares of Abbot Industries common stock that trades on the New York Stock Exchange (NYSE). These shares are held in street name and are registered under the name of:

- A. Lauren Mitchell.
- B. RL Brokers.
- C. Abbot Industries.
- D. the New York Stock Exchange.
- E. the Securities and Exchange Commission.

38. Which one of the following is generally true concerning securities held in street name?

- A. The securities are registered under your mailing address rather than your name.
- B. There is a greater likelihood the security may be stolen.
- C. All dividend checks are mailed to your street address.
- D. The annual stock report is mailed directly to your street address.
- E. The brokerage firm is the owner of record.

39. Sarah has a brokerage account with Jeff, who is a money manager with Downtown Brokers. Sarah pays an all-inclusive annual fee to the firm and Jeff manages her funds. She pays no trading costs or commissions. Which one of the following best describes this type of account?

- A. wrap
- B. cash
- C. margin
- D. mutual
- E. advisory

40. A discretionary account:

- A. authorizes a broker to trade securities on your behalf.
- B. charges an annual fee to cover all trading and management services.
- C. is the term applied to brokerage accounts with check-writing and credit card services.
- D. is the same as a wrap account.
- E. is the account used to pledge securities as collateral for a margin loan.

41. An investor with a long position in a security will make money:

- A. if the price of the security increases.
- B. if the price of the security declines.
- C. if the price of the security remains stable.
- D. only if the security has been purchased on margin.
- E. only by shorting the security.

42. Which one of the following describes a short position?

- A. Purchasing a security on margin
- B. Selling a security that you originally purchased on margin
- C. Loaning a security to your broker to cover a margin call
- D. Having less equity than required in your margin account
- E. Selling a security that you do not own

43. On August 8 of this year, Brent sold 500 shares of ADO stock for \$24 a share. On September 6 of this year, he purchased 500 shares of ADO stock to cover his position. The transaction on August 8:

- A. was a short sale.
- B. was a margin trade.
- C. was a wrap transaction.
- D. created a long transaction.
- E. was a pooling transaction.

44. A short sale:

- A. creates a long position in a stock.
- B. involves the borrowing of securities.
- C. is the purchase of less than 100 shares of a stock.
- D. is a bullish outlook towards a security.
- E. is the resale of a security within four hours of purchase.

45. If you benefit when a security decreases in value, you have a _____ position in the security.

- A. long
- B. margined
- C. short
- D. covered
- E. wrapped

46. The maximum loss you can incur on a short sale is:

- A. limited to your initial equity.
- B. limited to your initial margin.
- C. limited to the margin loan plus interest.
- D. zero.
- E. unlimited.

47. What is the maximum loss you can incur if you have a long position on a stock in a cash account?

- A. The initial investment
- B. The initial margin
- C. The margin loan plus interest
- D. Zero
- E. Unlimited

48. Taylor Industries stock is selling for \$36 a share. You would like to purchase as many shares of this stock as you can. Your margin account currently has available cash of \$6,200 and the initial margin requirement is 60 percent. What is the maximum number of shares you can buy?

- A. 193 shares
- B. 287 shares
- C. 322 shares
- D. 360 shares
- E. 408 shares

49. Todd has a margin account with \$17,400 in available cash. The initial margin is 70 percent and the maintenance margin is 30 percent. What is the maximum number of shares he can purchase if the price per share is \$44?

- A. 395 shares
- B. 564 shares
- C. 698 shares
- D. 744 shares
- E. 842 shares

50. Theresa has a margin account with a 60 percent initial margin requirement and a 35 percent maintenance margin. What is the maximum dollar amount of stock she can purchase if her cash balance in the account is \$33,400?

- A. \$19,140.00
- B. \$31,900.00
- C. \$44,093.33
- D. \$55,666.67
- E. \$91,142.86

51. You recently purchased 900 shares of Western Timber stock for \$38 a share. Your broker required a cash payment of \$25,650, plus trading costs, for this purchase. What was the initial margin requirement?

- A. 60 percent
- B. 65 percent
- C. 70 percent
- D. 75 percent
- E. 80 percent

52. Donna recently purchased 500 shares of Deltona stock for \$28.60 a share. Her broker required a cash payment of \$10,725, plus trading costs, for the purchase. What is the initial margin requirement on this particular stock?

- A. 70 percent
- B. 75 percent
- C. 85 percent
- D. 90 percent
- E. 100 percent

53. Suzette recently purchased 300 shares of Nu Electronics stock for \$4.40 a share. Her broker required a cash payment of \$1,320, plus trading costs, for the purchase. What is the initial margin requirement on this stock?

- A. 70 percent
- B. 75 percent
- C. 80 percent
- D. 90 percent
- E. 100 percent

54. Stephen is purchasing 800 shares of KPT, Inc., stock at a price per share of \$26.00. What is the minimum amount the Federal Reserve will require Stephen to pay in cash for this purchase?

- A. \$4,488
- B. \$7,480
- C. \$10,400
- D. \$11,968
- E. \$14,960

55. Alfonso purchased 600 shares of Crosswinds, Inc., stock on 60% margin when the stock was selling for \$37 a share. The stock is currently selling for \$32 a share. What is his current equity position?

- A. \$7,680
- B. \$8,880
- C. \$9,600
- D. \$10,320
- E. \$11,560

56. You purchased 1,200 shares of stock at \$52 a share. The stock is currently selling for \$54 a share. The initial margin was 70 percent and the maintenance margin is 30 percent. What is your current margin position?

- A. 28.36 percent
- B. 25.00 percent
- C. 75.00 percent
- D. 63.59 percent
- E. 71.11 percent

57. You own 700 shares of a stock that you purchased on margin at a price per share of \$20.12. The stock is currently valued at \$23 a share. Your broker advised you today that your minimum equity position for this purchase is \$5,635 as of today. What is the maintenance margin percentage?

- A. 25 percent
- B. 30 percent
- C. 35 percent
- D. 40 percent
- E. 50 percent

58. Sun Lee purchased 1,100 shares of Franklin Metals stock for \$16.80 a share. The stock was purchased with an initial margin of 65 percent. The maintenance margin is 30 percent. The stock is currently selling for \$17.60 a share. What is the minimum dollar amount of equity that he must have in this stock today to avoid a margin call?

- A. \$5,544
- B. \$5,621
- C. \$5,700
- D. \$5,808
- E. \$5,973

59. Rosita purchased 300 shares of a stock for \$37 a share. Today, the stock is selling for \$41 a share.

The initial margin requirement is 70 percent and the maintenance margin is 30 percent. Rosita had to pay _____ in cash to purchase the stock and must have at least _____ in equity today.

- A. \$3,690; \$3,330
- B. \$3,690; \$3,690
- C. \$7,770; \$3,330
- D. \$7,770; \$3,690
- E. \$8,610; \$3,690

60. Allan purchased 600 shares of stock on margin for \$41 a share and sold the shares five months later for \$42.50 a share. The initial margin requirement was 65 percent and the maintenance margin was 30 percent. The interest rate on the margin loan was 10 percent. He received no dividend income. What was his holding period return?

- A. 1.05 percent
- B. 3.45 percent
- C. 4.88 percent
- D. 7.50 percent
- E. 7.82 percent

61. Tony purchased 100 shares of T-Rex stock for \$43 a share. On the same day, Sam also purchased 100 shares of T-Rex stock for \$43 a share. Tony paid cash for his purchase while Sam used margin. The initial margin requirement on this stock is 60 percent while the maintenance margin is 40 percent. Both Tony and Sam sold their shares after eight months at a price of \$40 a share. The stock pays no dividends. Tony had a holding period percentage return of _____ percent as compared to Sam's _____ percent return. Ignore margin interest and trading costs.

- A. -4.19; -6.98
- B. -4.19; -11.63
- C. -6.98; -4.19
- D. -6.98; -11.63
- E. -11.63; -7.56

62. Stacy purchased 500 shares of stock for \$48 a share. She sold those shares six months later for \$44 a share. The initial margin requirement is 80 percent and the maintenance margin is 40 percent.

Ignore margin interest and trading costs. If she purchased the shares for cash her holding period return would be _____ percent as compared to _____ percent if she had used margin.

- A. -8.12; -10.34
- B. -8.33; -10.42
- C. -9.63; -11.30
- D. -9.63; -12.54
- E. -10.27; -12.82

63. A stock was purchased for \$51 a share and sold eleven months later for \$54 a share. If the shares were purchased totally with cash the holding period return would be _____ percent as compared to _____ percent if the purchase was made using 70 percent margin. Ignore trading costs and margin interest.

- A. 5.56; 3.89
- B. 5.56; 7.94
- C. 5.88; 4.12
- D. 5.88; 6.69
- E. 5.88; 8.40

64. You purchased a stock for \$19.75 a share using 70 percent margin. You sold the stock seven months later for \$20.80 a share. You did not receive any dividend income. What was your holding period percentage return on this investment? Ignore trading costs and margin interest.

- A. 5.77 percent
- B. 6.12 percent
- C. 7.59 percent
- D. 8.75 percent
- E. 9.13 percent

65. Rudolfo purchased 900 shares of stock for \$62.20 a share and sold them ten months later for \$64.60 a share. The initial margin requirement on this stock is 75 percent and the maintenance margin is 40 percent. Ignoring dividends and costs, what is his holding period return?

- A. 3.72 percent
- B. 3.86 percent
- C. 4.54 percent
- D. 4.95 percent
- E. 5.14 percent

66. Marti purchased 100 shares of Better Foods stock on margin at a price of \$54 a share. The initial margin requirement is 60 percent and the maintenance margin is 30 percent. What is the lowest the stock price can go before Marti receives a margin call?

- A. \$17.20
- B. \$24.36
- C. \$29.57
- D. \$30.86
- E. \$33.90

67. You purchased 800 shares of stock for \$49.20 a share. The initial margin requirement is 65 percent and the maintenance margin is 35 percent. What is the lowest the stock price can go before you receive a margin call?

- A. \$9.27
- B. \$14.54
- C. \$17.22
- D. \$21.88
- E. \$26.49

68. Aaron purchased 200 shares of a technology stock for \$14.80 a share. The initial margin requirement on this stock is 85 percent and the maintenance margin is 60 percent. What is the lowest the stock price can go before he receives a margin call?

- A. \$4.43
- B. \$5.55
- C. \$6.02
- D. \$8.33
- E. \$10.03

69. You purchased 700 shares of stock for \$54.30 a share. The initial margin requirement is 75 percent and the maintenance margin is 35 percent. What is the maximum percentage decrease that can occur in the stock price before you receive a margin call?

- A. 35 percent
- B. 38 percent
- C. 48 percent
- D. 57 percent
- E. 62 percent

70. Nelson purchased 1,300 shares of stock for \$15.75 a share. The initial margin requirement is 70 percent and the maintenance margin is 40 percent. What is the maximum percent by which the stock price can decline before he receives a margin call?

- A. 30 percent
- B. 45 percent
- C. 50 percent
- D. 65 percent
- E. 70 percent

71. You purchase 500 shares of stock on margin at a cost per share of \$22. The initial margin requirement is 60 percent. The effective interest rate on the margin loan is 6.4 percent. How much interest will you pay if you repay the loan in four months?

- A. \$68.77
- B. \$91.93
- C. \$102.16
- D. \$112.38
- E. \$117.04

72. Ina purchased 600 shares of Detroit Motors stock at a price of \$65 a share. The initial margin requirement is 65 percent and the maintenance margin is 30 percent. The effective interest rate on the margin loan is 5.85 percent. How much margin interest will she pay if she repays the loan in seven months?

- A. \$387.29
- B. \$401.32
- C. \$460.28
- D. \$580.42
- E. \$687.96

73. Today, you are purchasing 100 shares of stock on margin. The purchase price per share is \$35. The initial margin requirement is 70 percent and the maintenance margin is 30 percent. The call money rate is 4.5 percent and you are charged 1.6 percent over that rate. What will your rate of return be if you sell your shares one year from now for \$37 a share? Ignore dividends.

- A. 5.55 percent
- B. 6.42 percent
- C. 7.18 percent
- D. 7.49 percent
- E. 8.03 percent

74. Five months ago, you purchased 300 shares of stock on margin. The initial margin requirement on your account is 60 percent and the maintenance margin is 30 percent. The call money rate is 4.2 percent and you pay 1.75 percent above that rate. The purchase price was \$18 a share. Today, you sold these shares for \$20.50 each. What is your annualized rate of return?

- A. 26.15 percent
- B. 59.65 percent
- C. 62.77 percent
- D. 68.87 percent
- E. 74.64 percent

75. Seven months ago, Freda purchased 400 shares of stock on margin at a price per share of \$36. The initial margin requirement on her account is 70 percent and the maintenance margin is 40 percent. The call money rate is 4.4 percent and she pays 2 percent above that rate. Today, she sold these shares for \$37.50 each. What is her annualized rate of return?

- A. 7.50 percent
- B. 7.61 percent
- C. 14.37 percent
- D. 16.90 percent
- E. 17.42 percent

76. Two months ago, Trevor purchased 500 shares of stock at a cost per share of \$74.20. The purchase was made on margin with an initial margin requirement of 65 percent. Trevor pays 1.6 percent over the call money rate of 4.8 percent. What will his total dollar return be on this investment if he sells his shares today at a price per share of \$73.40? Ignore dividends.

- A. -\$548.60
- B. -\$539.67
- C. -\$534.95
- D. -\$574.87
- E. -\$591.19

77. Robin sold 800 shares of a non-dividend paying stock this morning for a total of \$29,440. She had purchased these shares on margin nine months ago at a cost per share of \$35. The initial margin requirement on this stock is 60 percent and the maintenance margin is 30 percent. Robin pays 1.2 percent over the call money rate of 4.9 percent. What is her total dollar return on this investment?

- A. \$816.48
- B. \$897.29
- C. \$931.41
- D. \$1,164.93
- E. \$1,440.00

78. You recently purchased 100 shares of stock at a cost per share of \$23.80. The initial margin requirement on this stock is 80 percent and the maintenance margin is 50 percent. The stock is currently valued at \$17.90 a share. What is your current margin position? Ignore margin interest.

- A. 71.01 percent
- B. 71.83 percent
- C. 73.41 percent
- D. 73.69 percent
- E. 74.80 percent

79. You recently purchased 1,300 shares of stock at a cost per share of \$54.10. The initial margin requirement on this stock is 60 percent and the maintenance margin is 30 percent. The stock is currently valued at \$42.30 a share. What is your current margin position? Ignore margin interest.

- A. 46.91 percent
- B. 48.84 percent
- C. 63.05 percent
- D. 65.28 percent
- E. 78.18 percent

80. Yvette recently purchased 700 shares of stock at a cost per share of \$43.50. The initial margin requirement on this stock is 75 percent and the maintenance margin is 40 percent. The stock is currently valued at \$45.10 a share. What is her current margin position? Ignore margin interest.

- A. 74.29 percent
- B. 74.78 percent
- C. 75.89 percent
- D. 76.03 percent
- E. 76.14 percent

81. You short sold 600 shares of a stock at \$48 a share. The initial margin requirement is 60 percent and the maintenance margin is 30 percent. What is the amount of your total liability for this transaction as initially shown on your account balance sheet?

- A. \$8,640
- B. \$17,280
- C. \$22,210
- D. \$28,800
- E. \$37,440

82. Elizabeth short sold 600 shares of stock at \$62 a share. One month later, she covered the short at

a price of \$58. What was her total dollar return on this investment?

- A. -\$2,400
- B. -\$1,800
- C. -\$920
- D. \$1,800
- E. \$2,400

83. Today, you short sold 1,100 shares of Jasper Industrial stock at \$48 a share. The initial margin is 60 percent and the maintenance margin is 30 percent. Which one of the following is correct concerning your account balance sheet for this transaction?

- A. You have an asset of \$31,680 from the sale proceeds.
- B. You have a liability from the short position of \$21,120.
- C. Your account equity is \$21,120.
- D. Your initial margin deposit is \$15,840.
- E. Your total assets are \$84,480.

84. Matt short sold 900 shares of stock at \$11.50 a share. The initial margin is 80 percent and the maintenance margin is 50 percent. The stock is currently selling for \$6.80 a share. What is Matt's account equity at this time? Ignore margin interest.

- A. \$2,070
- B. \$3,590
- C. \$10,350
- D. \$11,950
- E. \$12,510

85. You short sold 500 shares of Jasper stock at \$41 a share at an initial margin of 60 percent. What is the highest the stock price can go before you receive a margin call if the maintenance margin is 40 percent?

- A. \$46.86
- B. \$47.08
- C. \$55.50
- D. \$56.90
- E. \$57.40

86. Jennifer believes that Northern Wine stock is going to decline in value so she is short selling 800 shares at \$35 a share. Her initial margin requirement is 70 percent and the maintenance margin is 30 percent. What is the highest the stock price can go before she receives a margin call?

- A. \$38.97
- B. \$40.15
- C. \$42.08
- D. \$43.75
- E. \$45.77

87. Matt short sold 500 shares of Tall Pines stock at \$19 a share at an initial margin of 65 percent.

The maintenance margin is 35 percent. What is the highest the stock price can go before he receives a margin call?

- A. \$20.12
- B. \$21.48
- C. \$23.22
- D. \$24.07
- E. \$25.16

88. The short interest on Blue Water Cruisers stock was 218,900 when the market opened this morning. During the day, 187,400 shares were covered and 171,600 shares were sold short.

What was the short interest on this stock at the end of the trading day?

- A. 203,100 shares
- B. 221,100 shares
- C. 233,100 shares
- D. 408,100 shares
- E. 447,900 shares

89. You just sold 1,200 shares of stock short at a price per share of \$13.50. The initial margin requirement is 60 percent and the maintenance margin is 30 percent. What is your initial equity position?

- A. \$6,480
- B. \$7,520
- C. \$9,720
- D. \$10,520
- E. \$16,200

90. Last week, you sold 300 shares of Hi-Lo stock for \$13,200. The sale was a short sale with an initial margin requirement of 70 percent. The maintenance margin is 40 percent. Some positive news concerning the company was released last night and the stock price jumped this morning to \$48 a share. What is your current margin position in this stock?

- A. 71.33 percent
- B. 66.67 percent
- C. 48.33 percent
- D. 46.67 percent
- E. 55.83 percent

91. Recently, you sold 1,000 shares of stock for \$21,400. The sale was a short sale with an initial margin requirement of 60 percent. The maintenance margin is 30 percent. The stock is currently trading at \$27.50 a share. What is your current margin position in this stock?

- A. 24.51 percent
- B. 28.11 percent
- C. 32.09 percent
- D. 43.98 percent
- E. 46.69 percent

92. Recently, you sold 300 shares of stock for \$14.60 a share. The sale was a short sale with an initial margin requirement of 70 percent. The maintenance margin is 35 percent. The stock is currently trading at \$16.10 a share. What is your current short position in this stock?

- A. \$2,916
- B. \$4,830
- C. \$7,446
- D. \$10,362
- E. \$11,976

Short Answer Questions

93. You just sold short 700 shares of Highway Construction stock for \$31 a share. The initial margin requirement is 70 percent and the maintenance margin is 35 percent. Construct a balance sheet depicting this transaction.

94. Last week, you sold short 400 shares of stock for \$33 a share. The initial margin requirement is 65 percent and the maintenance margin is 30 percent. Today, that stock is selling for \$36 a share. Construct a balance sheet for this short sale reflecting today's values.

Essay Questions

95. Briefly describe the basic elements of an Investment Policy Statement and its importance.

96. Briefly discuss any three (3) constraints that an investor might face in designing his investment strategy and how they affect that strategy.

97. You are having a discussion with Kate when she mentions that she just initiated a short position on ABC stock. Given that statement, what do you know about Kate's future outlook for ABC stock?

98. This morning, you shorted 100 shares of Better Foods stock at a price per share of \$46. What is the maximum potential profit and maximum potential loss on this position? Explain how you compute these values. Ignore trading costs, taxes, and dividends.

99. Briefly discuss the difference between strategic and tactical asset allocation.

100. Briefly describe the NYSE up-tick rule, the rationale for it and the current status of the rule.

Chapter 02 The Investment Process **Answer Key**

Multiple Choice Questions

1. Market timing is the:

- A. placing of an order within the last half-hour of trading for a day.
- B. period of time between the placement of a short sale and the covering of that sale.
- C.** buying and selling of securities in anticipation of the overall direction of the market.
- D. staggering of either buy or sell orders to mask the total size of a large transaction.
- E. placing of trades within the last half-hour prior to the commencement of daily trading.

See Section 2.1

Bloom's taxonomy: knowledge

Learning Objective: 02-01 The importance of an investment policy statement.

Section: 2.1

Topic: market timing

2. Asset allocation is the:

- A. selection of specific securities within a particular class or industry.
- B. division of a purchase price between a cash payment and a margin loan.
- C. division of a portfolio into short and long positions.
- D.** distribution of investment funds among various broad asset classes.
- E. dividing of assets into those that are hypothecated and those that are not.

See Section 2.1

Bloom's taxonomy: knowledge

Learning Objective: 02-01 The importance of an investment policy statement.

Section: 2.1

Topic: asset allocation

3. Jesse is researching chemical companies in an effort to determine which company's stock he should purchase. This process is known as:

- A. market timing.
- B. purchase shorting.
- C. marketing research.
- D. asset allocation.
- E.** security selection.

See Section 2.1

Bloom's taxonomy: knowledge

Learning Objective: 02-01 The importance of an investment policy statement.

Section: 2.1

Topic: security selection

4. A Roth IRA:

- A. is a form of "tax-deferred" account
- B. funds are taxed at the time you begin withdrawals
- C. are well-suited to investors nearing retirement
- D.** invests after-tax dollars
- E. is the type of account offered by most employers

See Section 2.1

Bloom's taxonomy: knowledge

Learning Objective: 02-01 The importance of an investment policy statement.

Section: 2.1

Topic: roth iras

5. A brokerage account in which purchases can be made using credit is referred to as which type of account?

- A. clearing
- B. funds available
- C. cash
- D. call
- E.** margin

See Section 2.3

Bloom's taxonomy: knowledge

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin account

6. Kate just purchased \$7,000 worth of stock. She paid \$5,000 in cash and borrowed \$2,000. In this example, the term margin refers to:

- A. the total amount of the purchase.
- B.** the percentage of the purchase that was paid in cash.
- C. the percentage of the purchase paid with borrowed funds.
- D. any future increase in the value of the stock.
- E. any future decrease in the value of the stock.

See Section 2.3

Bloom's taxonomy: knowledge

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin

7. Which one of the following best describes the term "initial margin"?
- A. Amount of money that must be deposited to open a margin account with a broker
 - B. Amount of cash that must be paid to purchase a security on margin**
 - C. Amount of cash that must be paid when a broker issues a margin call
 - D. Amount of money borrowed when a security is purchased
 - E. Total loan amount offered to a customer by a brokerage firm to cover future purchases

See Section 2.3

Bloom's taxonomy: knowledge

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: initial margin

8. The minimum equity that must be maintained at all times in a margin account is called the:
- A. initial margin.
 - B. initial equity position.
 - C. maintenance margin.**
 - D. call requirement.
 - E. margin call.

See Section 2.3

Bloom's taxonomy: knowledge

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: maintenance margin

9. When your equity position in a security is less than the required amount, your brokerage firm will issue a:

- A. margin call.
- B. margin certificate.
- C. cash certificate.
- D. limit order.
- E. leverage call.

See Section 2.3

Bloom's taxonomy: knowledge

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin call

10. Stuart purchased 300 shares of Microsoft stock which he has pledged to his broker as collateral

for the loan in his margin account. This process of pledging securities is called:

- A. margin calling.
- B. hypothecation.
- C. leveraging.
- D. maintaining the margin.
- E. street securitization.

See Section 2.3

Bloom's taxonomy: knowledge

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: hypothecation

11. Staci owns 1,000 shares of stock in a margin account. Those shares are most likely held in:

- A. transit.
- B. her registered name.
- C. street name.
- D. a wrap account.
- E. a discretionary account.

See Section 2.3

Bloom's taxonomy: knowledge

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: street name

12. This morning, Josh sold 800 shares of stock that he did not own. This sale is referred to as a:

- A. margin sale.
- B. long position.
- C. wrap trade.
- D. hypothecated sale.
- E. short sale.

See Section 2.4

Bloom's taxonomy: knowledge

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: short sale

13. The amount of common stock held in short positions is referred to as the short:

- A. margin.
- B. shares.
- C. proceeds.
- D. sale.
- E.** interest.

See Section 2.4

Bloom's taxonomy: knowledge

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: short interest

14. A company that owns income-producing real estate such as an apartment complex or a retail shopping center is called a(n):

- A.** REIT.
- B. SIPC.
- C. REEF.
- D. EAR.
- E. SPIC.

See Section 2.5

Bloom's taxonomy: knowledge

Learning Objective: 02-04 The workings of short sales.

Section: 2.5

Topic: reit

15. An investor who has a resource constraint:

- A. pays no income taxes.
- B.** has insufficient funds to purchase a security.
- C. has a relatively high marginal tax rate.
- D. has only one source of income.
- E. will only invest in socially acceptable securities.

See Section 2.1

Bloom's taxonomy: knowledge

Learning Objective: 02-01 The importance of an investment policy statement.

Section: 2.1

Topic: investor constraints

16. To be considered liquid, a security must:

- A. be held in a cash account.
- B. pay dividends.
- C. be able to be sold on short notice.
- D. be held for less than one year.
- E.** be able to be sold quickly with little, if any, price concession.

See Section 2.1

Bloom's taxonomy: comprehension

Learning Objective: 02-01 The importance of an investment policy statement.

Section: 2.1

Topic: liquidity

17. Wythe is trying to decide whether he wants to purchase shares in General Motors, Ford, or Honda, all of which are auto manufacturers. Wythe is making a(n) _____ decision.

- A. security selection
- B. tax-advantaged
- C. risk aversion
- D. active strategy
- E. asset allocation

See Section 2.1

Bloom's taxonomy: knowledge

Learning Objective: 02-01 The importance of an investment policy statement.

Section: 2.1

Topic: security selection

18. Brooke has decided to invest 55 percent of her money in large company stocks, 40 percent in small company stocks, and 5 percent in cash. This is a(n) _____ decision.

- A. market timing
- B. security selection
- C. tax-advantaged
- D. active strategy
- E. asset allocation

See Section 2.1

Bloom's taxonomy: knowledge

Learning Objective: 02-01 The importance of an investment policy statement.

Section: 2.1

Topic: asset allocation

19. Kay plans to retire in two years and wishes to liquidate her account at that time. Kay has a _____ constraint.

- A. resource
- B. horizon**
- C. liquidity
- D. tax
- E. special circumstances

See Section 2.1

Bloom's taxonomy: knowledge

Learning Objective: 02-01 The importance of an investment policy statement.

Section: 2.1

Topic: horizon constraint

20. The SIPC:

- A. guarantees investors against any loss related to an investment account held at a brokerage firm.
- B. guarantees cash balances held in brokerage accounts up to \$500,000.
- C. is an agency of the federal government.
- D. protects private brokerage firms from bankruptcy.
- E. protects investors from missing assets when a brokerage firm closes.**

See Section 2.2

Bloom's taxonomy: knowledge

Learning Objective: 02-02 The various types of securities brokers and brokerage.

Section: 2.2

Topic: SIPC

21. The determination of which individual stocks to purchase within a particular asset class is referred to as:

- A. security selection.
- B. asset allocation.
- C. security analysis.
- D. market timing.
- E. market selection.

See Section 2.1

Bloom's taxonomy: knowledge

Learning Objective: 02-01 The importance of an investment policy statement.

Section: 2.1

Topic: security selection

22. An investor who follows a fully active strategy will:

- A. move money between asset classes as well as try to select the best performers in each class.
- B. move money between asset classes but will not be concerned about which individual securities are owned.
- C. focus on picking individual stocks only.
- D. maintain a relatively constant mix of asset classes while continually buying and selling individual securities.
- E. concentrate solely on asset allocation to maximize potential returns.

See Section 2.1

Bloom's taxonomy: comprehension

Learning Objective: 02-01 The importance of an investment policy statement.

Section: 2.1

Topic: fully active strategy

23. Which one of the following decisions falls under the category of asset allocation?

- A. Purchasing Ford stock rather than General Motors stock
- B. Determining that thirty percent of a portfolio should be invested in bonds**
- C. Adopting a passive investment strategy
- D. Deciding to actively analyze individual securities
- E. Deciding to use an online broker

See Section 2.1

Bloom's taxonomy: comprehension

Learning Objective: 02-01 The importance of an investment policy statement.

Section: 2.1

Topic: asset allocation

24. Ted recently inherited a large sum of money that he wants to invest in the stock market. Since he has no investment experience, he has decided that he would like to work with a professional who can explain the market to him and also manage his funds for him. Ted most likely needs the services offered by a(n):

- A. deep-discount broker.
- B. discount broker.
- C. full-service broker.**
- D. online broker.
- E. cyberbroker.

See Section 2.2

Bloom's taxonomy: comprehension

Learning Objective: 02-02 The various types of securities brokers and brokerage.

Section: 2.2

Topic: brokerage firms

25. Which one of the following statements is correct?

- A. Most brokerage agreements require disputes be settled in a court of law.
- B. Arbitration is a formal legal process for settling disputes related to brokerage accounts.
- C. Churning is the preferred method of providing deep-discount brokerage services.
- D. Discount brokers only provide order execution services.
- E.** Full service brokers frequently provide financial planning services to clients.

See Section 2.2

Bloom's taxonomy: comprehension

Learning Objective: 02-02 The various types of securities brokers and brokerage.

Section: 2.2

Topic: broker-customer relations

26. Martin has an investment account with William, who is a broker with City Brokerage. Martin believes that William has mishandled his account by churning it. If he files a complaint against William seeking compensation, the case will most likely be decided by:

- A. the office manager of City Brokerage.
- B. a civil suit judge.
- C. a jury.
- D.** an arbitration panel.
- E. the SEC Hearing Board.

See Section 2.2

Bloom's taxonomy: comprehension

Learning Objective: 02-02 The various types of securities brokers and brokerage.

Section: 2.2

Topic: arbitration

27. You currently have \$5,000 in cash in your brokerage account. You decide to spend \$8,000 to purchase shares of stock and borrow \$3,000 from your broker to do so. Which type of brokerage account do you have?

- A. Cash
- B. Wrap
- C. Margin
- D. Short
- E. Asset allocation

See Section 2.2

Bloom's taxonomy: knowledge

Learning Objective: 02-02 The various types of securities brokers and brokerage.

Section: 2.2

Topic: margin account

28. Which one of the following statements is correct?

- A. The call money rate is the rate of interest brokerage firms charge on margin loans.
- B. The spread is the fee a deep-discount broker charges to execute a trade.
- C. The percentage of a purchase paid for with borrowed funds is referred to as the margin.
- D. A margin loan is treated as an asset on an account balance sheet.
- E. Margin is equal to account equity divided by the value of the securities owned.

See Section 2.2

Bloom's taxonomy: comprehension

Learning Objective: 02-02 The various types of securities brokers and brokerage.

Section: 2.2

Topic: margin

29. Staci just used \$6,000 of cash plus a \$3,000 margin loan to purchase \$9,000 worth of stock. This is the only transaction in her brokerage account. According to her account balance sheet, she now has account equity of:

- A. \$3,000.
- B.** \$6,000.
- C. \$9,000.
- D. \$12,000.
- E. \$15,000.

See Section 2.3

Bloom's taxonomy: comprehension

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: account balance sheet

30. Amy just purchased \$12,000 of stock. She paid \$9,000 in cash and borrowed the remaining \$3,000 needed to pay for this purchase. If you constructed a balance sheet reflecting this transaction, the total assets would be:

- A. \$3,000.
- B. \$9,000.
- C.** \$12,000.
- D. \$15,000.
- E. \$21,000.

See Section 2.3

Bloom's taxonomy: comprehension

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: account balance sheet

31. Anita wants to buy \$10,000 of securities in her margin account. Her advisor has informed her that she must pay a minimum of \$7,000 in cash and maintain a minimum equity position of 30 percent. The initial margin requirement is _____ percent and the maintenance margin is _____ percent.

- A. 30; 30
- B. 30; 70
- C. 70; 30
- D. 70; 50
- E. 70; 70

See Section 2.3

Bloom's taxonomy: comprehension

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin account

32. The absolute minimum initial margin requirement is set by the:

- A. individual investor.
- B. brokerage firm.
- C. Federal Reserve.
- D. Security Investors Protection Corporation.
- E. Securities and Exchange Commission.

See Section 2.3

Bloom's taxonomy: knowledge

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: initial margin

33. You open a margin account with a local broker and purchase shares of stock. The house maintenance margin requirement for your account is set by:

- A. your broker.
- B. the stock exchange.
- C. the SEC.
- D. the SIPC.
- E. the Federal Reserve.

See Section 2.3

Bloom's taxonomy: knowledge

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: house margin

34. If you opt to purchase shares of stock on margin rather than with cash, you will:

- A. decrease your maximum potential rate of return.
- B. increase your maximum potential rate of return.
- C. guarantee yourself a profit.
- D. eliminate any potential profit.
- E. have equal rates of return regardless of how the purchase is made.

See Section 2.3

Bloom's taxonomy: comprehension

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: effects of margin

35. What is the purpose of a margin call?

- A. to inform you that your margin loan is due and payable
- B. to demand funds to increase your margin position**
- C. to let you know the amount of funds that are now available for you to borrow
- D. to advise you that the interest rate on your loan has changed
- E. to remind you of the upcoming monthly payment due on your margin loan

See Section 2.3

Bloom's taxonomy: comprehension

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin call

36. If you ignore a margin call, your broker:

- A. will seize all the assets in your account.
- B. will close your account.
- C. may place a short sale on your behalf to cover the amount of the call.
- D. may sell some of your securities to repay the margin loan.**
- E. will increase both your margin loan and the rate of interest on that loan.

See Section 2.3

Bloom's taxonomy: comprehension

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin call

37. Lauren Mitchell has a margin account with a local brokerage firm, RL Brokers. She recently purchased 200 shares of Abbot Industries common stock that trades on the New York Stock Exchange (NYSE). These shares are held in street name and are registered under the name of:

- A. Lauren Mitchell.
- B. RL Brokers.**
- C. Abbot Industries.
- D. the New York Stock Exchange.
- E. the Securities and Exchange Commission.

See Section 2.3

Bloom's taxonomy: knowledge

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: street name

38. Which one of the following is generally true concerning securities held in street name?

- A. The securities are registered under your mailing address rather than your name.
- B. There is a greater likelihood the security may be stolen.
- C. All dividend checks are mailed to your street address.
- D. The annual stock report is mailed directly to your street address.
- E. The brokerage firm is the owner of record.**

See Section 2.3

Bloom's taxonomy: knowledge

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: street name

39. Sarah has a brokerage account with Jeff, who is a money manager with Downtown Brokers. Sarah pays an all-inclusive annual fee to the firm and Jeff manages her funds. She pays no trading costs or commissions. Which one of the following best describes this type of account?

- A. wrap
- B. cash
- C. margin
- D. mutual
- E. advisory

See Section 2.2

Bloom's taxonomy: knowledge

Learning Objective: 02-02 The various types of securities brokers and brokerage.

Section: 2.2

Topic: wrap account

40. A discretionary account:

- A. authorizes a broker to trade securities on your behalf.
- B. charges an annual fee to cover all trading and management services.
- C. is the term applied to brokerage accounts with check-writing and credit card services.
- D. is the same as a wrap account.
- E. is the account used to pledge securities as collateral for a margin loan.

See Section 2.2

Bloom's taxonomy: knowledge

Learning Objective: 02-02 The various types of securities brokers and brokerage.

Section: 2.2

Topic: discretionary account

41. An investor with a long position in a security will make money:

- A. if the price of the security increases.
- B. if the price of the security declines.
- C. if the price of the security remains stable.
- D. only if the security has been purchased on margin.
- E. only by shorting the security.

See Section 2.4

Bloom's taxonomy: knowledge

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: long position

42. Which one of the following describes a short position?

- A. Purchasing a security on margin
- B. Selling a security that you originally purchased on margin
- C. Loaning a security to your broker to cover a margin call
- D. Having less equity than required in your margin account
- E. Selling a security that you do not own

See Section 2.4

Bloom's taxonomy: knowledge

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: short position

43. On August 8 of this year, Brent sold 500 shares of ADO stock for \$24 a share. On September 6 of this year, he purchased 500 shares of ADO stock to cover his position. The transaction on August 8:

- A. was a short sale.
- B. was a margin trade.
- C. was a wrap transaction.
- D. created a long transaction.
- E. was a pooling transaction.

See Section 2.4

Bloom's taxonomy: knowledge

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: short sale

44. A short sale:

- A. creates a long position in a stock.
- B. involves the borrowing of securities.
- C. is the purchase of less than 100 shares of a stock.
- D. is a bullish outlook towards a security.
- E. is the resale of a security within four hours of purchase.

See Section 2.4

Bloom's taxonomy: knowledge

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: short sale

45. If you benefit when a security decreases in value, you have a _____ position in the security.

- A. long
- B. margined
- C. short
- D. covered
- E. wrapped

See Section 2.4

Bloom's taxonomy: knowledge

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: short position

46. The maximum loss you can incur on a short sale is:

- A. limited to your initial equity.
- B. limited to your initial margin.
- C. limited to the margin loan plus interest.
- D. zero.
- E. unlimited.

See Section 2.4

Bloom's taxonomy: comprehension

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: loss on short sale

47. What is the maximum loss you can incur if you have a long position on a stock in a cash account?

- A. The initial investment
- B. The initial margin
- C. The margin loan plus interest
- D. Zero
- E. Unlimited

See Section 2.4

Bloom's taxonomy: knowledge

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: loss on long position

48. Taylor Industries stock is selling for \$36 a share. You would like to purchase as many shares of this stock as you can. Your margin account currently has available cash of \$6,200 and the initial margin requirement is 60 percent. What is the maximum number of shares you can buy?

- A. 193 shares
- B. 287 shares
- C. 322 shares
- D. 360 shares
- E. 408 shares

Maximum purchase = $\$6,200 / .6 = \$10,333.33$

Maximum number of shares $\$10,333.33 / \$36 = 287$ shares, rounded down to the last full share

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin purchase

49. Todd has a margin account with \$17,400 in available cash. The initial margin is 70 percent and the maintenance margin is 30 percent. What is the maximum number of shares he can purchase if the price per share is \$44?

- A. 395 shares
- B.** 564 shares
- C. 698 shares
- D. 744 shares
- E. 842 shares

Maximum purchase = $\$17,400 / .7 = \$24,857.14$

Maximum number of shares = $\$24,857.14 / \$44 = 564$ shares, rounded down to the last full share

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin purchase

50. Theresa has a margin account with a 60 percent initial margin requirement and a 35 percent maintenance margin. What is the maximum dollar amount of stock she can purchase if her cash balance in the account is \$33,400?

- A. \$19,140.00
- B. \$31,900.00
- C. \$44,093.33
- D.** \$55,666.67
- E. \$91,142.86

Maximum purchase = $\$33,400 / .60 = \$55,666.67$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin purchase

51. You recently purchased 900 shares of Western Timber stock for \$38 a share. Your broker required a cash payment of \$25,650, plus trading costs, for this purchase. What was the initial margin requirement?

- A. 60 percent
- B. 65 percent
- C. 70 percent
- D.** 75 percent
- E. 80 percent

Purchase cost = $900 \times \$38 = \$34,200$

Initial margin percentage = $\$25,650 / \$34,200 = 75$ percent

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: initial margin

52. Donna recently purchased 500 shares of Deltona stock for \$28.60 a share. Her broker required a cash payment of \$10,725, plus trading costs, for the purchase. What is the initial margin requirement on this particular stock?

- A. 70 percent
- B.** 75 percent
- C. 85 percent
- D. 90 percent
- E. 100 percent

Purchase cost = $500 \times \$28.60 = \$14,300$

Initial margin percentage = $\$10,725 / \$14,300 = 75$ percent

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: initial margin

53. Suzette recently purchased 300 shares of Nu Electronics stock for \$4.40 a share. Her broker required a cash payment of \$1,320, plus trading costs, for the purchase. What is the initial margin requirement on this stock?

- A. 70 percent
- B. 75 percent
- C. 80 percent
- D. 90 percent
- E.** 100 percent

Purchase cost = $300 \times \$4.40 = \$1,320$

Initial margin percentage = $\$1,320 / \$1,320 = 100$ percent

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: initial margin

54. Stephen is purchasing 800 shares of KPT, Inc., stock at a price per share of \$26.00. What is the minimum amount the Federal Reserve will require Stephen to pay in cash for this purchase?

- A. \$4,488
- B. \$7,480
- C.** \$10,400
- D. \$11,968
- E. \$14,960

Minimum cash required = $.50 \times 800 \times \$26 = \$10,400$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: initial margin

55. Alfonso purchased 600 shares of Crosswinds, Inc., stock on 60% margin when the stock was selling for \$37 a share. The stock is currently selling for \$32 a share. What is his current equity position?

- A. \$7,680
- B. \$8,880
- C. \$9,600
- D.** \$10,320
- E. \$11,560

$$\text{Margin loan} = 600 \times \$37 \times (1 - .60) = \$8,880$$
$$\text{Current equity} = (600 \times \$32) - \$8,880 = \$10,320$$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: equity position

56. You purchased 1,200 shares of stock at \$52 a share. The stock is currently selling for \$54 a share. The initial margin was 70 percent and the maintenance margin is 30 percent. What is your current margin position?

- A. 28.36 percent
- B. 25.00 percent
- C. 75.00 percent
- D. 63.59 percent
- E.** 71.11 percent

$$\text{Margin loan} = 1,200 \times \$52 \times (1 - .70) = \$18,720$$
$$\text{Current equity} = (1,200 \times \$54) - \$18,720 = \$46,080$$
$$\text{Margin position} = \$46,080 / (1,200 \times \$54) = 71.11 \text{ percent}$$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin position

57. You own 700 shares of a stock that you purchased on margin at a price per share of \$20.12. The stock is currently valued at \$23 a share. Your broker advised you today that your minimum equity position for this purchase is \$5,635 as of today. What is the maintenance margin percentage?

- A. 25 percent
- B. 30 percent
- C. 35 percent**
- D. 40 percent
- E. 50 percent

Maintenance margin percentage = $\$5,635 / (700 \times \$23) = 35$ percent

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin position

58. Sun Lee purchased 1,100 shares of Franklin Metals stock for \$16.80 a share. The stock was purchased with an initial margin of 65 percent. The maintenance margin is 30 percent. The stock is currently selling for \$17.60 a share. What is the minimum dollar amount of equity that he must have in this stock today to avoid a margin call?

- A. \$5,544
- B. \$5,621
- C. \$5,700
- D. \$5,808**
- E. \$5,973

Minimum equity = $1,100 \times \$17.60 \times .30 = \$5,808$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: maintenance margin

59. Rosita purchased 300 shares of a stock for \$37 a share. Today, the stock is selling for \$41 a share.

The initial margin requirement is 70 percent and the maintenance margin is 30 percent. Rosita had to pay _____ in cash to purchase the stock and must have at least _____ in equity today.

- A. \$3,690; \$3,330
- B. \$3,690; \$3,690
- C. \$7,770; \$3,330
- D.** \$7,770; \$3,690
- E. \$8,610; \$3,690

Initial cash requirement = $300 \times \$37 \times .70 = \$7,770$

Current equity requirement = $300 \times \$41 \times .30 = \$3,690$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: maintenance margin

60. Allan purchased 600 shares of stock on margin for \$41 a share and sold the shares five months later for \$42.50 a share. The initial margin requirement was 65 percent and the maintenance margin was 30 percent. The interest rate on the margin loan was 10 percent. He received no dividend income. What was his holding period return?

- A. 1.05 percent
- B.** 3.45 percent
- C. 4.88 percent
- D. 7.50 percent
- E. 7.82 percent

Initial investment = $600 \times \$41 \times .65 = \$15,990$

Loan repayment = $[600 \times \$41 \times (1 - .65)] \times (1.10)^{5/12} = \$8,958.81$

HPR = $[(600 \times \$42.50) - \$8,958.81 - \$15,990] / \$15,990 = 3.45 \text{ percent}$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: hpr with margin interest

61. Tony purchased 100 shares of T-Rex stock for \$43 a share. On the same day, Sam also purchased 100 shares of T-Rex stock for \$43 a share. Tony paid cash for his purchase while Sam used margin. The initial margin requirement on this stock is 60 percent while the maintenance margin is 40 percent. Both Tony and Sam sold their shares after eight months at a price of \$40 a share. The stock pays no dividends. Tony had a holding period percentage return of _____ percent as compared to Sam's _____ percent return. Ignore margin interest and trading costs.

- A. -4.19; -6.98
- B. -4.19; -11.63
- C. -6.98; -4.19
- D. -6.98; -11.63**
- E. -11.63; -7.56

Tony's HPR without margin = $[100 \times (\$40 - \$43)] / (100 \times \$43) = -6.98$ percent

Sam's HPR with margin = $[100 \times (\$40 - \$43)] / (100 \times \$43 \times .60) = -11.63$ percent

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin and leverage

62. Stacy purchased 500 shares of stock for \$48 a share. She sold those shares six months later for \$44 a share. The initial margin requirement is 80 percent and the maintenance margin is 40 percent.

Ignore margin interest and trading costs. If she purchased the shares for cash her holding period return would be _____ percent as compared to _____ percent if she had used margin.

- A. -8.12; -10.34
- B. -8.33; -10.42**
- C. -9.63; -11.30
- D. -9.63; -12.54
- E. -10.27; -12.82

HPR without margin = $(\$44 - \$48) / \$48 = -8.33$ percent

HPR with margin = $(\$44 - \$48) / (\$48 \times .80) = -10.42$ percent

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin and leverage

63. A stock was purchased for \$51 a share and sold eleven months later for \$54 a share. If the shares were purchased totally with cash the holding period return would be _____ percent as compared to _____ percent if the purchase was made using 70 percent margin. Ignore trading costs and margin interest.

- A. 5.56; 3.89
- B. 5.56; 7.94
- C. 5.88; 4.12
- D. 5.88; 6.69
- E. 5.88; 8.40**

HPR without margin = $(\$54 - \$51)/\$51 = 5.88$ percent

HPR with margin = $(\$54 - \$51)/(\$51 \times .70) = 8.40$ percent

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin and leverage

64. You purchased a stock for \$19.75 a share using 70 percent margin. You sold the stock seven months later for \$20.80 a share. You did not receive any dividend income. What was your holding period percentage return on this investment? Ignore trading costs and margin interest.

- A. 5.77 percent
- B. 6.12 percent
- C. 7.59 percent**
- D. 8.75 percent
- E. 9.13 percent

HPR = $(\$20.80 - \$19.75)/(\$19.75 \times .70) = 7.59$ percent

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin return

65. Rudolfo purchased 900 shares of stock for \$62.20 a share and sold them ten months later for \$64.60 a share. The initial margin requirement on this stock is 75 percent and the maintenance margin is 40 percent. Ignoring dividends and costs, what is his holding period return?

- A. 3.72 percent
- B. 3.86 percent
- C. 4.54 percent
- D. 4.95 percent
- E. 5.14 percent**

$$\text{HPR} = (\$64.60 - \$62.20)/(\$62.20 \times .75) = 5.14 \text{ percent}$$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin return

66. Marti purchased 100 shares of Better Foods stock on margin at a price of \$54 a share. The initial margin requirement is 60 percent and the maintenance margin is 30 percent. What is the lowest the stock price can go before Marti receives a margin call?

- A. \$17.20
- B. \$24.36
- C. \$29.57
- D. \$30.86**
- E. \$33.90

$$P^* = \{[100 \times \$54 \times (1 - .60)]/100\}/(1 - .30) = \$30.86$$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin call

67. You purchased 800 shares of stock for \$49.20 a share. The initial margin requirement is 65 percent and the maintenance margin is 35 percent. What is the lowest the stock price can go before you receive a margin call?

- A. \$9.27
- B. \$14.54
- C. \$17.22
- D. \$21.88
- E. \$26.49**

$$P^* = \{[800 \times \$49.20 \times (1 - .65)]/800\}/(1 - .35) = \$26.49$$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin call

68. Aaron purchased 200 shares of a technology stock for \$14.80 a share. The initial margin requirement on this stock is 85 percent and the maintenance margin is 60 percent. What is the lowest the stock price can go before he receives a margin call?

- A. \$4.43
- B. \$5.55**
- C. \$6.02
- D. \$8.33
- E. \$10.03

$$P^* = \{[200 \times \$14.80 \times (1 - .85)]/200\}/(1 - .60) = \$5.55$$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin call

69. You purchased 700 shares of stock for \$54.30 a share. The initial margin requirement is 75 percent and the maintenance margin is 35 percent. What is the maximum percentage decrease that can occur in the stock price before you receive a margin call?

- A. 35 percent
- B. 38 percent
- C. 48 percent
- D. 57 percent
- E.** 62 percent

$$P^* = \{[700 \times \$54.30 \times (1 - .75)]/700\}/(1 - .35) = \$20.88462$$

$$\text{Maximum percentage decline} = 1 - (\$20.88462/\$54.30) = 62 \text{ percent}$$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin call

70. Nelson purchased 1,300 shares of stock for \$15.75 a share. The initial margin requirement is 70 percent and the maintenance margin is 40 percent. What is the maximum percent by which the stock price can decline before he receives a margin call?

- A. 30 percent
- B. 45 percent
- C.** 50 percent
- D. 65 percent
- E. 70 percent

$$P^* = \{[1,300 \times \$15.75 \times (1 - .70)]/1,300\}/(1 - .40) = \$7.875$$

$$\text{Maximum percentage decline} = 1 - (\$7.875/\$15.75) = 50 \text{ percent}$$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin call

71. You purchase 500 shares of stock on margin at a cost per share of \$22. The initial margin requirement is 60 percent. The effective interest rate on the margin loan is 6.4 percent. How much interest will you pay if you repay the loan in four months?

- A. \$68.77
- B. \$91.93**
- C. \$102.16
- D. \$112.38
- E. \$117.04

$$\text{Margin interest} = [(1 + .064)^{4/12} - 1] \times [500 \times \$22 \times (1 - .60)] = \$91.93$$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin interest

72. Ina purchased 600 shares of Detroit Motors stock at a price of \$65 a share. The initial margin requirement is 65 percent and the maintenance margin is 30 percent. The effective interest rate on the margin loan is 5.85 percent. How much margin interest will she pay if she repays the loan in seven months?

- A. \$387.29
- B. \$401.32
- C. \$460.28**
- D. \$580.42
- E. \$687.96

$$\text{Margin interest} = [(1 + .0585)^{7/12} - 1] \times [600 \times \$65 \times (1 - .65)] = \$460.28$$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin interest

73. Today, you are purchasing 100 shares of stock on margin. The purchase price per share is \$35. The initial margin requirement is 70 percent and the maintenance margin is 30 percent. The call money rate is 4.5 percent and you are charged 1.6 percent over that rate. What will your rate of return be if you sell your shares one year from now for \$37 a share? Ignore dividends.

- A. 5.55 percent
- B. 6.42 percent
- C. 7.18 percent
- D. 7.49 percent
- E. 8.03 percent

Initial investment = $(100 \times \$35 \times .70) = \$2,450$

Loan repayment = $[100 \times \$35 \times (1 - .70)] \times [1 + (.045 + .016)]^1 = \$1,114.05$

Rate of return = $[(100 \times \$37) - \$1,114.05 - \$2,450] / \$2,450 = 5.55 \text{ percent}$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: hpr with margin interest

74. Five months ago, you purchased 300 shares of stock on margin. The initial margin requirement on your account is 60 percent and the maintenance margin is 30 percent. The call money rate is 4.2 percent and you pay 1.75 percent above that rate. The purchase price was \$18 a share. Today, you sold these shares for \$20.50 each. What is your annualized rate of return?

- A. 26.15 percent
- B. 59.65 percent
- C. 62.77 percent
- D. 68.87 percent
- E. 74.64 percent

Initial investment = $300 \times \$18 \times .60 = \$3,240$

Loan repayment = $[300 \times \$18 \times (1 - .60)] \times [1 + (.042 + .0175)]^{5/12} = 2,212.65$

HPR = $[(300 \times \$20.50) - \$2,212.65 - \$3,240] / \$3,240 = .2152$

EAR = $(1 + .2152)^{12/5} - 1 = 59.65 \text{ percent}$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: annualized return

75. Seven months ago, Freda purchased 400 shares of stock on margin at a price per share of \$36. The initial margin requirement on her account is 70 percent and the maintenance margin is 40 percent. The call money rate is 4.4 percent and she pays 2 percent above that rate. Today, she sold these shares for \$37.50 each. What is her annualized rate of return?

- A. 7.50 percent
- B. 7.61 percent**
- C. 14.37 percent
- D. 16.90 percent
- E. 17.42 percent

$$\text{Initial investment} = 400 \times \$36 \times .70 = \$10,080$$

$$\text{Loan repayment} = [400 \times \$36 \times (1 - .70)] \times [1 + (.044 + .02)]^{7/12} = \$4,479.19$$

$$\text{HPR} = [(400 \times \$37.50) - \$4,479.19 - \$10,080] / \$10,080 = .04373$$

$$\text{EAR} = (1 + .04373)^{12/7} - 1 = 7.61 \text{ percent}$$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: annualized return

76. Two months ago, Trevor purchased 500 shares of stock at a cost per share of \$74.20. The purchase was made on margin with an initial margin requirement of 65 percent. Trevor pays 1.6 percent over the call money rate of 4.8 percent. What will his total dollar return be on this investment if he sells his shares today at a price per share of \$73.40? Ignore dividends.

- A. -\$548.60
- B. -\$539.67
- C. -\$534.95**
- D. -\$574.87
- E. -\$591.19

$$\text{Initial investment} = 500 \times \$74.20 \times .65 = \$24,115$$

$$\text{Loan repayment} = [500 \times \$74.20 \times (1 - .65)] \times [1 + (.016 + .048)]^{2/12} = \$13,119.95$$

$$\text{HPR} = [(500 \times \$73.40) - \$13,119.95 - \$24,115] = -\$534.95$$

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: return with margin interest

77. Robin sold 800 shares of a non-dividend paying stock this morning for a total of \$29,440. She had purchased these shares on margin nine months ago at a cost per share of \$35. The initial margin requirement on this stock is 60 percent and the maintenance margin is 30 percent. Robin pays 1.2 percent over the call money rate of 4.9 percent. What is her total dollar return on this investment?

- A. \$816.48
- B. \$897.29
- C. \$931.41**
- D. \$1,164.93
- E. \$1,440.00

Initial investment = $800 \times \$35 \times .60 = \$16,800$

Loan repayment = $[800 \times \$35 \times (1 - .60)] \times [1 + (.012 + .049)]^{9/12} = \$11,708.59$

Holding period dollar return = $(\$29,440 - \$11,708.59 - \$16,800) = \931.41

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: return with margin interest

78. You recently purchased 100 shares of stock at a cost per share of \$23.80. The initial margin requirement on this stock is 80 percent and the maintenance margin is 50 percent. The stock is currently valued at \$17.90 a share. What is your current margin position? Ignore margin interest.

- A. 71.01 percent
- B. 71.83 percent
- C. 73.41 percent**
- D. 73.69 percent
- E. 74.80 percent

Margin loan = $100 \times \$23.80 \times (1 - .80) = \476

Current stock value = $100 \times \$17.90 = \$1,790$

Current equity = $\$1,790 - \$476 = \$1,314$

Current margin = $\$1,314 / \$1,790 = 73.41$ percent

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin

79. You recently purchased 1,300 shares of stock at a cost per share of \$54.10. The initial margin requirement on this stock is 60 percent and the maintenance margin is 30 percent. The stock is currently valued at \$42.30 a share. What is your current margin position? Ignore margin interest.

- A. 46.91 percent
- B. 48.84 percent**
- C. 63.05 percent
- D. 65.28 percent
- E. 78.18 percent

Margin loan = $1,300 \times \$54.10 \times (1 - .60) = \$28,132$

Current stock value = $1,300 \times \$42.30 = \$54,990$

Current equity = $\$54,990 - \$28,132 = \$26,858$

Current margin = $\$26,858 / \$54,990 = 48.84$ percent

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin

80. Yvette recently purchased 700 shares of stock at a cost per share of \$43.50. The initial margin requirement on this stock is 75 percent and the maintenance margin is 40 percent. The stock is currently valued at \$45.10 a share. What is her current margin position? Ignore margin interest.

- A. 74.29 percent
- B. 74.78 percent
- C. 75.89 percent**
- D. 76.03 percent
- E. 76.14 percent

Margin loan = $700 \times \$43.50 \times (1 - .75) = \$7,612.50$

Current stock value = $700 \times \$45.10 = \$31,570$

Current equity = $\$31,570 - \$7,612.50 = \$23,957.50$

Current margin = $\$23,957.50 / \$31,570 = 75.89$ percent

Bloom's taxonomy: application

Learning Objective: 02-03 How to calculate initial and maintenance margin.

Section: 2.3

Topic: margin

81. You short sold 600 shares of a stock at \$48 a share. The initial margin requirement is 60 percent and the maintenance margin is 30 percent. What is the amount of your total liability for this transaction as initially shown on your account balance sheet?

- A. \$8,640
- B. \$17,280
- C. \$22,210
- D.** \$28,800
- E. \$37,440

$$\text{Liability} = 600 \times \$48 = \$28,800$$

Bloom's taxonomy: application

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: short sale

82. Elizabeth short sold 600 shares of stock at \$62 a share. One month later, she covered the short at a price of \$58. What was her total dollar return on this investment?

- A. -\$2,400
- B. -\$1,800
- C. -\$920
- D. \$1,800
- E.** \$2,400

$$\text{Total dollar return} = 600 \times (\$62 - \$58) = \$2,400$$

Bloom's taxonomy: application

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: short sale

83. Today, you short sold 1,100 shares of Jasper Industrial stock at \$48 a share. The initial margin is 60 percent and the maintenance margin is 30 percent. Which one of the following is correct concerning your account balance sheet for this transaction?

- A. You have an asset of \$31,680 from the sale proceeds.
- B. You have a liability from the short position of \$21,120.
- C. Your account equity is \$21,120.
- D. Your initial margin deposit is \$15,840.
- E.** Your total assets are \$84,480.

$$\text{Total assets} = (1,100 \times \$48) + (1,100 \times \$48 \times .60) = \$84,480$$

Bloom's taxonomy: application

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: short sale balance sheet

84. Matt short sold 900 shares of stock at \$11.50 a share. The initial margin is 80 percent and the maintenance margin is 50 percent. The stock is currently selling for \$6.80 a share. What is Matt's account equity at this time? Ignore margin interest.

- A. \$2,070
- B. \$3,590
- C. \$10,350
- D. \$11,950
- E.** \$12,510

$$\text{Proceeds from sale} = 900 \times \$11.50 = \$10,350$$

$$\text{Initial margin deposit} = 900 \times \$11.50 \times .80 = \$8,280$$

$$\text{Short position} = 900 \times \$6.80 = \$6,120$$

$$\text{Account equity} = \$10,350 + \$8,280 - \$6,120 = \$12,510$$

Bloom's taxonomy: application

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: short sale balance sheet

85. You short sold 500 shares of Jasper stock at \$41 a share at an initial margin of 60 percent. What is the highest the stock price can go before you receive a margin call if the maintenance margin is 40 percent?

- A. \$46.86
- B. \$47.08
- C. \$55.50
- D. \$56.90
- E. \$57.40

$$P^* = \{[(500 \times \$41) + (500 \times \$41 \times .60)]/500\}/(1 + .40) = \$46.86$$

Bloom's taxonomy: application

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: margin call on short sale

86. Jennifer believes that Northern Wine stock is going to decline in value so she is short selling 800 shares at \$35 a share. Her initial margin requirement is 70 percent and the maintenance margin is 30 percent. What is the highest the stock price can go before she receives a margin call?

- A. \$38.97
- B. \$40.15
- C. \$42.08
- D. \$43.75
- E. \$45.77

$$P^* = \{[(800 \times \$35) + (800 \times \$35 \times .70)]/800\}/(1 + .30) = \$45.77$$

Bloom's taxonomy: application

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: margin call on short sale

87. Matt short sold 500 shares of Tall Pines stock at \$19 a share at an initial margin of 65 percent.

The maintenance margin is 35 percent. What is the highest the stock price can go before he receives a margin call?

- A. \$20.12
- B. \$21.48
- C. \$23.22
- D. \$24.07
- E. \$25.16

$$P^* = \{[(500 \times \$19) + (500 \times \$19 \times .65)]/500\}/(1 + .35) = \$23.22$$

Bloom's taxonomy: application

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: margin call on short sale

88. The short interest on Blue Water Cruisers stock was 218,900 when the market opened this morning. During the day, 187,400 shares were covered and 171,600 shares were sold short.

What was the short interest on this stock at the end of the trading day?

- A. 203,100 shares
- B. 221,100 shares
- C. 233,100 shares
- D. 408,100 shares
- E. 447,900 shares

$$\text{End of day short interest} = 218,900 - 187,400 + 171,600 = 203,100 \text{ shares}$$

Bloom's taxonomy: application

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: short interest

89. You just sold 1,200 shares of stock short at a price per share of \$13.50. The initial margin requirement is 60 percent and the maintenance margin is 30 percent. What is your initial equity position?

- A. \$6,480
- B. \$7,520
- C. \$9,720
- D. \$10,520
- E. \$16,200

Proceeds from sale = $1,200 \times \$13.50 = \$16,200$

Initial margin deposit = $1,200 \times \$13.50 \times .60 = \$9,720$

Short position = $1,200 \times \$13.50 = \$16,200$

Account equity = $\$16,200 + \$9,720 - \$16,200 = \$9,720$

Bloom's taxonomy: application

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: short equity

90. Last week, you sold 300 shares of Hi-Lo stock for \$13,200. The sale was a short sale with an initial margin requirement of 70 percent. The maintenance margin is 40 percent. Some positive news concerning the company was released last night and the stock price jumped this morning to \$48 a share. What is your current margin position in this stock?

- A. 71.33 percent
- B. 66.67 percent
- C. 48.33 percent
- D. 46.67 percent
- E. 55.83 percent

Proceeds from sale = \$13,200

Initial margin deposit = $\$13,200 \times .70 = \$9,240$

Short position = $300 \times \$48 = \$14,400$

Account equity = $\$13,200 + \$9,240 - \$14,400 = \$8,040$

Margin position = $\$8,040 / \$14,400 = 55.83 \text{ percent}$

Bloom's taxonomy: application

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: short margin

91. Recently, you sold 1,000 shares of stock for \$21,400. The sale was a short sale with an initial margin requirement of 60 percent. The maintenance margin is 30 percent. The stock is currently trading at \$27.50 a share. What is your current margin position in this stock?

- A. 24.51 percent
- B. 28.11 percent
- C. 32.09 percent
- D. 43.98 percent
- E. 46.69 percent

Proceeds from sale = \$21,400

Initial margin deposit = $\$21,400 \times .60 = \$12,840$

Short position = $1,000 \times \$27.50 = \$27,500$

Account equity = $\$21,400 + \$12,840 - \$27,500 = \$6,740$

Margin position = $\$6,740 / \$27,500 = 24.51$ percent

Bloom's taxonomy: application

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: short margin

92. Recently, you sold 300 shares of stock for \$14.60 a share. The sale was a short sale with an initial margin requirement of 70 percent. The maintenance margin is 35 percent. The stock is currently trading at \$16.10 a share. What is your current short position in this stock?

- A. \$2,916
- B. \$4,830
- C. \$7,446
- D. \$10,362
- E. \$11,976

Short position = $300 \times \$16.10 = \$4,830$

Bloom's taxonomy: application

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: short position

Short Answer Questions

93. You just sold short 700 shares of Highway Construction stock for \$31 a share. The initial margin requirement is 70 percent and the maintenance margin is 35 percent. Construct a balance sheet depicting this transaction.

Assets		Liabilities and Account Equity	
Proceeds from sale	\$21,700	Short position	\$21,700
Initial margin deposit	<u>15,190</u>	Account equity	<u>15,190</u>
Total	\$36,890	Total	\$36,890

Bloom's taxonomy: application

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: account balance sheet

94. Last week, you sold short 400 shares of stock for \$33 a share. The initial margin requirement is 65 percent and the maintenance margin is 30 percent. Today, that stock is selling for \$36 a share. Construct a balance sheet for this short sale reflecting today's values.

Assets		Liabilities and Account Equity	
Proceeds from sale	\$13,200	Short position	\$14,400
Initial margin deposit	<u>8,580</u>	Account equity	<u>7,380</u>
Total	\$21,780	Total	\$21,780

Bloom's taxonomy: application

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: account balance sheet

Essay Questions

95. Briefly describe the basic elements of an Investment Policy Statement and its importance.

The Investment Policy Statement defines an investor's overall objectives and constraints. It provides a broad roadmap for asset allocation and ultimately for security selection by clearly laying out the investors goals and risk tolerance level along with any limitations to be considered in developing an investment portfolio.

Bloom's taxonomy: knowledge

Learning Objective: 02-01 The importance of an investment policy statement.

Section: 2.1

Topic: investment policy statement

96. Briefly discuss any three (3) constraints that an investor might face in designing his investment strategy and how they affect that strategy.

Resources: The amount of money the investor has available to invest. Clearly this is an important constraint as it may affect the type of investment opportunities available.

Horizon: The investment horizon refers to the planned life of the investment. Asset allocation will be affected by the investor's horizon - when the money will be needed. For example, an investor needed funds to pay for college tuition in 5 years should consider a different asset set than one planning for retirement in 25 years.

Liquidity: Liquidity refers to the ability to sell an asset (turn it into cash) quickly and without significant loss in value. An investor needs to consider future needs for cash in which would impact the allocation to cash and highly liquid but lower return assets.

Taxes: Different types of investments are taxed differently. The impact of taxes on an investor's asset choices will be driven by those differences along with the investor's individual tax bracket, since the goal is after-tax return.

Unique circumstances: These are constraints unique to the individual investor. For example, an investor may be interested only in investing in socially or environmentally conscious firms. Another investor may be influenced by his company's investment "matching" policy or a need to avoid a conflict of interest.

Bloom's taxonomy: knowledge

Learning Objective: 02-01 The importance of an investment policy statement.

Section: 2.1

Topic: investment constraints

97. You are having a discussion with Kate when she mentions that she just initiated a short position on ABC stock. Given that statement, what do you know about Kate's future outlook for ABC stock?

A short position provides a positive return to an investor when a security's price declines. Thus, Kate is bearish on the stock as she is expecting the value of that stock to decline.

Bloom's taxonomy: comprehension

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: account positions

98. This morning, you shorted 100 shares of Better Foods stock at a price per share of \$46. What is the maximum potential profit and maximum potential loss on this position? Explain how you compute these values. Ignore trading costs, taxes, and dividends.

A short sale involves the borrowing of shares that you sell today with the hope that the price per share declines in the near future so that you can purchase shares later at a lower price to replace the borrowed shares. Thus, you profit if the price declines and you incur a loss if the market price increases. The maximum profit would be \$4,600 and would occur only if the stock became worthless. The maximum loss is unlimited as there is no upper limit on the value of a stock.

Bloom's taxonomy: application

Learning Objective: 02-04 The workings of short sales.

Section: 2.4

Topic: short selling

99. Briefly discuss the difference between strategic and tactical asset allocation.

Strategic asset allocation describes the asset allocation an investor has defined after defining his investment policy statement. "Strategic" implies the investor's long-term, target asset allocation which will be relatively stable. Changes will be infrequent, driven by changes in objectives, constraints, or the relative performance of asset classes.

A tactical asset allocation refers to a short-term change to the investor's strategic allocation in an attempt to capture added return. The benefits of tactical asset allocation are under debate as it is similar to market timing.

Bloom's taxonomy: comprehension

Learning Objective: 02-04 The workings of short sales.

Section: 2.5

Topic: asset allocation

100. Briefly describe the NYSE up-tick rule, the rationale for it and the current status of the rule.

The New York Stock Exchange Uptick Rule prohibited short sales unless the last price change was an "uptick" or increase. The NYSE originally enacted the rule to make it more difficult for speculators to drive down a stock's price by repeated short sales. Note that this rule applied only to trades on the NYSE, not on other trading venues. The rule was repealed in June 2007, but the U.S. government is seriously considering reinstating the rule.

Bloom's taxonomy: comprehension

Learning Objective: 02-04 The workings of short sales.

Section: 2.5

Topic: NYSE up stick rule