TEST BANK



- 1. The financial system consists of
 - a. all the securities, intermediaries, and markets that exist to match savers and borrowers.
 - b. all transactions occurring in the goods market during a financial year.
 - c. all markets that exist to match the buyers and suppliers of various factors of production.
 - d. all transactions involving the government.

ANSWER: a POINTS: 1

DIFFICULTY: Basic

TOPICS: The Financial System and the Economy

OTHER: Factual

- 2. Which of the following will be included in the financial system of a country?
 - a. Labor Unions
 - b. Banks
 - c. Factor markets
 - d. Markets for raw materials

ANSWER: b
POINTS: 1

DIFFICULTY: Basic

TOPICS: The Financial System and the Economy

OTHER: Factual

- 3. In the financial system, savers transfer funds to borrowers in exchange for
 - a. cash.
 - b. gold.
 - c. financial securities.
 - d. derivative securities.

ANSWER: c
POINTS: 1

DIFFICULTY: Basic

TOPICS: The Financial System and the Economy

4. A contract we the future is a. a warrant b. an exchance a derivatiful. a financial	rge rate. ve security.
ANSWER:	d
POINTS:	1
DIFFICULT	
TOPICS:	Financial Securities
OTHER:	Factual
5. A contract to is known as a. a debt seed b. an equity c. stock.	security.
ANSWER:	a
POINTS:	1
DIFFICULT	Y: Basic
TOPICS:	Financial Securities
OTHER:	Factual
6. A contract t a. a debt sec b. an equity c. a bond. d. an option.	security.
ANSWER:	b
POINTS:	1
DIFFICULT	Y: Basic
TOPICS:	Financial Securities
OTHER:	Factual

7. Another name	for an equity security is
a. bond.	
b. debt.	
c. option.	
d. stock.	
ANSWER:	d
POINTS:	1
DIFFICULTY:	Basic
TOPICS:	Financial Securities
OTHER:	Factual
	debt and equity outstanding in the United States is more thantimes the nation's GDP.
a. 2	
b. 3	
c. 4	
d. 5	
ANSWER:	d
POINTS:	1
DIFFICULTY:	Moderate
TOPICS:	Financial Securities
OTHER:	Factual
9. The ratio of de	bt to equity in the United States is about
9. The ratio of de a. 2.	bt to equity in the United States is about
	bt to equity in the United States is about
a. 2.	bt to equity in the United States is about
a. 2.b. 2.5.	bt to equity in the United States is about
a. 2.b. 2.5.c. 3.	bt to equity in the United States is about
a. 2.b. 2.5.c. 3.d. 3.5.	
a. 2.b. 2.5.c. 3.d. 3.5. ANSWER:	a 1
a. 2.b. 2.5.c. 3.d. 3.5. ANSWER: POINTS:	a 1
a. 2.b. 2.5.c. 3.d. 3.5. ANSWER: POINTS: DIFFICULTY:	a 1 Moderate
a. 2. b. 2.5. c. 3. d. 3.5. ANSWER: POINTS: DIFFICULTY: TOPICS: OTHER:	a 1 Moderate Financial Securities
a. 2. b. 2.5. c. 3. d. 3.5. ANSWER: POINTS: DIFFICULTY: TOPICS: OTHER:	a 1 Moderate Financial Securities Factual
a. 2. b. 2.5. c. 3. d. 3.5. ANSWER: POINTS: DIFFICULTY: TOPICS: OTHER: 10. In the United S	a 1 Moderate Financial Securities Factual States, the biggest issuers of securities are
a. 2. b. 2.5. c. 3. d. 3.5. ANSWER: POINTS: DIFFICULTY: TOPICS: OTHER: 10. In the United Sa. households.	a 1 Moderate Financial Securities Factual States, the biggest issuers of securities are
a. 2. b. 2.5. c. 3. d. 3.5. ANSWER: POINTS: DIFFICULTY: TOPICS: OTHER: 10. In the United Sa. households. b. business firm	a 1 Moderate Financial Securities Factual States, the biggest issuers of securities are ns. s.
a. 2. b. 2.5. c. 3. d. 3.5. ANSWER: POINTS: DIFFICULTY: TOPICS: OTHER: 10. In the United S a. households. b. business firm c. governments	a 1 Moderate Financial Securities Factual States, the biggest issuers of securities are ns. s.
a. 2. b. 2.5. c. 3. d. 3.5. ANSWER: POINTS: DIFFICULTY: TOPICS: OTHER: 10. In the United Sa. households. b. business firm c. governments d. financial interpression of the control of th	a 1 Moderate Financial Securities Factual States, the biggest issuers of securities are ns. s. ermediaries.
a. 2. b. 2.5. c. 3. d. 3.5. ANSWER: POINTS: DIFFICULTY: TOPICS: OTHER: 10. In the United S a. households. b. business firm c. governments d. financial inte	a 1 Moderate Financial Securities Factual States, the biggest issuers of securities are ns. s. ermediaries. b 1
a. 2. b. 2.5. c. 3. d. 3.5. ANSWER: POINTS: DIFFICULTY: TOPICS: OTHER: 10. In the United S a. households. b. business firm c. governments d. financial inter ANSWER: POINTS:	a 1 Moderate Financial Securities Factual States, the biggest issuers of securities are ns. s. ermediaries. b 1

11. In the United States, the biggest issuers of debt securities are a. households. b. business firms. c. governments. d. financial intermediaries. ANSWER: d *POINTS:* 1 DIFFICULTY: Basic TOPICS: Financial Securities OTHER: Factual 12. In the United States, the biggest issuers of equity securities are a. households. b. business firms. c. governments. d. financial intermediaries. ANSWER: b *POINTS:* 1 DIFFICULTY: Basic TOPICS: Financial Securities OTHER: Factual 13. When a household borrows to buy a home, the resulting security is referred to as a. a discount bond. b. a Treasury bill. c. mortgage debt. d. consumer credit. ANSWER: c**POINTS:** 1 DIFFICULTY: Basic TOPICS: **Financial Securities** OTHER: Factual

	the resulting sec a. a discount bot b. a Treasury bit c. mortgage deb d. consumer cre	II. ot.
	ANSWER: POINTS: DIFFICULTY: TOPICS: OTHER:	d 1 Basic Financial Securities Factual
15.	The owner of a a. an investor. b. a debtor. c. a broker. d. a securitor.	financial security is known as
	ANSWER: POINTS: DIFFICULTY: TOPICS: OTHER:	a 1 Basic Financial Securities Factual
16.	In the United St a. households. b. business firm c. governments. d. financial inter	
	ANSWER: POINTS: DIFFICULTY: TOPICS: OTHER:	1

14. When a household borrows using credit cards and by taking out loans for large purchases (such as automobiles),

- 17. In the United States, the biggest investors in debt securities are
 - a. households.
 - b. business firms.
 - c. governments.
 - d. financial intermediaries.

ANSWER: d
POINTS: 1

DIFFICULTY: Basic

TOPICS: Financial Securities

OTHER: Factual

- 18. Maturity is
 - a. the time until borrowed funds are repaid.
 - b. the total interest accumulated on a financial security.
 - c. a situation in which equity becomes worthless.
 - d. the principal amount invested in a financial security.

ANSWER: a
POINTS: 1
DIFFICULTY: Ba

DIFFICULTY: Basic

TOPICS: Financial Securities

OTHER: Factual

- 19. Principal is
 - a. the amount of interest accumulated on a bond.
 - b. the amount of dividends paid each year on a stock.
 - c. the original amount invested in a security.
 - d. the time until a borrowed fund is repaid.

ANSWER: c
POINTS: 1
DIFFICULTY: Basic

TOPICS: Financial Securities

OTHER: Factual

- 20. The periodic payments on debt securities are called
 - a. interest payments.
 - b. dividends.
 - c. debt swaps.
 - d. subordinations.

ANSWER: a
POINTS: 1
DIFFICULTY: Basic

TOPICS: Financial Securities

- 21. The periodic payments on equity securities are called
 - a. interest payments.
 - b. dividends.
 - c. equity shares.
 - d. stock repurchases.

ANSWER: b
POINTS: 1

DIFFICULTY: Basic

TOPICS: Financial Securities

OTHER: Factual

- 22. Which of the following is true of debt securities?
 - a. The periodic payment on a debt security is known as dividend.
 - b. A debt security specifies a particular maturity date.
 - c. The original amount invested in a referred to as interest.
 - d. The amount of payment on a debt security depends on the company's profits.

ANSWER: b
POINTS: 1
DIFFICULTY: Basic

TOPICS: Financial Securities

OTHER: Factual

- 23. Which of the following is true of an equity?
 - a. Equity securities can be bought and sold.
 - b. The periodic payment on an equity security is called the interest.
 - c. An equity promises to pay a fixed amount periodically.
 - d. An equity security has a specific date of maturity.

ANSWER: a
POINTS: 1
DIFFICULTY: Basic

TOPICS: Financial Securities

OTHER: Factual

- 24. A treasury bond issued by the U.S. government
 - a. does not have a maturity date.
 - b. makes periodic payments of specific amounts.
 - c. pays dividends to the bond holders.
 - d. is a short-term debt security.

ANSWER: b
POINTS: 1
DIFFICULTY: Basic

TOPICS: Financial Securities

25. Treasury bills issued by the U.S. government a. do not have a specific period of maturity. b. promises to pay dividends to its owners. c. are long term debt securities. d. are short term debt securities. ANSWER: d **POINTS:** 1 DIFFICULTY: Basic TOPICS: Financial Securities OTHER: Factual 26. Which of the following is true of dividends? a. The amount of dividends paid to stock owners depends on the company's performance. b. The timing of dividend payments is the same across all companies. c. Dividends are tax-free payments from insurance companies. d. Dividends are tax-free social security payments. ANSWER: a **POINTS:** 1 DIFFICULTY: Basic Financial Securities TOPICS: OTHER: Factual 27. Most commonly, companies issue a(n) ______dividend. a. quarterly b. semiannual c. annual d. monthly ANSWER: a *POINTS:* 1 DIFFICULTY: Basic TOPICS: **Financial Securities** OTHER: Factual 28. Interest payments are a. the periodic payments on equity securities. b. made by the borrower to the investor along with the principal. c. tax-free payments from insurance companies. d. taxable Social Security payments. ANSWER: b

POINTS: DIFFICULTY: Basic TOPICS: Financial Securities

29.	debt holders, an a. (1) debt hold b. (1) stockhold c. (1) workers;	a firm goes bankrupt and is liquidated, who is paid off first, second, and third between workers, d stockholders? ers; (2) workers; (3) stockholders ers; (2) workers; (3) debt holders (2) debt holders; (3) stockholders (2) stockholders; (3) debt holders
	ANSWER:	c
	POINTS:	1
	DIFFICULTY:	
	TOPICS:	Financial Securities
	OTHER:	Factual
30.	CEO of Redhoo	nillips, Eliza, John, and Jacob are associated with Redhood Ltd. in different ways. Phillips is the od Ltd., Melissa works as an accountant while John owns some shares of Redhood Ltd. and Jacob ecurities issued by the company. Who is likely to be paid last in case of a bankruptcy?
	ANSWER:	a
	POINTS:	1
	DIFFICULTY:	Basic
	TOPICS:	Financial Securities
	OTHER:	Conceptual
31.	Charlie keeps hi	savings in a money market mutual fund, Ben keeps his savings invested in U.S. savings bonds, is in a bank, and Beth uses her savings to buy the stocks of a company. Given this information, who wing individuals is using direct finance?
	ANSWER:	b
	POINTS:	1
	DIFFICULTY:	Moderate
	TOPICS:	Matching Borrowers with Lenders
	OTHER:	Conceptual

32.	Beth keeps her s	savings in a certificate of deposit at a bank, Ben keeps his savings invested in U.S. savings bonds, savings in the form of liquid cash in her vault, and Charlie uses his to buy stock on the New York Given this information, who among the following individuals is using indirect finance?
	a. Andy	
	b. Ben	
	c. Charlie	
	d. Beth	
	ANSWER:	a
	POINTS:	1
	DIFFICULTY:	Moderate
	TOPICS:	Matching Borrowers with Lenders
	OTHER:	Conceptual
33.		transfers funds from savers to borrowers by receiving funds from savers and investing in securities wers is known as a(n)
	b. financial inter	mediary.
	c. stock exchange	ge.
	d. venture capita	alist.
	ANSWER:	b
	POINTS:	1
	DIFFICULTY:	Basic
	TOPICS:	Matching Borrowers with Lenders
	OTHER:	Factual
34.	When savers bu a. direct finance b. indirect finance c. a secondary r	ce.
	d. a financial int	
	ANSWER:	a
	POINTS:	1
	DIFFICULTY:	Basic Moderate
	TOPICS:	Matching Borrowers with Lenders
	OTHER:	Conceptual

25	****			
35	5. When savers invest through financial intermediaries, they are said to engage in			
	a. direct finance.			
	b. indirect finance.			
	c. a secondary market.			
	d. a tertiary man	rket.		
	ANSWER:	b		
	POINTS:	1		
	DIFFICULTY:	Basic		
	TOPICS:	Matching Borrowers with Lenders		
	OTHER:	Factual		
36	owned through government. What a. Mary b. Jane c. George	savings to buy some stocks of a company in the secondary market while Jane sold some stocks she a stock broker. George invested his savings in a bank while Tom bought treasury bills of the U.S. ho among the following is using direct finance?		
	d. Tom			
	ANSWER: POINTS: DIFFICULTY: TOPICS: OTHER:	c 1 Basic Matching Borrowers with Lenders Conceptual		
37	. Mr.Smith bough	nt stocks of several companies from the secondary market. He used		
	a. micro financeb. public financec. direct financed. indirect finance	e. e.		
	ANSWER:	d		
	POINTS:	1		
	DIFFICULTY:	Basic		
	TOPICS:	Matching Borrowers with Lenders		
	OTHER:	Conceptual		

38.		takes short term deposits and makes long term loans is a				
	a. a financial intermediary.					
	b. a brokerage.					
	c. an investment					
	d. a secondary i	market maker.				
	ANSWER:	a				
	POINTS:	1				
	DIFFICULTY:	Basic				
	TOPICS:	Matching Borrowers with Lenders				
	OTHER:	Factual				
39.	A financial inter	rmediary				
	a. is a governme	ent-owned acceptor of deposits.				
	b. pools the fund	ds of many people.				
	c. speculates in	the stock market.				
	d. advances loan	ns but does not accept deposits.				
	ANSWER:	b				
	POINTS:	1				
	DIFFICULTY:	Basic				
	TOPICS:	Matching Borrowers with Lenders				
	OTHER:	Factual				
40.	When a country	's financial system is young, it usually relies more onfinance.				
	a. micro	, , , , , <u> </u>				
	b. direct					
	c. nonintermedia	ary				
	d. indirect					
	ANSWER:	d				
	POINTS:	1				
	DIFFICULTY:	Basic				
	TOPICS:	Matching Borrowers with Lenders				
	OTHER:	Factual				
41.	Which of the fo	llowing is NOT a financial intermediary?				
	a. A commercia	·				
	b. A savings ins	titution.				
	c. A governmen	nt treasury.				
	d. A mutual fun	d.				
	ANSWER:	c				
	POINTS:	1				
	DIFFICULTY:	Basic				
	TOPICS:	Matching Borrowers with Lenders				
	OTHER:	Factual				

- 42. Commercial banks, savings institutions, and mutual funds are all
 - a. financial intermediaries.
 - b. secondary market organizations.
 - c. owned by the government.
 - d. institutions that people use to engage in direct finance.

ANSWER: a POINTS: 1

DIFFICULTY: Basic

TOPICS: Matching Borrowers with Lenders

OTHER: Factual

- 43. Which of the following is NOT a financial intermediary?
 - a. A credit union.
 - b. A life insurance company.
 - c. A mutual fund.
 - d. A labor union.

ANSWER: d POINTS: 1

DIFFICULTY: Basic

TOPICS: Matching Borrowers with Lenders

OTHER: Factual

- 44. Investors who wish to reduce their risk should
 - a. buy stocks of small companies.
 - b. diversify.
 - c. buy stocks of large companies.
 - d. keep large amounts of cash.

ANSWER: b
POINTS: 1

DIFFICULTY: Basic

TOPICS: Matching Borrowers with Lenders

OTHER: Factual

- 45. Owning a variety of securities means engaging in
 - a. securitization.
 - b. sterilization.
 - c. diversification.
 - d. free-riding.

ANSWER: c
POINTS: 1
DIFFICULTY: Basic

TOPICS: Matching Borrowers with Lenders

- 46. Beth's financial adviser has asked her to invest in a number of securities rather than investing in one. This is an example of
 - a. securitization.
 - b. free-riding.
 - c. sterilization.
 - d. diversification.

ANSWER: d
POINTS: 1
DIFFICULTY: Basic

TOPICS: Matching Borrowers with Lenders

OTHER: Conceptual

- 47. A financial intermediary specializes in knowing about people who apply for loans. The intermediary knows how to evaluate credit histories and the probabilities that borrowers will repay. These facts are examples of which of the following functions of financial intermediaries?
 - a. Gathering information
 - b. Helping savers diversify
 - c. Pooling funds
 - d. Taking short-term deposits in order to make long-term loans

ANSWER: a
POINTS: 1
DIFFICULTY: Basic

TOPICS: Matching Borrowers with Lenders

OTHER: Factual

- 48. Joe E. Conomist purchased 100 shares of IBM corporation in 2011 for \$10,000. In 2014, Joe sold these shares to Sally Forth for \$15,000. How would this sale of stock in 2014 affect IBM corporation?
 - a. IBM makes \$5,000 in profit.
 - b. IBM invests \$5,000 in capital equipment.
 - c. IBM suffers a loss of \$5,000.
 - d. IBM is unaffected.

ANSWER: d
POINTS: 1

DIFFICULTY: Moderate

TOPICS: Financial Markets

- 49. The market for new securities is known as:
 - a. the closed market.
 - b. the primary market.
 - c. the secondary market.
 - d. the open market.

ANSWER: b

POINTS: 1

DIFFICULTY: Basic

TOPICS: Financial Markets

OTHER: Factual

50. Suppose the quantity demanded for a security is

$$B_D = 150 - 0.1b$$
,

and the quantity supplied of the security is

$$B_S = 50 + 0.1b$$
,

where b is the price of the security in dollars. The equilibrium price of the security is

- a. \$50.
- b. \$125.
- c. \$250.
- d. \$500.

ANSWER: d

POINTS: 1

DIFFICULTY: Moderate

TOPICS: Financial Markets

OTHER: Conceptual

- 51. A financial market is
 - a. a place or a mechanism by which borrowers, savers, and financial intermediaries trade.
 - b. an electronic means of transacting.
 - c. a place where people engage in indirect finance.
 - d. a secondary market.

ANSWER: a

POINTS: 1

DIFFICULTY: Basic

TOPICS: Financial Markets

- 52. Which of the following is true of a financial market?
 - a. Only new securities can be traded in a financial market.
 - b. Some financial markets are local.
 - c. All financial markets have a central physical location.
 - d. All financial markets are secondary markets.

ANSWER: b
POINTS: 1
DIFFICULTY: Basic

TOPICS: Financial Markets

OTHER: Factual

- 53. The market in which a security is sold from one investor to another is known as
 - a. the closed market.
 - b. the primary market.
 - c. the secondary market.
 - d. the open market.

ANSWER: c
POINTS: 1
DIFFICULTY: Basic

TOPICS: Financial Markets

OTHER: Factual

- 54. GLTP Inc. transformed from a private company into a public company after offering its shares in a securities exchange for the first time. Such transactions take place in a
 - a. tertiary market.
 - b. closed market.
 - c. secondary market.
 - d. primary market.

ANSWER: d
POINTS: 1
DIFFICULTY: Basic

TOPICS: Financial Markets

55.		arket.
	or printery man	
	ANSWER:	c
	POINTS:	1
	DIFFICULTY:	Basic
	TOPICS:	Financial Markets
	OTHER:	Conceptual
56.	The U.S. govern a. primary mark b. stock market. c. secondary ma d. derivative ma	arket.
	ANSWER:	a
	POINTS:	1
	DIFFICULTY:	Basic
	TOPICS:	Financial Markets
	OTHER:	Factual
57.		nrket et
	ANSWER:	a
	POINTS:	1
	DIFFICULTY:	
	TOPICS:	Financial Markets
	OTHER:	Conceptual
	OTTEN.	

58.	• •	remaining unchanged, an increase in the supply of security A and a decrease in the demand for cause the price of security A toand the price of security B to
	ANSWER:	a
	POINTS:	1
	DIFFICULTY:	Basic
	TOPICS:	Financial Markets
	OTHER:	Conceptual
59.		remaining unchanged, an increase in the supply of security A and an increase in the demand for es the price of security A toand the price of security B to
	ANSWER:	b
	POINTS:	1
	DIFFICULTY:	Basic
	TOPICS:	Financial Markets
	OTHER:	Conceptual
60.		remaining unchanged, a decrease in the supply of security A and a decrease in the demand for cause the price of security A toand the price of security B to
	ANSWER:	c
	POINTS:	1
	DIFFICULTY:	Basic
	TOPICS:	Financial Markets
	OTHER:	Conceptual

61.	Everything	else remaining	g unchanged,	a decrease	in the supp	ly of security	A and an	n increase	in the c	demand for
	security B	will cause the	price of secur	ity A to _	and the	price of secur	ity B to			

a. fall; fall

b. fall; rise

c. rise; fall

d. rise; rise

ANSWER: d
POINTS: 1
DIFFICULTY: Basic

TOPICS: Financial Markets

OTHER: Conceptual

- 62. If the demand for a company's stock decreases, supply remaining unchanged,
 - a. both its equilibrium price and quantity will rise.
 - b. both its equilibrium price and quantity will fall.
 - c. its equilibrium price will rise while its equilibrium quantity will fall.
 - d. its equilibrium price will fall while its equilibrium quantity will rise.

ANSWER: b
POINTS: 1
DIFFICULTY: Basic

TOPICS: Financial Markets

OTHER: Conceptual

63. Suppose the quantity demanded for a security is

$$B_D = 150 - 0.1b$$
,

and the quantity supplied of the security is

$$B_S = 50 + 0.1b$$
,

where b is the price of the security in dollars. The equilibrium quantity of the security is

- a. 100.
- b. 125.
- c. 145.
- d. 500.

ANSWER: a POINTS: 1

DIFFICULTY: Moderate

TOPICS: Financial Markets

64. Suppose the quantity demanded for a security is

$$B_D = 150 - 0.1b$$
,

and the quantity supplied of the security is

$$B_S = 50 + 0.1b$$
,

where b is the price of the security in dollars. Suppose that the supply curve shifts to

$$B_S = 75 + 0.1b$$
.

The equilibrium price of the security

- a. rises by \$50.
- b. rises by \$125.
- c. falls by \$125.
- d. falls by \$50.

ANSWER: c
POINTS: 1

DIFFICULTY: Moderate

TOPICS: Financial Markets

OTHER: Conceptual

65. The quantity demanded of a security is Q_D = 220 - 0.2b and the quantity supplied of it is Q_S =100 + 0.2b. The equilibrium price of the security is _____.

- a. \$300
- b. \$280
- c. \$420
- d. \$500

ANSWER: a

POINTS: 1

DIFFICULTY: Moderate

TOPICS: Financial Markets

66. Suppose the quantity demanded for a security is

$$B_D = 150 - 0.1b$$
,

and the quantity supplied of the security is

$$B_S = 50 + 0.1b$$
,

where b is the price of the security in dollars. Suppose that the supply curve shifts to

$$B_S = 75 + 0.1b$$
.

The equilibrium quantity of the security

- a. rises by 12.5.
- b. rises by 2.5.
- c. falls by 2.5.
- d. falls by 12.5.

ANSWER: a POINTS: 1

DIFFICULTY: Moderate

TOPICS: Financial Markets

OTHER: Conceptual

- 67. In the 1980s, the United States suffered one of its worst financial crises when _____began to fail in large numbers.
 - a. commercial banks
 - b. stock brokers
 - c. money market mutual funds
 - d. savings and loan institutions

ANSWER: d
POINTS: 1
DIFFICULTY: Basic

TOPICS: The Financial System

OTHER: Factual

- 68. In the Asian crisis, which began in 1997,
 - a. investors began to pull their financial investments out of Asia with urgency.
 - b. large banks from Asia began purchasing large American banks, threatening the health of the U.S. financial system.
 - c. mutual funds in Asia began to fail in large numbers.
 - d. savings-and-loan institutions in Asia began to fail in large numbers.

ANSWER: a POINTS: 1

DIFFICULTY: Basic

TOPICS: The Financial System

- 69. One lesson learned from the financial crisis of 2008 was that
 - a. government regulators need to respond slowly when financial practices threaten the economy.
 - b. unregulated financial firms need to be prevented from growing so large that their failure would severely damage the economy.
 - c. the ease of owning a home has no relationship to the efficiency of the financial system.
 - d. unregulated financial firms need to be prevented from growing so small that their success would have no or little effect on the economy.

ANSWER: b
POINTS: 1
DIFFICULTY: Basic

TOPICS: The Financial System

OTHER: Factual

70. Suppose you are an investor facing a choice between three investments that are identical in every way except in terms of their rates of return and taxability. Which investment provides the highest after-tax return?

Investment A: interest rate 10 percent, tax rate 40 percent of interest income. Investment B: interest rate 8 percent, tax rate 25 percent of interest income.

Investment C: interest rate 6.5 percent, tax rate 0 percent.

Investment D: interest rate 5 percent, tax rate 1 percent.

a. Investment A

b. Investment B

c. Investment C

d. Investment D

ANSWER: c
POINTS: 1

DIFFICULTY: Moderate

TOPICS: Application to Everyday Life: What Do Investors Care About?

71. Consider the following four debt securities, which are identical in every characteristic except as noted: A corporate bond rated AAA X: A corporate bond rated BBB Y: A corporate bond rated AAA with a shorter time to maturity than bonds W and X A corporate bond rated AAA with the same time to maturity as bond Y that trades in a Z: more liquid market than bonds W, X, or Y Which of the following is the most likely order of the interest rates (yields to maturity) of the bonds from highest to lowest? a. X, W, Y, Z b. W, X, Z, Y c. X, Y, Z, W d. X, Z, W, Y ANSWER: a POINTS: 1 DIFFICULTY: Challenging TOPICS: Application to Everyday Life: What Do Investors Care About? OTHER: Conceptual 72. An investor calculating the standard deviation of different investments is measuring the of alternative investment portfolios. a. expected return b. risk c. taxation d. liquidity

Application to Everyday Life: What Do Investors Care About?

ANSWER:

POINTS:

TOPICS:

OTHER:

DIFFICULTY: Basic

b

1

Factual

73. Suppose you are an investor with a choice between three securities that are identical in every way except in terms of their rates of return and risk. Which investment provides the highest expected return?

Investment A: Total return = 10 percent with probability 50 percent

Total return = 20 percent with probability 50 percent

Investment B: Total return = 12 percent with probability 50 percent

Total return = 20 percent with probability 50 percent

Investment C: Total return = 5 percent with probability 60 percent

Total return = 25 percent with probability 40 percent

Investment D: Total return = 5 percent with probability 60 percent

Total return = 7 percent with probability 40 percent

a. Investment A

b. Investment B

c. Investment C

d. Investment D

ANSWER: d
POINTS: 1

DIFFICULTY: Moderate

TOPICS: Application to Everyday Life: What Do Investors Care About?

74. Suppose you are an investor with a choice between three securities that are identical in every way except in terms of their rates of return and risk. Which security has the least risk? Note: You can answer this question intuitively, without calculating the standard deviation. However, if you want to calculate the standard deviation, the equation is:

Standard deviation = S =
$$\left\{ p_1 \left(X_1 - E \right)^2 + p_2 \left(X_2 - E \right)^2 + \dots + p_N \left(X_N - E \right)^2 \right\}^{\frac{1}{2}}.$$

Investment A: total return = 10 percent with probability 50 percent

total return = 20 percent with probability 50 percent

Investment B: total return = 12 percent with probability 50 percent

total return = 20 percent with probability 50 percent

Investment C: total return = 5 percent with probability 60 percent

total return = 25 percent with probability 40 percent

Investment D: total return = 5 percent with probability 60 percent

total return = 7 percent with probability 40 percent

a. Investment A

b. Investment B

c. Investment C

d. Investment D

ANSWER: b
POINTS: 1

DIFFICULTY: Moderate

TOPICS: Application to Everyday Life: What Do Investors Care About?

OTHER: Conceptual

- 75. A nonmarketable security is one that
 - a. is not widely advertised.
 - b. has a present value of zero.
 - c. cannot be resold in a secondary market.
 - d. has only a current yield and not a capital-gains yield.

ANSWER: c
POINTS: 1
DIFFICULTY: Basic

TOPICS: Application to Everyday Life: What Do Investors Care About?

76. Consider three investments, where expected return is the expected value of the total return and risk is measured by the standard deviation. The investments are identical in every way except for their expected return and risk:

Investment A: expected return = 2 percent, risk = 5 percent
Investment B: expected return = 5 percent, risk = 4 percent
Investment C: expected return = 14 percent, risk = 20 percent
Investment D expected return = 6 percent, risk = 12 percent

If a risk-averse investor can buy only one of the three investments and compares each investment with the other three, which investment option would be never choose?

- a. Investment A, because its expected return is lower than Investment B and its risk is higher.
- b. Investment B, because its expected return is so much lower than Investment C.
- c. Investment C, because its risk exceeds its expected return.
- d. Investments D, because the expected return to investment D is so much lower than Investment C.

ANSWER: a POINTS: 1

DIFFICULTY: Moderate

TOPICS: Application to Everyday Life: What Do Investors Care About?

OTHER: Conceptual

- 77. Risk that cannot be eliminated by diversification is referred to as
 - a. idiosyncratic risk.
 - b. market risk.
 - c. default risk.
 - d. interest-rate risk.

ANSWER: b
POINTS: 1
DIFFICULTY: Basic

TOPICS: Application to Everyday Life: What Do Investors Care About?

OTHER: Factual

- 78. Which of the following statements is true?
 - a. Over the last fifty years, the risk spread between Aaa bonds and Baa bonds always remained positive except in 1998.
 - b. The risk spread between Aaa bonds and Baa bonds became negative only in the mid-1960s.
 - c. For most of the last twenty years, the risk bread between Aaa bonds and Baa bonds remained negative.
 - d. Over the last fifty years, the risk spread between Aaa bonds and Baa bonds never became negative

ANSWER: d
POINTS: 1
DIFFICULTY: Basic

TOPICS: Application to Everyday Life: What Do Investors Care About?

79.	The income an	investor receives in some period divided by the value of the security at the beginning of that period
	is known as	
	a. capital-gains	
	b. expected	
	c. current	
	d. realized	
	ANSWER:	c
	POINTS:	1
	DIFFICULTY:	Basic
	TOPICS:	Application to Everyday Life: What Do Investors Care About?
	OTHER:	Factual
80.	end of the year	tock at the beginning of a year is \$50. There is a 70 percent chance of its price rising to \$55 by the and a 30 percent chance of its price falling to \$45. The stock will pay an amount of \$2 at the end of arrent yield of the security is
	ANSWER:	a
	POINTS:	1
	DIFFICULTY:	Moderate
	KEYWORDS:	Applications to Everyday Life: What do investors care about?
	OTHER:	Conceptual
81.		e is \$20 at the beginning of a year and \$17 at the end of the year, and it pays a dividend of \$2 during ne stock's current yield ispercent.
	ANSWER:	d
	POINTS:	1
	DIFFICULTY:	Moderate
	TOPICS:	Application to Everyday Life: What Do Investors Care About?
	OTHER:	Conceptual

82	. If the price of a	share of Aqua Inc. increased from \$40 to \$44 over a year, the capital-gains yield per share was
	a. 10 percent b. 4 percent c. 11 percent d. 0.4 percent	
	ANSWER: POINTS: DIFFICULTY: TOPICS: OTHER:	a 1 Moderate Application to Everyday Life: What do investors care about? Conceptual
83.	•	e is \$20 at the beginning of a year and \$17 at the end of the year, and it pays a dividend of \$2 during ne stock's capital-gains yield ispercent.
	ANSWER: POINTS: DIFFICULTY: TOPICS: OTHER:	a 1 Moderate Application to Everyday Life: What Do Investors Care About? Conceptual
84	_	e is \$20 at the beginning of a year and \$17 at the end of the year, and it pays a dividend of \$2 during the stock's return ispercent.
	ANSWER: POINTS: DIFFICULTY: TOPICS: OTHER:	b 1 Moderate Application to Everyday Life: What Do Investors Care About? Conceptual

85. The dollar value of a company's stock rose from \$20 to \$21 during a year. If the stock paid a divide return on the stock was					
	a. 20 percent				
b. 1 percent					
	c. 3 percent				
	d. 14 percent				
	-				
	ANSWER:	a			
	POINTS:	1			
	DIFFICULTY:	Moderate			
	TOPICS:	Application to Everyday Life: What do investors care about?			
	OTHER:	Conceptual			
86	Risk is the amo	unt of uncertainty relating to thea security.			
	a. maturity of				
	b. principal of				
	c. liquidity of				
d. return on					
	ANSWER:	d			
	POINTS:	1			
	DIFFICULTY:	Basic			
	TOPICS:	Application to Everyday Life: What Do Investors Care About?			
	OTHER:	Factual			
87. The situation when the issuer of a security fails to make the payment promised is referred to as					
	a. default.				
	b. deviation.				
	c. failure.				
	d. defect.				
	ANSWER:	a			
	POINTS:	1			
	DIFFICULTY:	Basic			
	TOPICS:	Application to Everyday Life: What Do Investors Care About?			
	OTHER:	Factual			

88.	of the year, and	is \$20 at the beginning of a year. There is a 25 percent chance that the price will be \$17 at the end a 75 percent chance that the price will be \$25 at the end of the year. The stock will pay a dividend e year. The expected return on the stock is percent.			
	u. 40				
	ANSWER:	c			
	POINTS:	1			
	DIFFICULTY:	Moderate			
	TOPICS:	Application to Everyday Life: What Do Investors Care About?			
	OTHER:	Conceptual			
89.	The probabilitie	The probabilities of different returns on a stock over the year are:			
	Probability	Return			
	10%	_5%			
	15%	0%			
	20%	5%			
	30%	10%			
	25%	20%			
	a. 8.5	eturn on the stock ispercent.			
	b. 9.0				
	c. 9.5				
	d. 10.0				
	ANSWER:	a			
	POINTS:	1			
	DIFFICULTY:	Moderate			
	TOPICS:	Application to Everyday Life: What Do Investors Care About?			
	OTHER:	Conceptual			
90.	However, the pr	for \$1,000 today that promises interest of \$50 in one year plus the return of your principal. Tobability that the company will default and not pay you either interest nor repay your principal is 1 pected return on the bond ispercent.			
	ANSWER:	a			
	POINTS:	1			
	DIFFICULTY:	Moderate			
	TOPICS:	Application to Everyday Life: What Do Investors Care About?			
	OTHER:	Conceptual			

91	 Upside risk is the risk that investors face due to a. an increase in the market price of a security. b. an increase in the inflation rate. c. an decrease in the earnings of the firm they invested in. d. an increase in the exchange rate. 				
	ANSWER: POINTS: DIFFICULTY: TOPICS: OTHER:	a 1 Basic Application to Everyday Life: What do investors care about? Factual			
92	92. A stock's price is \$20 at the beginning of a year. There is a 25 percent chance that the price will be \$17 at the end of the year, and a 75 percent chance that the price will be \$25 at the end of the year. The stock will pay a dividend of \$3 during the year. The standard deviation of the return on the stock is percent (rounded to the nearest percentage point). a. 10 b. 12 c. 15 d. 17				
	ANSWER: POINTS: DIFFICULTY: TOPICS: OTHER:	d 1 Moderate Application to Everyday Life: What Do Investors Care About? Conceptual			
93	a. with the loweb. with the higherc. with the higher	vestor will choose an investment st standard deviation est standard deviation est return and highest risk st capital-gains yield a 1 Basic Application to Everyday Life: What do investors care about? Factual			

94. The probabilities of different returns on a stock over the year are:

Probability	Return
10%	-5%
15%	0%
20%	5%
30%	10%
25%	20%

The standard deviation of the return on the stock is about ____percent.

- a. 5
- b. 8
- c. 11
- d. 14

ANSWER: b
POINTS: 1

DIFFICULTY: Moderate

TOPICS: Application to Everyday Life: What Do Investors Care About?

OTHER: Conceptual

- 95. The ease with which you can buy or sell a security in the secondary market when you want to without incurring significant costs is known as
 - a. liquidity.
 - b. risk.
 - c. secondary marketization.
 - d. secondary market penetration.

ANSWER: a
POINTS: 1
DIFFICULTY: Basic

TOPICS: Application to Everyday Life: What Do Investors Care About?

OTHER: Factual

- 96. Which of the following risks is only faced by investors in debt securities?
 - a. Default risk
 - b. Upward risk
 - c. Downward risk
 - d. Risk due to inflation

ANSWER: a
POINTS: 1
DIFFICULTY: Basic

TOPICS: Application to Everyday Life: What do investors care about?

97.	. Which of the following securities is likely to be most liquid?							
	a. Debt security issued by the government of a small town							
	b. Stock in a small corporation							
	c. Government savings bonds							
	d. 3 month treasury bills							
	ANSWER: d							
	POINTS: 1							
	DIFFICULTY: Basic							
	TOPICS:	Application to Everyday Life: What Do Investors Care About?						
	OTHER:	Factual						
98.	A U.S. governm	nent savings bond is an example of a						
	a. marketable se	ecurity.						
	b. nonmarketabl	e security.						
	c. secondary sec	curity.						
	d. primary secur	rity.						
	ANSWER:	b						
	POINTS:	1						
	DIFFICULTY:	Basic						
	TOPICS:	Application to Everyday Life: What Do Investors Care About?						
	OTHER:	Factual						
99.	A sec	urity can be sold to another investor.						
	a. marketable							
	b. idiosyncratic							
	c. nonmarketable							
	d. systematic							
	ANSWER: a							
	POINTS:	1						
	DIFFICULTY:	Basic						
	TOPICS:	Application to Everyday Life: What Do Investors Care About?						
	OTHER:	Factual						
100.	Risk that can be	eliminated by diversification is						
	a. idiosyncratic	risk.						
	b. market risk.							
c. default risk.								
	d. interest-rate i	risk.						
	ANSWER:	a						
	POINTS:	1						
	DIFFICULTY:	Basic						
	TOPICS:	Application to Everyday Life: What Do Investors Care About?						
	OTHER:	Factual						

- 101. Risk that cannot be eliminated by diversification is
 - a. unsystematic risk.
 - b. systematic risk.
 - c. default risk.
 - d. interest-rate risk.

ANSWER: b
POINTS: 1

DIFFICULTY: Basic

TOPICS: Application to Everyday Life: What Do Investors Care About?

OTHER: Factual

- 102. Risk that can be eliminated by diversification is
 - a. unsystematic risk.
 - b. systematic risk.
 - c. default risk.
 - d. interest-rate risk.

ANSWER: a POINTS: 1

DIFFICULTY: Basic

TOPICS: Application to Everyday Life: What Do Investors Care About?

OTHER: Factual

103. A security has a price of \$3,000 and an amount to be repaid in a single payment of \$3,400. What is the amount of interest on the security?

ANSWER: Interest = amount repaid minus price

= \$3,400 - \$3,000

= \$400

POINTS: 1

TOPICS: Financial Markets

104. Suppose the quantity demanded for a security is

$$B_D = 100 - 0.1b$$
,

and the quantity supplied of the security is

$$B_S = 50 + 0.1b$$
,

where b is the price of the security in dollars.

- a. Calculate the equilibrium price and quantity of the security.
- b. Suppose demand increases by 50, so that $B_D = 150 0.1b$. Now, calculate the new equilibrium price and quantity of the security.

Set quantity demanded equal to quantity supplied to get 100 - 0.1b = 50 + 0.1b, so 50 = 0.2b,

a. so b = 250. Plug into either equation to find the equilibrium quantity. The equilibrium quantity

ANSWER: is 75.

Now, set quantity demanded equal to quantity supplied to get 15 - 0.1b = 50 + 0.1b, so

b. 100 = 0.2b, so b = 500. Plug into either equation to find the equilibrium quantity. The equilibrium quantity is 100.

POINTS: 1

TOPICS: Financial Markets

105. Consider three alternative bonds that you might invest in, each of which matures in one year. The following table shows the probability that you will receive each possible return. For example, if you buy bond A, the probability is 90 percent that your return will be 20 percent and the probability is 10 percent that your return will be −100 percent (in other words, you lose the entire amount invested).

Bond Bond A	Probability 90% 10%	Return 20% -100%
Bond B	75% 25%	40% -40%
Bond C	60% 40%	10% -10%

a. Calculate the expected return for all three bonds in percentage terms.

The standard deviations of the returns on these bonds are: Bond A, 36.0 percent; Bond B,

- b. 34.6 percent; Bond C, 9.8 percent. If you are extremely risk averse, which of the three bonds would you buy? Why?
- c. Would a risk-averse investor ever buy Bond A instead of one of the other bonds? Why or why not?

Explain and show all your work. In your calculations, you may round after three significant digits.

ANSWER: a.
$$\begin{split} E(A) &= (0.9 \times 0.2) + [0.1 \times (-1.0)] = 0.08 = 8\% \\ E(B) &= (0.75 \times 0.4) + [0.25 \times (-0.4)] = 0.2 = 20\% \\ E(C) &= (0.6 \times 0.1) + [0.4 \times (-0.1)] = 0.02 = 2\% \end{split}$$

- b. You would buy bond C, which has the lowest risk, even though the expected return is very low.
- You would never buy bond A because it is dominated by bond B; B has a higher expected return and a lower standard deviation.

POINTS:

106. Suppose a discount bond costs \$5,000 today and pays off some amount *b* in one year. Suppose that *b* is uncertain according to the following table of probabilities:

b:	\$5,000	\$5,500	\$6,000	\$6,500	\$7,000
Probability:	0.1	0.2	0.3	0.2	0.2

- a. Calculate the return (in percent) for each value of b. (Note: you may just calculate the total return and not worry about how this is split up between current yield and capital-gains yield.)
- b. Calculate the expected return.

Suppose an investor has a choice between buying this security or purchasing a different c. security that also costs \$5,000 today, but pays off \$5,500 with certainty in one year. How is an investor's choice of which security to purchase related to her degree of risk aversion?

ANSWER: a.	The returns are found by: return = $[(b - \$5000)/\$5000] \times 1$			
	\boldsymbol{b}	return		
	\$5000	0%		
	\$5500	10%		
	\$6000	20%		
	\$6500	30%		
	\$7000	40%		
b.	E	$= (0.1 \times 0\%) + (0.2 \times 10\%) + (0.3 \times 20\%) + (0.2 \times 30\%) +$		
		= 22%		

The trade-off is between a certain return of 10 percent versus a risky return of 22 percent. Which one the investor would choose depends on her degree of risk aversion; the more risk averse she is, the more likely she is to pick the safe asset instead of the risky one. As the degree of risk aversion declines, she is more likely to pick the risky asset.

40%)

POINTS: 1

c.

TOPICS: Application to Everyday Life: What Do Investors Care About?

107. Suppose you are an investor with a choice between three investments in debt securities that are identical in every way except in terms of their interest rates and taxability.

Investment A: Interest rate 10 percent, tax rate 40 percent of interest income Investment B: Interest rate 8 percent, tax rate 30 percent of interest income

Investment C: Interest rate 6.5 percent, tax rate 0 percent

Which investment provides the highest after-tax return? Show your work.

ANSWER: After-tax return = $(1 - t) \times$ interest rate.

A: $(1 - 0.40) \times 10\% = 6.0\%$ B: $(1 - 0.30) \times 8\% = 5.6\%$ C: $(1 - 0) \times 6.5\% = 6.5\%$

Investment C has the highest after-tax return.

POINTS: 1

108. Consider the following four debt securities, which are identical in every characteristic except as noted:

W: A corporate bond rated AAA

X: A corporate bond rate BBB

Y: A corporate bond rated AAA with a shorter time to maturity than bonds W and X

Z: A corporate bond rated AAA with the same time to maturity as bond Y that trades in a more liquid market than bonds W, X, or Y

List the bonds in the most likely order of the interest rates (yields to maturity) of the bonds from highest to lowest. Explain your work.

ANSWER: X, W, Y, Z

Reasoning: W is rated AAA, X is BBB, so X must have a higher interest rate than W to compensate for the additional default risk; so far: X, W. Y is rated AAA and has a shorter time to maturity than W and X, so it will have a lower interest rate than W because of shorter time to maturity and will have a lower interest rate than X because of less default risk and a shorter time to maturity; so far: X, W, Y. Z trades in a more liquid market than W, X, or Y and has equal or less risk than them, and an equal or less time to maturity, all of which give it the lowest interest rate. Final order: X, W, Y, Z.

POINTS: 1

- 109. Suppose you are an investor with a choice between three securities that are identical in every way except in terms of their rates of return and risk.
 - Investment A: Total return = 10 percent with probability 50 percent

Total return = 20 percent with probability 50 percent

Investment B: Total return = 12 percent with probability 40 percent

Total return = 18 percent with probability 60 percent

Investment C: Total return = 5 percent with probability 60 percent

Total return = 25 percent with probability 40 percent

- a. Which investment provides the highest expected return? Show your work by calculating the expected return of all three investments.
- b. Calculate the standard deviation of all three investments.
- c. What type of investor might prefer investment A? Who might prefer investment B?

ANSWER: a. A:
$$(0.5 \times 10\%) + (0.5 \times 20\%) = 15.0\%$$

B:
$$(0.4 \times 12\%) + (0.6 \times 18\%) = 15.6\%$$

C:
$$(0.6 \times 5\%) + (0.4 \times 25\%) = 13.0\%$$

Investment B has the higher expected return.

b. A:
$$\{[0.5 \times (0.1 - 0.15)^2] + [0.5 \times (0.2 - 0.15)^2]\}^{1/2} = 5.0\%$$

B:
$$\{[0.4 \times (0.12 - 0.156)^2] + [0.6 \times (0.18 - 0.156)^2]\}^{1/2} = 2.9\%$$

C:
$$\{[0.6 \times (0.05 - 0.13)^2] + [0.4 \times (0.25 - 0.13)^2]\}^{1/2} = 9.8\%$$

No risk-averse investor would ever prefer investment A because it has a lower expected

c. return and higher risk than investment B. Similarly, no risk-averse investor would ever prefer investment C. Given these choices, all risk-averse investors would choose investment B.

POINTS: 1

110. Suppose you are an investor with a choice between three securities that are identical in every way except in terms of their rates of return and risk.

Investment A: Total return = 10 percent with probability 50 percent

Total return = 20 percent with probability 50 percent

Investment B: Total return = 12 percent with probability 40 percent

Total return = 14 percent with probability 60 percent

Investment C: Total return = 10 percent with probability 60 percent

Total return = 30 percent with probability 40 percent

- a. Which investment provides the highest expected return? Show your work by calculating the expected return of all three investments.
- b. Calculate the standard deviation of all three investments.
- c. What type of investor might prefer investment A? Who might prefer investment B?

ANSWER: a. A:
$$(0.5 \times 10\%) + (0.5 \times 20\%) = 15.0\%$$

B:
$$(0.4 \times 12\%) + (0.6 \times 14\%) = 13.2\%$$

C:
$$(0.6 \times 10\%) + (0.4 \times 30\%) = 18.0\%$$

Investment C has the highest expected return.

b. A:
$$\{[0.5 \times (0.1 - 0.15)^2] + [0.5 \times (0.2 - 0.15)^2]\}^{1/2} = 5.0\%$$

B:
$$\{[0.4 \times (0.12 - 0.132)^2] + [0.6 \times (0.14 - 0.132)^2]\}^{1/2} = 1.0\%$$

C:
$$\{[0.6 \times (0.10 - 0.18)^2] + [0.4 \times (0.30 - 0.18)^2]\}^{1/2} = 9.8\%$$

A fairly risk-averse investor would prefer investment B because it has the lowest risk, but also the lowest expected return. A moderately risk-averse investor would prefer investment

c. A, because its risk and return are in the middle of A and C. An investor who is not very risk averse might prefer investment C, which has the highest expected return but also the highest risk.

POINTS: 1

- 111. Suppose that the price of a stock is \$50 at the beginning of a year and \$53 at the end of the year, and it pays a dividend of \$2 during the year.
 - a. What is the stock's current yield?
 - b. What is the stock's capital-gains yield?
 - c. What is the stock's return?

ANSWER: a. Current yield = \$2/\$50 = .04 = 4%.

b. Capital-gains yield = (\$53 - \$50)/\$50 = .06 = 6%

c. Return = current yield + capital-gains yield = 4% + 6% = 10%

POINTS: 1

TOPICS: Application to Everyday Life: What Do Investors Care About?

- 112. A stock's price is \$100 at the beginning of a year. There is a 25 percent chance that the price will be \$90 at the end of the year, and a 75 percent chance that the price will be \$130 at the end of the year. The stock will pay a dividend of \$10 during the year.
 - a. Calculate the stock's expected return.
 - b. Calculate the standard deviation of the stock's return.

ANSWER: a. Expected return =
$$[0.25 \times (\$90 + \$10 - \$100)/\$100] + [0.75 \times (\$130 + \$10 - \$100)/\$100]$$

= $(0.25 \times 0) + (0.75 \times 0.4) = 0.3 = 30\%$

b. Standard deviation =
$$\{[0.25 \times (0 - 0.3)^2] + [0.75 \times (0.4 - 0.3)^2]\}^{1/2} = 17.3\%$$

POINTS: 1

TOPICS: Application to Everyday Life: What Do Investors Care About?

113. The probabilities of different returns on a stock over the year are:

Probability	Return
10%	-5%
15%	0%
20%	5%
30%	10%
25%	20%

- a. Calculate the stock's expected return.
- b. Calculate the stock's standard deviation.

a. Expected return =
$$(0.10 \times -5\%) + (0.15 \times 0\%) + (0.20 \times 5\%) + (0.30 \times 10\%) + (0.25 \times 20\%) = 8.5\%$$

b. Standard deviation =
$$\{[0.10 \times (-0.05 - 0.085)^2] + \{[0.15 \times (0.00 - 0.085)^2] + \{[0.20 \times (0.05 - 0.085)^2] + \{[0.30 \times (0.10 - 0.085)^2] + \{[0.25 \times (0.20 - 0.085)^2] = 8.1\%$$

POINTS: 1