

Student: _____	Instructor: Yue Liu	Assignment: FIN 320 Sample Final Fall 2018
Date: _____	Course: FIN320 Dept 2018	

1. Which of the following types of firms does NOT have limited liability?

- ☐ A. corporations
- ☐ B. limited partnerships
- ☐ C. sole proprietorships
- ☐ D. none of the above

2. A C corporation earns \$9.10 per share before taxes. The corporate tax rate is 39%, the personal tax rate on dividends is 15%, and the personal tax rate on non-dividend income is 36%. What is the total amount of taxes paid if the company pays a \$6 dividend?

- ☐ A. \$6.23
- ☐ B. \$3.56
- ☐ C. \$5.34
- ☐ D. \$4.45

3. The principal goal of a financial manager is to maximize the wealth of the stockholders.

- ☐ True
- ☐ False

4. Which of the following best describes why a firm produces financial statements?

- ☐ A. to show the daily activities a firm has undertaken in the previous financial year, and what activities are planned for the near future
- ☐ B. to increase the intrinsic value of a firm
- ☐ C. to provide a means for interested outside parties such as creditors to obtain information about a firm, with an overview of the short – and long – term financial condition of a business
- ☐ D. to use as a tool when planning future investments within a firm

5.

Luther Corporation
Consolidated Balance Sheet
December 31, 2006 and 2005 (in \$ millions)

Assets	2006	2005	Liabilities and Stockholders' Equity	2006	2005
<i>Current Assets</i>			<i>Current Liabilities</i>		
Cash	58.8	58.5	Accounts payable	85.8	73.5
Accounts receivable	56.6	39.6	Notes payable / short-term debt	10.5	9.6
Inventories	46.4	42.9	Current maturities of long-term debt	38	36.9
Other current assets	6.1	3.0	Other current liabilities	6.0	12.0
Total current assets	167.9	144.0	Total current liabilities	140.3	132.0
<i>Long – Term Assets</i>			<i>Long-Term Liabilities</i>		
Land	65.6	62.1	Long-term debt	238.3	168.9
Buildings	108.1	91.5	Capital lease obligations		
Equipment	118.3	99.6			
Less accumulated depreciation	(54.8)	(52.5)	Deferred taxes	22.8	22.2
Net property, plant, and equipment	237.2	200.7	Other long-term liabilities	– – –	– – –
Goodwill	60.0	– –	Total long-term liabilities	261.1	191.1
Other long – term assets	63.0	42.0	Total liabilities	401.4	323.1
Total long – term assets	360.2	242.7	Stockholders' Equity	126.7	63.6
Total Assets	528.1	386.7	Total liabilities and Stockholders' Equity	528.1	386.7

Refer to the balance sheet above. When using the book value of equity, the debt-equity ratio for Luther in 2006 is closest to:

- ☐ A. 4.53
- ☐ B. 2.26
- ☐ C. 1.13
- ☐ D. 3.17

6.

Luther Corporation
Consolidated Balance Sheet
December 31, 2006 and 2005 (in \$ millions)

Assets	2006	2005	Liabilities and Stockholders' Equity	2006	2005
<i>Current Assets</i>			<i>Current Liabilities</i>		
Cash	63.8	58.5	Accounts payable	89.2	73.5
Accounts receivable	55.5	39.6	Notes payable / short – term debt	10.8	9.6
Inventories	44.7	42.9	Current maturities of long-term debt	37.9	36.9
Other current assets	5.3	3.0	Other current liabilities	6.0	12.0
Total current assets	169.3	144.0	Total current liabilities	143.9	132.0
<i>Long-Term Assets</i>			<i>Long – Term Liabilities</i>		
Land	66.2	62.1	Long – term debt	236.4	168.9
Buildings	107.3	91.5	Capital lease obligations		
Equipment	120.5	99.6			
Less accumulated depreciation	(56.9)	(52.5)	Deferred taxes	22.8	22.2
Net property, plant, and equipment	237.1	200.7	Other long-term liabilities	– – –	– – –
Goodwill	60.0	– –	Total long-term liabilities	259.2	191.1
Other long-term assets	63.0	42.0	Total liabilities	403.1	323.1
Total long-term assets	360.1	242.7	Stockholders' Equity	126.3	63.6
Total Assets	529.4	386.7	Total liabilities and Stockholders' Equity	529.4	386.7

Refer to the balance sheet above. Luther's quick ratio for 2006 is closest to:

- ☐ A. 0.87
- ☐ B. 1.21
- ☐ C. 1.73
- ☐ D. 1.3

7. Which of the following best describes the valuation principle?

- ☐ A. It is not possible to compare costs and benefits that occur at different points in time, in different currencies, or with different risks.
- ☐ B. If equivalent goods or securities trade simultaneously in different markets across the world, they will trade for the same price.
- ☐ C. The rate at which we can exchange money today for money in the future by borrowing or investing is the current market interest rate and is same across all banks.
- ☐ D. The value of a commodity or an asset to a firm or its investors is determined by its competitive market price. When the value of the benefits exceeds the value of the costs in terms of market prices, the decision will increase the market value of the firm.

8. A lender lends \$10,300, which is to be repaid in annual payments of \$2,050 for 6 years. Which of the following shows the timeline of the loan from the lender's perspective?

- ☐ A.

Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
– \$10,300	\$2,050	\$4,050	\$6,050	\$8,050	\$10,050	\$12,050
- ☐ B.

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
0	\$2,050	\$2,050	\$2,050	\$2,050	\$2,050
- ☐ C.

Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
– \$10,300	\$2,050	\$2,050	\$2,050	\$2,050	\$2,050	\$2,050
- ☐ D.

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
– \$10,300	\$2,050	\$2,050	\$2,050	\$2,050	\$2,050

9. Owen expects to receive \$22,000 at the end of next year from a trust fund. If a bank loans money at an interest rate of 7%, how much money can he borrow from the bank on the basis of this information?

- ☐ A. \$1,540
- ☐ B. \$20,561
- ☐ C. \$23,540
- ☐ D. \$10,281

10. If \$16,000 is invested at 10% per year, in approximately how many years will the investment double?

- ☐ A. 8.4 years
- ☐ B. 7.3 years
- ☐ C. 14.6 years
- ☐ D. 11 years

11. Jeff has the opportunity to receive lump-sum payments either now or in the future. Which of the following opportunities is the best, given that the interest rate is 7% per year?

- ☐ A. one that pays \$1,000 now
- ☐ B. one that pays \$1,200 in two years
- ☐ C. one that pays \$1,500 in five years
- ☐ D. one that pays \$1,800 in ten years

12. You are given two choices of investments, Investment A and Investment B. Both investments have the same future cash flows. Investment A has a discount rate of 4%, and Investment B has a discount rate of 5%. Which of the following is true?

- ☐ A. The present value of cash flows in Investment A is equal to the present value of cash flows in Investment B.
- ☐ B. The present value of cash flows in Investment A is higher than the present value of cash flows in Investment B.
- ☐ C. The present value of cash flows in Investment A is lower than the present value of cash flows in Investment B.
- ☐ D. No comparison can be made—we need to know the cash flows to calculate the present value.

13. Which of the following investments has a higher present value, assuming the same (strictly positive) interest rate applies to both investments?

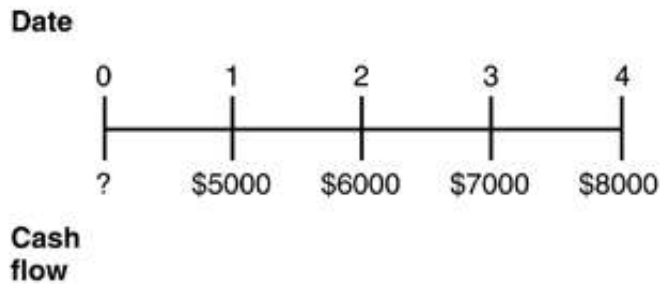
Year	Investment X	Investment Y
1	\$5,000	\$11,000
2	\$7,000	\$9,000
3	\$9,000	\$7,000
4	\$11,000	\$5,000

- ☐ A. Investment X has a higher present value.
- ☐ B. Investment Y has a higher present value.
- ☐ C. Investment X and Investment Y have the same present value, since the total of the cash flows is the same for both.
- ☐ D. No comparison can be made—we need to know the interest rate to calculate the present value.

14. A lottery winner will receive \$3 million at the end of each of the next twenty years. What is the future value (FV) of her winnings at the time of her final payment, given that the interest rate is 8.3% per year?

☐ A. \$198.70 million
☐ B. \$141.93 million
☐ C. \$113.54 million
☐ D. \$227.09 million

15. Consider the following timeline detailing a stream of cash flows:



If the current market rate of interest is 9%, then the present value (PV) of this stream of cash flows is closest to:

☐ A. \$20,710
☐ B. \$33,136
☐ C. \$10,355
☐ D. \$24,852

16. A homeowner in a sunny climate has the opportunity to install a solar water heater in his home for a cost of \$2,200. After installation the solar water heater will produce a small amount of hot water every day, forever, and will require no maintenance. How much must the homeowner save on water heating costs every year if this is to be a sound investment? (The interest rate is 6% per year.)

☐ A. \$177
☐ B. \$132
☐ C. \$162
☐ D. \$147

17. Assume that you are 30 years old today, and that you are planning on retirement at age 65. Your current salary is \$45,000 and you expect your salary to increase at a rate of 5% per year as long as you work. To save for your retirement, you plan on making annual contributions to a retirement account. Your first contribution will be made on your 31st birthday and will be 8% of this year's salary. Likewise, you expect to deposit 8% of your salary each year until you reach age 65. Assume that the rate of interest is 10%.

The present value (PV) (at age 30) of your retirement savings is closest to:

- ☐ A. \$57,868
- ☐ B. \$28,934
- ☐ C. \$63,655
- ☐ D. \$40,508

18. Which of the following statements is FALSE about interest rates?

- ☐ A. The annual percentage rate indicates the amount of simple interest earned in one year.
- ☐ B. The annual percentage rate indicates the amount of interest including the effect of compounding.
- ☐ C. The effective annual rate indicates the amount of interest that will be earned at the end of one year.
- ☐ D. As interest rates may be quoted for different time intervals, it is often necessary to adjust the interest rate to a time period that matches that of cash flows.

19. A pottery factory purchases a continuous belt conveyor kiln for \$51,000. A 8.1% APR loan with monthly payments is taken out to purchase the kiln. If the monthly payments are \$529.72, over what term is this loan being paid?

- ☐ A. 13 years
- ☐ B. 12 years
- ☐ C. 14 years
- ☐ D. 11 years

20. Emma runs a small factory that needs a vacuum oven for brazing small fittings. She can purchase the model she needs for \$180,000 up front, or she can lease it for five years for \$4200 per month. She can borrow at 7% APR, compounded monthly. Assuming that the oven will be used for five years, should she purchase the oven or should she lease it?

- ☐ A. Lease, since the present value (PV) of the lease is \$12,224 less than the cost of the oven.
- ☐ B. Lease, since the present value (PV) of the lease is \$2212 less than the cost of the oven.
- ☐ C. Lease, since the present value (PV) of the lease is \$8642 less than the cost of the oven.
- ☐ D. Buy, since the present value (PV) of the lease is \$32,108 more than the cost of the oven.

21. Market forces determine interest rates based ultimately on the willingness of individuals, banks, and firms to borrow, save, and lend.

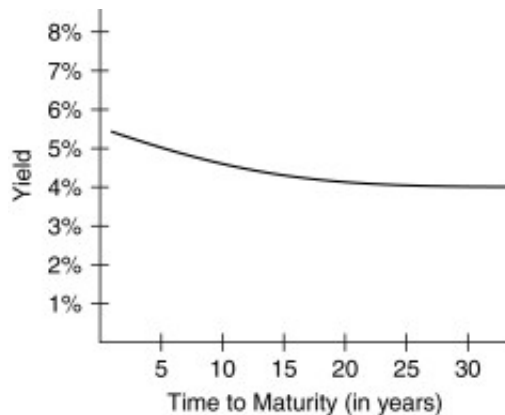
- ☐ True
☐ False

22. Historically, why were high inflation rates associated with high nominal interest rates?

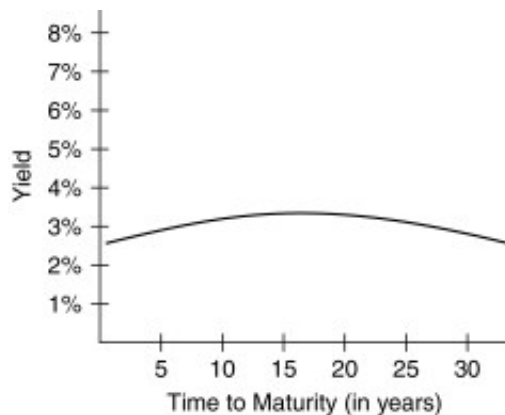
- ☐ A. Individuals will spend more when they expect their investments to increase in value.
☐ B. High inflation leads to a decrease in purchasing power and thus increases the attractiveness of investment over consumption in the short term.
☐ C. The real interest rate needs to be high enough so that individuals can expect their savings to have greater purchasing power in the future than in the present.
☐ D. Growth in investment and savings is encouraged when consumers are judged to be overspending.

23. Which of the following yield curves would most likely predict a downturn in the economy?

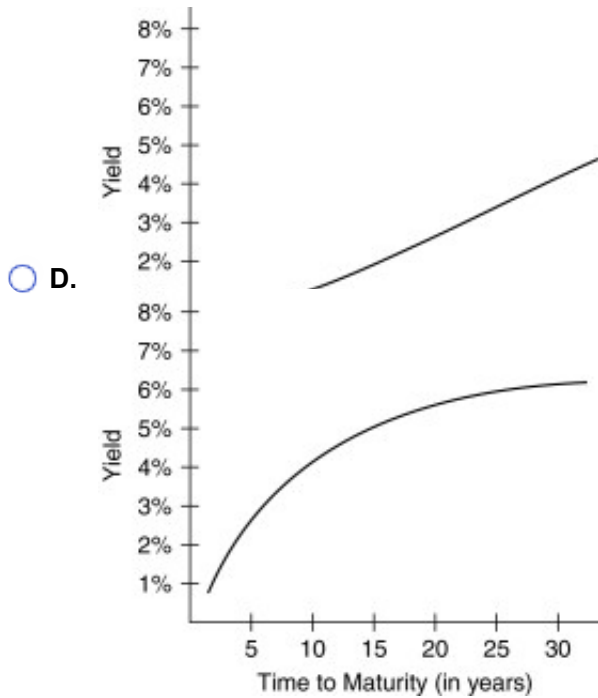
☐ A.



☐ B.



☐ C.



24. A risk-free, zero-coupon bond with a face value of \$5,000 has 15 years to maturity. If the YTM is 5.8%, which of the following would be closest to the price this bond will trade at?

- ☐ A. \$3,005
- ☐ B. \$2,576
- ☐ C. \$2,146
- ☐ D. \$3,434

25. What is the yield to maturity of a ten-year, \$10,000 bond with a 4.6% coupon rate and semiannual coupons if this bond is currently trading for a price of \$9,449?

- ☐ A. 6.38%
- ☐ B. 7.44%
- ☐ C. 5.32%
- ☐ D. 2.66%

26. The Sisyphian Company has a bond outstanding with a face value of \$5,000 that reaches maturity in 9 years. The bond certificate indicates that the stated coupon rate for this bond is 8% and that the coupon payments are to be made semiannually.

Assuming the appropriate YTM on the Sisyphian bond is 10.3%, then this bond will trade at

- ☐ A. a discount.
- ☐ B. a premium.
- ☐ C. par.
- ☐ D. none of the above

27. Matilda Industries pays a dividend of \$2.50 per share and is expected to pay this amount indefinitely. If Matilda's equity cost of capital is 9%, which of the following would be expected to be closest to Matilda's stock price?

- ☐ A. \$27.78
- ☐ B. \$16.67
- ☐ C. \$34.73
- ☐ D. \$22.22

28. Jumbuck Exploration has a current stock price of \$2.40 and is expected to sell for \$2.52 in one year's time, immediately after it pays a dividend of \$0.24. Which of the following is closest to Jumbuck Exploration's equity cost of capital?

- ☐ A. 7.5%
- ☐ B. 9%
- ☐ C. 18.75%
- ☐ D. 15%

29. Which of the following is NOT a way that a firm can increase its dividend?

- ☐ A. by increasing its earnings (net income)
- ☐ B. by decreasing its shares outstanding
- ☐ C. by increasing its retention rate
- ☐ D. by increasing its dividend payout rate

30. The owners of a chain of fast-food restaurants spend \$26 million installing donut makers in all their restaurants. This is expected to increase cash flows by \$12 million per year for the next five years. If the discount rate is 5.9%, were the owners correct in making the decision to install donut makers?

- ☐ A. No, as it has a net present value (NPV) of – \$2 million.
- ☐ B. Yes, as it has a net present value (NPV) of \$25 million.
- ☐ C. No, as it has a net present value (NPV) of – \$5 million.
- ☐ D. Yes, as it has a net present value (NPV) of \$15 million.

31. Which of the following is NOT a limitation of the payback rule?

- ☐ A. It does not consider the time value of money.
- ☐ B. It does not consider cash flows occurring after the payback period.
- ☐ C. Lacks a decision criterion that is economically based.
- ☐ D. It is difficult to calculate.

32. Consider a project with the following cash flows:

Year	Cash Flow
0	- 8000
1	5000
2	5000
3	5000
4	5000

Assume the appropriate discount rate for this project is 10%. The payback period for this project is closest to:

- ☐ A. 1.28
- ☐ B. 1.92
- ☐ C. 1.6
- ☐ D. 2.4

33. The Sisyphean Company is planning on investing in a new project. This will involve the purchase of some new machinery costing \$350,000. The Sisyphean Company expects cash inflows from this project as detailed below:

Year 1	Year 2	Year 3	Year 4
\$145,574	\$145,574	\$145,574	\$145,574

The appropriate discount rate for this project is 17%.

The internal rate of return (IRR) for this project is closest to:

- ☐ A. 18%
- ☐ B. 24%
- ☐ C. 28%
- ☐ D. 14%

34. Time:	0	1	2	3
Investment A:	– \$2 million	\$600,000	\$800,000	\$1,000,000
Investment B:	– \$2 million	\$1,000,000	\$800,000	\$600,000

An investor is considering the two investments shown above. Her cost of capital is 7%. Which of the following statements about these investments is true?

- ☐ A. The investor should take investment A since it has a greater internal rate of return (IRR).
- ☐ B. The investor should take investment B since it has a greater net present value (NPV).
- ☐ C. The investor should take investment A since it has a greater net present value (NPV).
- ☐ D. The investor should take investment B since it has a greater internal rate of return (IRR).

35. You are trying to decide between three mutually exclusive investment opportunities. The most appropriate tool for identifying the correct decision is _____.

- ☐ A. net present value (NPV)
- ☐ B. incremental internal rate of return (IRR)
- ☐ C. internal rate of return (IRR)
- ☐ D. profitability index

36. The ultimate goal of the capital budgeting process is to _____.

- ☐ A. determine how the consequences of making a particular decision affects the firm's revenues and costs
- ☐ B. determine the effect of the decision to accept or reject a project on the firm's cash flows
- ☐ C. forecast the consequences of a list of future projects for the firm
- ☐ D. list the projects and investments that a company plans to undertake in the future

37. Which of the following would you NOT consider when making a capital budgeting decision?

- ☐ A. the change in direct labor expense due to the purchase of a new machine
- ☐ B. the opportunity to lease out a warehouse instead of using it to house a new production line
- ☐ C. the additional taxes a firm would have to pay in the next year
- ☐ D. the cost of a marketing study completed last year

38. The Sisyphian Company is considering a new project that will have an annual depreciation expense of \$4 million. If Sisyphian's marginal corporate tax rate is 35% and its average corporate tax rate is 30%, then what is the value of the depreciation tax shield on the company's new project?

- ☐ A. \$1.1
- ☐ B. \$1.3
- ☐ C. \$1.0
- ☐ D. \$2.0

39. A company spends \$20 million researching whether it is possible to create a durable plastic from the process waste from feedstock preparation. The \$20 million should best be considered _____.
-
- ☐ A. as an opportunity cost
 - ☐ B. as a sunk cost
 - ☐ C. as a fixed overhead expense
 - ☐ D. as a capital cost
-
40. The average annual return over the period 1886-2006 for stocks that comprise the S&P 500 is 5%, and the standard deviation of returns is 15%. Based on these numbers, what is a 95% confidence interval for 2007 returns?
-
- ☐ A. - 15%, 25%
 - ☐ B. - 12.5%, 17.5%
 - ☐ C. - 25%, 35%
 - ☐ D. - 25%, 25%
-
41. Which of the following statements is FALSE?
-
- ☐ A. On average, smaller stocks have higher returns than larger stocks.
 - ☐ B. On average, Treasury Bills have lower returns than corporate bonds.
 - ☐ C. On average, larger stocks have higher volatility than smaller stocks.
 - ☐ D. Portfolios of large stocks are typically less volatile than individual large stocks.
-
42. A company's stock price jumped when it announced that its revenue had decreased because of the quality issues of its products. This is an example of _____.
-
- ☐ A. systematic risk
 - ☐ B. market risk
 - ☐ C. undiversifiable risk
 - ☐ D. unsystematic risk
-
43. Suppose you invest in 150 shares of Merck at \$40 per share and 150 shares of Yahoo at \$25 per share. If the price of Merck increases to \$45 and the price of Yahoo decreases to \$22 per share, what is the return on your portfolio?
-
- ☐ A. 4.92%
 - ☐ B. 4.15%
 - ☐ C. 9.23%
 - ☐ D. 3.08%
-

44. You expect General Motors (GM) to have a beta of 1.3 over the next year and the beta of Exxon Mobil (XOM) to be 0.9 over the next year. Also, you expect the volatility of General Motors to be 40% and that of Exxon Mobil to be 30% over the next year. Which stock has more systematic risk? Which stock has more total risk?
-
- ☐ A. XOM, GM
- ☐ B. GM, GM
- ☐ C. XOM, XOM
- ☐ D. GM, XOM
-
45. Your estimate of the market risk premium is 7%. The risk-free rate of return is 3.4% and General Motors has a beta of 1.4. According to the Capital Asset Pricing Model (CAPM), what is its expected return?
-
- ☐ A. 13.9%
- ☐ B. 11.9%
- ☐ C. 13.2%
- ☐ D. 12.5%
-
46. The _____ of a firm's debt can be used as the firm's current cost of debt.
-
- ☐ A. yield to maturity
- ☐ B. current yield
- ☐ C. discount yield
- ☐ D. coupon rate
-
47. IBM expects to pay a dividend of \$6 next year and expects these dividends to grow at 9% a year. The price of IBM is \$95 per share. What is IBM's cost of equity capital?
-
- ☐ A. 6.13%
- ☐ B. 9%
- ☐ C. 4.59%
- ☐ D. 15.32%
-
48. The market value of Fords' equity, preferred stock, and debt are \$8 billion, \$1 billion, and \$11 billion, respectively. Ford has a beta of 1.7, the market risk premium is 6%, and the risk-free rate of interest is 3%. Ford's preferred stock pays a dividend of \$2 each year and trades at a price of \$27 per share. Ford's debt trades with a yield to maturity of 7.5%. What is Ford's weighted average cost of capital if its tax rate is 35%?
-
- ☐ A. 9.16%
- ☐ B. 8.75%
- ☐ C. 10%
- ☐ D. 8.33%
-

49. Firms that have many divisions with different lines of business do not use a companywide WACC to evaluate projects.

- ☐ True
 - ☐ False
-

50. Which of the following statements is FALSE?

- ☐ A. Issuance costs should be treated as cash outflows in NPV analysis.
- ☐ B. A project that can be financed with internal funds will be less costly than the same project if it were financed with external funds.
- ☐ C. Issuance costs increase the WACC.
- ☐ D. External equity is less expensive than retained earnings.

1. C. sole proprietorships

2. D. \$4.45

3. True

4. C.

to provide a means for interested outside parties such as creditors to obtain information about a firm, with an overview of the short – and long – term financial condition of a business

5. B. 2.26

6. A. 0.87

7. D.

The value of a commodity or an asset to a firm or its investors is determined by its competitive market price. When the value of the benefits exceeds the value of the costs in terms of market prices, the decision will increase the market value of the firm.

8.

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
C.	– \$10,300	\$2,050	\$2,050	\$2,050	\$2,050	\$2,050	\$2,050

9. B. \$20,561

10. B. 7.3 years

11. C. one that pays \$1,500 in five years

12. B. The present value of cash flows in Investment A is higher than the present value of cash flows in Investment B.

13. B. Investment Y has a higher present value.

14. B. \$141.93 million

15. A. \$20,710

16. B. \$132

17. A. \$57,868

18. B. The annual percentage rate indicates the amount of interest including the effect of compounding.

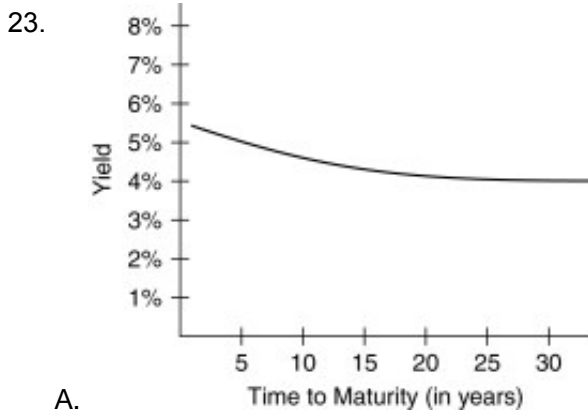
19. A. 13 years

20. D. Buy, since the present value (PV) of the lease is \$32,108 more than the cost of the oven.

21. True

22. C.

The real interest rate needs to be high enough so that individuals can expect their savings to have greater purchasing power in the future than in the present.



24. C. \$2,146

25. C. 5.32%

26. A. a discount.

27. A. \$27.78

28. D. 15%

29. C. by increasing its retention rate

30. B. Yes, as it has a net present value (NPV) of \$25 million.

31. D. It is difficult to calculate.

32. C. 1.6

33. B. 24%

34. B. The investor should take investment B since it has a greater net present value (NPV).

35. A. net present value (NPV)

36. B. determine the effect of the decision to accept or reject a project on the firm's cash flows

37. D. the cost of a marketing study completed last year

38. B. \$1.3

39. B. as a sunk cost

40. C. - 25%, 35%

41. C. On average, larger stocks have higher volatility than smaller stocks.

42. D. unsystematic risk

43. D. 3.08%

44. B. GM, GM

45. C. 13.2%

46. A. yield to maturity

47. D. 15.32%

48. D. 8.33%

49. True

50. D. External equity is less expensive than retained earnings.
