

***Finance - Applications and Theory 5th edition
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Finance, 5e (Cornett)

Chapter 2 Reviewing Financial Statements

1) Which financial statement reports a firm's assets, liabilities, and equity at a particular point in time?

- A) balance sheet
- B) income statement
- C) statement of retained earnings
- D) statement of cash flows

Answer: A

Difficulty: 1 Easy

Topic: Balance sheet

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

2) Which financial statement shows the total revenues that a firm earns and the total expenses the firm incurs to generate those revenues over a specific period of time—generally one year?

- A) balance sheet
- B) income statement
- C) statement of retained earnings
- D) statement of cash flows

Answer: B

Difficulty: 1 Easy

Topic: Income statement

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

3) Which financial statement reports the amounts of cash that the firm generated and distributed during a particular time period?

- A) balance sheet
- B) income statement
- C) statement of retained earnings
- D) statement of cash flows

Answer: D

Difficulty: 1 Easy

Topic: Statement of cash flows

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

4) Which financial statement reconciles net income earned during a given period and any cash dividends paid within that period using the change in retained earnings between the beginning and end of the period?

- A) balance sheet
- B) income statement
- C) statement of retained earnings
- D) statement of cash flows

Answer: C

Difficulty: 1 Easy

Topic: Statement of retained earnings

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

5) On which of the four major financial statements would you find the common stock and paid-in surplus?

- A) balance sheet
- B) income statement
- C) statement of cash flows
- D) statement of retained earnings

Answer: A

Difficulty: 1 Easy

Topic: Balance sheet

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

6) On which of the four major financial statements would you find the increase in inventory?

- A) balance sheet
- B) income statement
- C) statement of cash flows
- D) statement of retained earnings

Answer: C

Difficulty: 1 Easy

Topic: Statement of cash flows

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

7) On which of the four major financial statements would you find net plant and equipment?

- A) balance sheet
- B) income statement
- C) statement of cash flows
- D) statement of retained earnings

Answer: A

Difficulty: 1 Easy

Topic: Balance sheet

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

8) Financial statements of publicly traded firms can be found in a number of places. Which of the following is *NOT* an option for finding publicly traded firms' financial statements?

- A) Facebook
- B) a firm's website
- C) Securities and Exchange Commission's (SEC) website
- D) websites such as finance.yahoo.com

Answer: A

Difficulty: 1 Easy

Topic: Financial statements

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

9) Which of the following changes are true of the Tax Cut and Jobs Act (TCJA) of 2017?

- A) Businesses are allowed to immediately deduct 100% of the cost of eligible property in the year it is placed into service through 2022.
- B) Allowable bonus depreciations will phase down over four years.
- C) Both A and B are true.
- D) None of the above are true.

Answer: C

Difficulty: 1 Easy

Topic: Financial statements

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

10) Which of the following statements is **NOT** true of the Tax Cut and Jobs Act (TCJA) of 2017?

- A) The act permanently lowers corporate taxes from a progressive schedule to a flat 21% starting in 2018.
- B) The act limits the deductibility of net interest expense that exceeds 21% of a firm's adjusted taxable income starting in 2018.
- C) Neither A or B is false.
- D) Both A and B are false.

Answer: B

Difficulty: 1 Easy

Topic: Financial statements

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

11) For which of the following would one expect the book value of the asset to differ widely from its market value?

- A) cash
- B) accounts receivable
- C) inventory
- D) fixed assets

Answer: D

Difficulty: 1 Easy

Topic: Market and book values

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-02 Differentiate between book (or accounting) value and market value.

12) Common stockholders' equity divided by number of shares of common stock outstanding is the formula for

- A) earnings per share (EPS).
- B) dividends per share (DPS).
- C) book value per share (BVPS).
- D) market value per share (MVPS).

Answer: C

Difficulty: 1 Easy

Topic: Per-share valuations

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-02 Differentiate between book (or accounting) value and market value.

13) When a firm alters its capital structure to include more or less debt (and, in turn, less or more equity), it impacts which of the following?

- A) the residual cash flows available for stockholders
- B) the number of shares of stock outstanding
- C) the earnings per share (EPS)
- D) all of these choices are correct.

Answer: D

Difficulty: 2 Medium

Topic: Capital structure basics

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-03 Explain how taxes influence corporate managers' and investors' decisions.

14) This is the amount of additional taxes a firm must pay out for every additional dollar of taxable income it *earns*.

- A) average tax rate
- B) marginal tax rate
- C) progressive tax system
- D) earnings before tax

Answer: B

Difficulty: 1 Easy

Topic: Taxes

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-03 Explain how taxes influence corporate managers' and investors' decisions.

15) An equity-financed firm will

- A) pay more in income taxes than a debt-financed firm.
- B) pay less in income taxes than a debt-financed firm.
- C) pay the same in income taxes as a debt-financed firm.
- D) not pay any income taxes.

Answer: A

Difficulty: 2 Medium

Topic: Taxes

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-03 Explain how taxes influence corporate managers' and investors' decisions.

16) Deferred taxes occur when a company postpones taxes on profits pertaining to

- A) tax years they are under an audit by the Internal Revenue Service.
- B) funds they have not collected because they use the accrual method of accounting.
- C) a loss they intend to carry back or carry forward on their income tax returns.
- D) a particular period as they end up postponing part of their tax liability on this year's profits to future years.

Answer: D

Difficulty: 2 Medium

Topic: Taxes

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-03 Explain how taxes influence corporate managers' and investors' decisions.

17) When evaluating the statement of cash flows, which of the following statement(s) is/are true?

- A) Negative cash flow could be a result of investments in new fixed assets or inventory.
- B) Cash expenditures used to expand the firm could drain cash during expansion periods.
- C) Can assist financial professionals in identifying where cash is generated and dispersed.
- D) All of the above.

Answer: D

Difficulty: 2 Medium

Topic: Taxes

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-03 Explain how taxes influence corporate managers' and investors' decisions.

18) Net operating profit after taxes (NOPAT) is defined as which of the following?

- A) net profit a firm earns before taxes, but after any financing costs
- B) net profit a firm earns after taxes, and after any financing cost
- C) net profit a firm earns after taxes, but before any financing costs
- D) net profit a firm earns before taxes, and before any financing cost

Answer: C

Difficulty: 2 Medium

Topic: Free cash flow

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-04 Differentiate between accounting income and cash flows.

19) This is cash flow available for payments to stockholders and debt holders of a firm after the firm has made investments in assets necessary to sustain the ongoing operations of the firm.

- A) net income available to common stockholders
- B) cash flow from operations
- C) net cash flow
- D) free cash flow

Answer: D

Difficulty: 1 Easy

Topic: Free cash flow

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

20) Which of the following activities result in an increase in a firm's cash?

- A) decrease fixed assets
- B) decrease accounts payable
- C) pay dividends
- D) repurchase of common stock

Answer: A

Difficulty: 2 Medium

Topic: Sources and uses of cash

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

21) These are cash inflows and outflows associated with buying and selling of fixed or other long-term assets.

- A) cash flows from operations
- B) cash flows from investing activities
- C) cash flows from financing activities
- D) net change in cash and cash equivalents

Answer: B

Difficulty: 1 Easy

Topic: Investing activities

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

22) Which statement regarding retained earnings is false?

- A) Reinvesting earnings is more expensive than raising capital from outside sources.
- B) Increases in retained earnings can occur because a firm has net income.
- C) Increases in retained earnings can occur when the firm's common stockholders let management reinvest net income back into the firm rather than payout dividends.
- D) None of the above.

Answer: A

Difficulty: 1 Easy

Topic: Investing activities

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

- 23) If a company reports a large amount of net income on its income statement during a year, the firm could have
- A) positive cash flow.
 - B) negative cash flow.
 - C) zero cash flow.
 - D) all of these choices are correct.

Answer: D

Difficulty: 2 Medium

Topic: Cash flows

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

- 24) Free cash flow is defined as
- A) cash flows available for payments to stockholders of a firm after the firm has made payments to all others with claims against it.
 - B) cash flows available for payments to stockholders and debt holders of a firm after the firm has made payments necessary to vendors.
 - C) cash flows available for payments to stockholders and debt holders of a firm after the firm has made investments in assets necessary to sustain the ongoing operations of the firm.
 - D) cash flows available for payments to stockholders and debt holders of a firm that would be tax-free to the recipients.

Answer: C

Difficulty: 2 Medium

Topic: Free cash flow

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

25) The Sarbanes-Oxley Act requires public companies to ensure which of the following individuals have considerable experience applying generally accepted accounting principles (GAAP) for financial statements?

- A) external auditors
- B) internal auditors
- C) chief financial officers
- D) corporate boards' audit committees

Answer: D

Difficulty: 2 Medium

Topic: Ethics, governance, and regulation

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-06 Observe cautions that should be taken when examining financial statements.

26) Within the GAAP framework:

- A) Managers may smooth earnings to show investors that firm assets are growing.
- B) Managers may take steps to over or understate earnings.
- C) Both A and B are possible
- D) None of the above.

Answer: C

Difficulty: 2 Medium

Topic: Ethics, governance, and regulation

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-06 Observe cautions that should be taken when examining financial statements.

27) You are evaluating the balance sheet for Campus Corporation. From the balance sheet you find the following balances: cash and marketable securities = \$400,000, accounts receivable = \$200,000, inventory = \$100,000, accrued wages and taxes = \$10,000, accounts payable = \$300,000, and notes payable = \$600,000. What is Campus's net working capital?

- A) -\$210,000
- B) \$700,000
- C) \$910,000
- D) \$1,610,000

Answer: A

Explanation: net working capital = current assets – current liabilities.

Cypress's current assets	=	
Cash and marketable securities	=	\$ 400,000
Accounts receivable	=	\$ 200,000
Inventory	=	\$ 100,000
Total current assets	=	<u>\$ 700,000</u>
Accrued wages and taxes	=	\$ 10,000
Accounts payable	=	\$ 300,000
Notes payable	=	\$ 600,000
Total current liabilities		<u>\$ 910,000</u>

So the firm's net working capital is -\$210,000 (\$700,000 – \$910,000).

Difficulty: 1 Easy

Topic: Net working capital

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

28) Jack and Jill Corporation's year-end 2018 balance sheet lists current assets of \$250,000, fixed assets of \$800,000, current liabilities of \$195,000, and long-term debt of \$300,000. What is Jack and Jill's total stockholders' equity?

- A) \$495,000
- B) \$555,000
- C) \$1,050,000
- D) There is not enough information to calculate total stockholders' equity.

Answer: B

Explanation: Recall the balance sheet identity in Equation 2-1: $\text{Assets} = \text{Liabilities} + \text{Equity}$. Rearranging this equation: $\text{Equity} = \text{Assets} - \text{Liabilities}$. Thus, the balance sheets would appear as follows:

Book value		Book value	
Assets		Liabilities and Equity	
Current assets	\$ 250,000	Current liabilities	\$ 195,000
Fixed assets	800,000	Long—term debt	300,000
		Stockholder's equity	<u>555,000</u>
Total	<u>\$ 1,050,000</u>	Total	<u>\$ 1,050,000</u>

Difficulty: 1 Easy

Topic: Balance sheet

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

29) Bullseye, Inc.'s 2018 income statement lists the following income and expenses: EBIT = \$900,000, interest expense = \$85,000, and net income = \$570,000. What are the 2018 taxes reported on the income statement?

- A) \$245,000
- B) \$330,000
- C) \$815,000
- D) There is not enough information to calculate 2018 taxes.

Answer: A

Explanation: Using the setup of an Income Statement in Table 2.2:

EBIT	\$ 900,000
Interest expense	<u>– 85,000</u>
EBT	815,000
Taxes	<u>– 245,000</u>
Net income	<u>\$ 570,000</u>

Difficulty: 1 Easy

Topic: Income statement

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

30) Consider a firm with an EBIT of \$500,000. The firm finances its assets with \$2,000,000 debt (costing 6 percent) and 50,000 shares of stock selling at \$20.00 per share. To reduce the firm's risk associated with this financial leverage, the firm is considering reducing its debt by \$1,000,000 by selling an additional 50,000 shares of stock. The firm is in the 40 percent tax bracket. The change in capital structure will have no effect on the operations of the firm. Thus, EBIT will remain \$500,000. What is the change in the firm's EPS from this change in capital structure?

- A) decrease EPS by \$1.68
- B) decrease EPS by \$1.92
- C) decrease EPS by \$3.20
- D) increase EPS by \$0.72

Answer: B

Explanation: Using the setup of an Income Statement in Example 2.2:

	Before Capital Structure Change	After Capital Structure Change
Change		
EBIT	\$ 500,000	\$ 500,000
–Interest ($\$2,000,000 \times 0.06$)	<u>120,000</u>	
–Interest ($\$1,000,000 \times 0.06$)		<u>60,000</u>
EBT	\$ 380,000	\$ 440,000
–Taxes (40%)	<u>152,000</u>	<u>176,000</u>
Net Income	\$ 228,000	\$ 264,000
Divide # of Shares	50,000	100,000
EPS	\$ 4.56	\$ 2.64

The change in capital structure would dilute the stockholders' EPS by \$1.92.

Difficulty: 1 Easy

Topic: Per-share valuations

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

31) Consider a firm with an EBIT of \$5,000,000. The firm finances its assets with \$20,000,000 debt (costing 5 percent) and 70,000 shares of stock selling at \$50.00 per share. To reduce the firm's risk associated with this financial leverage, the firm is considering reducing its debt by \$5,000,000 by selling an additional 100,000 shares of stock. The firm is in the 40 percent tax bracket. The change in capital structure will have no effect on the operations of the firm. Thus, EBIT will remain \$5,000,000. What is the change in the firm's EPS from this change in capital structure?

- A) decrease EPS by \$9.29
- B) decrease EPS by \$18.70
- C) decrease EPS by \$19.29
- D) increase EPS by \$2.14

Answer: C

Explanation: Using the setup of an Income Statement in Example 2.2:

	Before Capital Structure Change	After Capital Structure Change
Change		
EBIT	\$ 5,000,000	\$ 5,000,000
–Interest (\$20,000,000 × 0.05)	1,000,000	
–Interest (\$15,000,000 × 0.05)		750,000
EBT	\$ 4,000,000	\$ 4,250,000
–Taxes (40%)	1,600,000	1,700,000
Net Income	\$ 2,400,000	\$ 2,550,000
Divide # of Shares	70,000	170,000
EPS	\$ 34.29	\$ 15.00

The change in capital structure would dilute the stockholders' EPS by \$19.29.

Difficulty: 1 Easy

Topic: Per-share valuations

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

32) Barnyard, Inc.'s 2018 income statement lists the following income and expenses: EBIT = \$500,000, interest expense = \$45,000, and taxes = \$152,000. Barnyard's has no preferred stock outstanding and 200,000 shares of common stock outstanding. What are its 2018 earnings per share?

- A) \$2.50
- B) \$2.275
- C) \$1.74
- D) \$1.515

Answer: D

Explanation: Using the setup of an Income Statement in Table 2.2:

EBIT	\$ 500,000
Interest expense	<u>−45,000</u>
EBT	455,000
Taxes	<u>− 152,000</u>
Net income	<u>\$ 303,000</u>

Thus,

$$\text{Earnings per share (EPS)} = \frac{303,000}{200,000} = \$1.515 \text{ per share}$$

Difficulty: 1 Easy

Topic: Per-share valuations

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

33) Eccentricity, Inc. had \$300,000 in 2018 taxable income. Using the tax schedule from Table 2.3, what are the company's 2018 income taxes, average tax rate, and marginal tax rate, respectively?

Taxable income	Pay this amount on Base income	Plus this percentage on anything over the base
\$0 – \$50,000	\$ 0	15%
\$50,001 – \$75,000	\$ 7,500	25%
\$75,001 – \$100,000	\$ 13,750	34%
\$100,001 – \$335,000	\$ 22,250	39%
\$335,000 – \$10,000,000	\$ 113,900	34%

- A) \$22,250, 7.42%, 39%
- B) \$78,000, 26.00%, 39%
- C) \$100,250, 33.42%, 39%
- D) \$139,250, 46.42%, 39%

Answer: C

Explanation: From Table 2.3, the \$300,000 of taxable income puts Eccentricity in the 39 percent marginal tax bracket. Thus,

Tax liability = Tax on base amount + Tax rate (amount over base): = \$22,250 + .39 (\$300,000 – \$100,000) = \$100,250

Note that the base amount is the maximum dollar value listed in the previous tax bracket. The average tax rate for Eccentricity Inc. comes to:

$$\begin{aligned}\text{Average tax rate} &= \frac{\$100,250}{\$300,000} \\ &= 33.4167\%\end{aligned}$$

If Eccentricity earned \$1 more of taxable income, it would pay 39 cents (its tax rate of 39 percent) more in taxes. Thus, the firm's marginal tax rate is 39 percent.

Difficulty: 1 Easy

Topic: Taxes

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-03 Explain how taxes influence corporate managers' and investors' decisions.

34) Swimmy, Inc. had \$400,000 in 2018 taxable income. Using the tax schedule from Table 2.3, what are the company's 2018 income taxes, average tax rate, and marginal tax rate, respectively?

Taxable income	Pay this amount on Base income	Plus this percentage on anything over the base
\$0 – \$50,000	\$ 0	15%
\$50,001 – \$75,000	\$ 7,500	25%
\$75,001 – \$100,000	\$ 13,750	34%
\$100,001 – \$335,000	\$ 22,250	39%
\$335,000 – \$10,000,000	\$ 113,900	34%

- A) \$22,100, 5.53%, 34%
- B) \$113,900, 28.48%, 34%
- C) \$136,000, 34.00%, 34%
- D) \$136,000, 39.00%, 34%

Answer: C

Explanation: From Table 2.3, the \$400,000 of taxable income puts Swimmy in the 34 percent marginal tax bracket. Thus, Tax liability = Tax on base amount + Tax rate (amount over base): = \$113,900 + 0.34 (\$400,000 – \$335,000) = \$136,000

Note that the base amount is the maximum dollar value listed in the previous tax bracket. The average tax rate for Swimmy Inc. comes to:

$$\begin{aligned}\text{Average tax rate} &= \frac{\$136,000}{\$400,000} \\ &= 34\%\end{aligned}$$

If Swimmy earned \$1 more of taxable income, it would pay 34 cents (its tax rate of 34 percent) more in taxes. Thus, the firm's marginal tax rate is 34 percent.

Difficulty: 1 Easy

Topic: Taxes

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-03 Explain how taxes influence corporate managers' and investors' decisions.

35) Scuba, Inc. is concerned about the taxes paid by the company in 2018. In addition to \$5 million of taxable income, the firm received \$80,000 of interest on state-issued bonds and \$500,000 of dividends on common stock it owns in Boating Adventures, Inc. What are Scuba's tax liability, average tax rate, and marginal tax rate, respectively?

Taxable income	Pay this amount on Base income	Plus this percentage on anything over the base
\$0 – \$50,000	\$ 0	15%
\$50,001 – \$75,000	\$ 7,500	25%
\$75,001 – \$100,000	\$ 13,750	34%
\$100,001 – \$335,000	\$ 22,250	39%
\$335,000 – \$10,000,000	\$ 113,900	34%

- A) \$1,637,100, 31.79%, 34%
- B) \$1,751,000, 34.00%, 34%
- C) \$1,870,000, 34.00%, 34%
- D) \$1,983,900, 36.07%, 34%

Answer: B

Explanation: In this case, interest on the state-issued bonds is not taxable and should not be included in taxable income. Further, the first 70 percent of the dividends received from Boating Adventures is not taxable. Thus, only 30 percent of the dividends received are taxed, so: Taxable income = \$5,000,000 + (0.3) \$500,000 = \$5,150,000.

Now Scuba's tax liability will be: Tax liability = \$113,900 + 0.34 (\$5,150,000 – \$335,000) = \$1,751,000.

The \$500,000 of dividend income increased Scuba's tax liability by \$51,000 (= (0.3) × \$500,000 × (0.34)). Scuba's resulting average tax rate is now: Average tax rate = \$1,751,000/\$5,150,000 = 34.00%.

Finally, if Scuba earned \$1 more of taxable income, it would still pay 34 cents (based upon its marginal tax rate of 34 percent) more in taxes.

Difficulty: 1 Easy

Topic: Taxes

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-03 Explain how taxes influence corporate managers' and investors' decisions.

36) Paige's Properties Inc. reported 2018 net income of \$5 million and depreciation of \$1,500,000. Paige's Properties, Inc.'s 2017 and 2018 balance sheets are listed as follows (in millions of dollars).

Current assets	2017	2018	Current liabilities	2017	2018
Cash and marketable securities	\$ 10	\$ 20	Accrued wages and taxes	\$ 5	\$ 11
Accounts receivable	20	34	Accounts payable	25	29
Inventory	10	11	Notes payable	10	25
Total	<u>\$ 40</u>	<u>\$ 65</u>	Total	<u>\$ 40</u>	<u>\$ 65</u>

What is the 2018 net cash flow from operating activities for Paige's Properties, Inc.?

- A) -\$13,500,000
- B) \$1,500,000
- C) \$5,000,000
- D) \$6,500,000

Answer: B

Explanation:

Cash Flows from Operating Activities

Net income	\$ 5,000,000
Additions (sources of cash):	
Depreciation	1,500,000
Increase accrued wages and taxes	6,000,000
Increase in accounts payable	4,000,000
Subtraction (uses of cash):	
Increase in accounts receivable	– 14,000,000
Increase in inventory	– 1,000,000
Net cash flow from operating activities:	<u>\$ 1,500,000</u>

Difficulty: 1 Easy

Topic: Operating activities

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-04 Differentiate between accounting income and cash flows.

37) In 2018, Upper Crust had cash flows from investing activities of (\$250,000) and cash flows from financing activities of (\$150,000). The balance in the firm's cash account was \$90,000 at the beginning of 2018 and \$105,000 at the end of the year. What was Upper Crust's cash flow from operations for 2018?

- A) \$15,000
- B) \$105,000
- C) \$400,000
- D) \$415,000

Answer: D

Explanation: Net change in cash and marketable securities = \$105,000 – \$90,000 = \$15,000.

Cash flows from operating activities	= \$ 415,000
Cash flows from investing activities	= – 250,000
Cash flows from financing activities	= – 150,000
Net change in cash and marketable securities	= <u>\$ 15,000</u>

Difficulty: 1 Easy

Topic: Operating activities

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-04 Differentiate between accounting income and cash flows.

38) In 2018, Lower Case Productions had cash flows from investing activities of +\$50,000 and cash flows from financing activities of +\$100,000. The balance in the firm's cash account was \$80,000 at the beginning of 2018 and \$65,000 at the end of the year. What was Lower Case's cash flow from operations for 2018?

- A) -\$15,000
- B) -\$150,000
- C) -\$165,000
- D) -\$65,000

Answer: C

Explanation: Net change in cash and marketable securities = \$65,000 - \$80,000 = -\$15,000.

Cash Flows from Operating Activities	=	-\$ 165,000
Cash Flows from Investing Activities	=	+ 50,000
Cash Flows from Financing Activities	=	+ 100,000
Net Change in Cash and Marketable Securities	=	<u><u>-\$ 15,000</u></u>

Difficulty: 1 Easy

Topic: Operating activities

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-04 Differentiate between accounting income and cash flows.

- 39) You are considering an investment in Crew Cut, Inc. and want to evaluate the firm's free cash flow. From the income statement, you see that Crew Cut earned an EBIT of \$23 million, paid taxes of \$4 million, and its depreciation expense was \$8 million. Crew Cut's gross fixed assets increased by \$10 million from 2017 to 2018. The firm's current assets increased by \$6 million and spontaneous current liabilities increased by \$4 million. What is Crew Cut's operating cash flow, investment in operating capital and free cash flow for 2018, respectively in millions?
- A) \$23, \$10, \$13
B) \$23, \$12, \$11
C) \$27, \$10, \$17
D) \$27, \$12, \$15

Answer: D

Explanation:

Crew Cut's operating cash flow was:

$$\begin{aligned}\text{OCF} &= \text{EBIT} - \text{Taxes} + \text{Depreciation} \\ &= (\$23\text{m.} - \$4\text{m.} + \$8\text{m.}) = \$27\text{m.}\end{aligned}$$

Investment in operating capital for 2008 was:

$$\begin{aligned}\text{IOC} &= \Delta \text{Gross fixed assets} + \Delta \text{Net operating working capital} \\ &= \$10\text{m.} + (\$6\text{m.} - \$4\text{m.}) = \$12\text{m.}\end{aligned}$$

Accordingly, Crew Cut's free cash flow for 2008 was:

$$\begin{aligned}\text{FCF} &= \text{Operating cash flow} - \text{Investment in operating capital} \\ &= \$27\text{m.} - \$12\text{m.} = \$15\text{m.}\end{aligned}$$

In other words, in 2018 Crew Cut had cash flows of \$15 million available to pay its stockholders and debt holders.

Difficulty: 1 Easy

Topic: Free cash flow

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

40) You are considering an investment in Cruise, Inc. and want to evaluate the firm's free cash flow. From the income statement, you see that Cruise earned an EBIT of \$202 million, paid taxes of \$51 million, and its depreciation expense was \$75 million. Cruise's gross fixed assets increased by \$70 million from 2017 to 2018. The firm's current assets decreased by \$10 million and spontaneous current liabilities increased by \$6 million. What is Cruise's operating cash flow, investment in operating capital, and free cash flow for 2018, respectively, in millions?

- A) \$202, \$70, \$130
- B) \$226, \$70, \$156
- C) \$226, \$54, \$172
- D) \$226, \$74, \$152

Answer: C

Explanation:

Cruise's operating cash flow was:

$$\begin{aligned}\text{OCF} &= \text{EBIT} - \text{Taxes} + \text{Depreciation} \\ &= (\$202\text{m.} - \$51\text{m.} + \$75\text{m.}) = \$226\text{m.}\end{aligned}$$

Investment in operating capital for 2018 was:

$$\begin{aligned}\text{IOC} &= \Delta \text{Gross fixed assets} + \Delta \text{Net operating working capital} \\ &= \$70\text{m.} + (-\$10\text{m.} - \$6\text{m.}) = \$54\text{m.}\end{aligned}$$

Accordingly, Cruise's free cash flow for 2018 was:

$$\begin{aligned}\text{FCF} &= \text{Operating cash flow} - \text{Investment in operating capital} \\ &= \$226\text{m.} - \$54\text{m.} = \$172\text{m.}\end{aligned}$$

In other words, in 2018 Cruise had cash flows of \$172 million available to pay its stockholders and debt holders.

Difficulty: 1 Easy

Topic: Free cash flow

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

41) Catering Corp. reported free cash flows for 2018 of \$8 million and investment in operating capital of \$2 million. Catering listed \$1 million in depreciation expense and \$2 million in taxes on its 2018 income statement. What was Catering's 2018 EBIT?

- A) \$7 million
- B) \$10 million
- C) \$11 million
- D) \$13 million

Answer: C

Explanation: Catering's free cash flow for 2018 was:

FCF = Operating cash flow – Investment in operating capital

\$8m. = Operating cash flow – \$2m.

So, operating cash flow = \$8m. + \$2m. = \$10m.

Catering's operating cash flow was:

OCF = EBIT – Taxes + Depreciation

\$10m. = (EBIT – \$2m. + \$1m.)

So, EBIT = \$10m. + \$2m. – \$1m. = \$11m.

Difficulty: 1 Easy

Topic: Free cash flow

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

42) TriCycle, Corp. began the year 2018 with \$25 million in retained earnings. The firm earned net income of \$7 million in 2018 and paid \$1 million to its preferred stockholders and \$3 million to its common stockholders. What is the year-end 2018 balance in retained earnings for TriCycle?

- A) \$25 million
- B) \$28 million
- C) \$32 million
- D) \$36 million

Answer: B

Explanation: The statement of retained earnings for 2018 is as follows:

Balance of Retained Earnings, December 31, 2017		\$ 25m
Plus: Net Income for 2018		7m
Less: Cash Dividends Paid		
Preferred Stock	\$ 1m	
Common Stock	3m	
Total Cash Dividends Paid		4m
Balance of Retained Earnings, December 31, 2018		<u>\$ 28m</u>

Difficulty: 1 Easy

Topic: Statement of retained earnings

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

43) Night Scapes, Corp. began the year 2018 with \$10 million in retained earnings. The firm suffered a net loss of \$2 million in 2018 and yet paid \$2 million to its preferred stockholders and \$1 million to its common stockholders. What is the year-end 2018 balance in retained earnings for Night Scapes?

- A) \$5 million
- B) \$8 million
- C) \$9 million
- D) \$15 million

Answer: A

Explanation: The statement of retained earnings for 2018 is as follows:

Balance of Retained Earnings, December 31, 2017		\$ 10m
Less: Net Income for 2018		2m
Less: Cash Dividends Paid		
Preferred Stock	\$ 2m	
Common Stock	<u>1m</u>	
Total Cash Dividends Paid		<u>3m</u>
Balance of Retained Earnings, December 31, 2018		<u>\$ 5m</u>

Difficulty: 1 Easy

Topic: Statement of retained earnings

Bloom's: Apply

AACSB: Analytical Thinking

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Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

44) Use the following information to find dividends paid to common stockholders during 2018.

Balance of Retained Earnings, December 31, 2017		\$ 52m
Plus: Net Income for 2018		21m
Less: Cash Dividends Paid		
Preferred Stock	\$ 7m	
Common Stock	<u> ?m </u>	
Total Cash Dividends Paid		<u> ?m </u>
Balance of Retained Earnings, December 31, 2018		<u> \$ 56m </u>

- A) \$3 million
- B) \$4 million
- C) \$10 million
- D) \$17 million

Answer: C

Explanation: Total Cash Dividends Paid = \$56m – \$21m – \$52m = –\$17m. Thus, common stock dividends paid = \$17m – \$7m = \$10m.

Difficulty: 1 Easy

Topic: Statement of retained earnings

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

45) Harvey's Hamburger Stand has total assets of \$3 million of which \$1 million are current assets. Cash makes up 20 percent of the current assets and accounts receivable makes up another 5 percent of current assets. Harvey's gross plant and equipment has a book value of \$1.5 million and other long-term assets have a book value of \$1 million. Using this information, what is the balance of inventory and the balance of depreciation on Harvey's Hamburger Stand's balance sheet?

- A) \$250,000, \$500,000
- B) \$250,000, \$1 million
- C) \$750,000, \$500,000
- D) \$750,000, \$1 million

Answer: C

Explanation:

Current assets:

Cash and marketable Securities (.2 × \$1)	\$ 0.20
Accounts receivable (.05 × \$1)	0.05
Inventory	<u>.75</u>
Total	\$ 1.0

Fixed assets:

Gross plant and equipment	\$ 1.5
Less: Depreciation	<u>0.5</u>
Net plant and equipment	\$ 1.0
Other long-term assets	<u>1.0</u>
Total	\$ 2.0
Total assets	<u>\$ 3.0</u>

Step 1: Inventory = \$1 – \$0.20 – \$0.05 = \$.75.

Step 2: Total fixed assets = \$3.0 – \$1.0 = \$2.0.

Step 3: Net plant equipment = \$2.0 – \$1.0 = \$1.0.

Step 4: Depreciation = \$1.5 – \$1.0 = \$0.5.

Difficulty: 2 Medium

Topic: Balance sheet

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

46) School Books, Inc. has total assets of \$18 million of which \$6 million are current assets. Cash makes up 10 percent of the current assets and accounts receivable makes up another 40 percent of current assets. School Books' gross plant and equipment has an original cost of \$13 million and other long-term assets have a cost value of \$2 million. Using this information, what are the balance of inventory and the balance of depreciation on School Books' balance sheet?

- A) \$3 million, \$2 million
- B) \$3 million, \$3 million
- C) \$2.4 million, \$2 million
- D) \$2.4 million, \$3 million

Answer: B

Explanation:

Current assets:

Cash and marketable Securities (.10 × \$6)	\$ 0.6
Accounts receivable (.40 × \$6)	2.4
Inventory	<u>3.0</u>
Total	\$ 6.0

Fixed assets:

Gross plant and equipment	\$ 13.0
Less: Depreciation	<u>3.0</u>
Net plant and equipment	\$ 10.0
Other long-term assets	<u>2.0</u>
Total	\$ 12.0
Total assets	<u>\$ 18.0</u>

Step 1: Inventory = \$6 – \$0.6 – \$2.4 = \$3.0.

Step 2: Total fixed assets = \$18 – \$6 = \$12.0.

Step 3: Net plant equipment = \$12 – \$2 = \$10.0.

Step 4: Depreciation = \$13 – \$10 = \$3.0.

Difficulty: 2 Medium

Topic: Balance sheet

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

47) Ted's Taco Shop has total assets of \$5 million. Forty percent of these assets are financed with debt of which \$400,000 is current liabilities. The firm has no preferred stock but the balance in common stock and paid-in surplus is \$1 million. Using this information what is the balance for long-term debt and retained earnings on Ted's Taco Shop's balance sheet?

- A) \$400,000, \$1 million
- B) \$1.6 million, \$2 million
- C) \$1.6 million, \$3 million
- D) \$2 million, \$3 million

Answer: B

Explanation:

Total current liabilities	\$.4
Long-term debt:	\$ 1.6
Total debt:	<u>\$ 2</u>
Stockholder's equity:	
Preferred stock	\$ 0
Common stock and paid-in surplus (2 million shares)	1
Retained earnings	<u>2</u>
Total	\$ 3
Total liabilities and equity	<u>\$ 5</u>

Step 1: Total liabilities and equity = Total Assets = \$5.

Step 2: Total debt = $.4 \times \$5 = \2 .

Step 3: Long-term debt = $\$2 - \$0.4 = \$1.6$.

Step 4: Total Stockholder's Equity = $\$5 - \$2 = \$3$.

Step 5: Retained earnings = $\$3 - \$1 = \$2$.

Difficulty: 2 Medium

Topic: Balance sheet

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

48) Hair Etc. has total assets of \$15 million. Twenty percent of these assets are financed with debt of which \$1 million is current liabilities. The firm has no preferred stock but the balance in common stock and paid-in surplus is \$8 million. Using this information what is the balance for long-term debt and retained earnings on Hair Etc.'s balance sheet?

- A) \$1 million, \$8 million
- B) \$2 million, \$4 million
- C) \$2 million, \$8 million
- D) \$3 million, \$4 million

Answer: B

Explanation:

Total current liabilities	\$ 1
Long-term debt:	\$ 2
Total debt:	<u>\$ 3</u>
Stockholder's equity:	
Preferred stock	\$ 0
Common stock and paid-in surplus (2 million shares)	8
Retained earnings	<u>4</u>
Total	\$ 12
Total liabilities and equity	<u>\$ 15</u>

Step 1: Total liabilities and equity = Total Assets = \$15.

Step 2: Total debt = $.2 \times \$15\text{m} = \3 .

Step 3: Long-term debt = $\$3 - \$1 = \$2$.

Step 4: Total Stockholder's Equity = $\$15 - \$3 = \$12$.

Step 5: Retained earnings = $\$12 - \$8 = \$4$.

Difficulty: 2 Medium

Topic: Balance sheet

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

49) Acme Bricks balance sheet lists net fixed assets as \$40 million. The fixed assets could currently be sold for \$50 million. Acme's current balance sheet shows current liabilities of \$15 million and net working capital of \$12 million. If all the current accounts were liquidated today, the company would receive \$77 million cash after paying \$15 million in liabilities. What is the book value of Acme's assets today? What is the market value of these assets?

- A) \$12 million, \$77 million
- B) \$27 million, \$92 million
- C) \$40 million, \$50 million
- D) \$67 million, \$142 million

Answer: D

Explanation:

	Book value	Market value
Assets		
Current assets	\$ 27m.	\$ 92m.
Fixed assets	<u>40m.</u>	<u>50m.</u>
Total	<u>\$ 67m.</u>	<u>\$ 142m.</u>

Step 1: Net working capital (book value) = Current assets (book value) – Current liabilities (book value) = \$12m = Current assets (book value) – \$15m => Current assets (book value) = \$12m + \$15m = \$27m.

Step 2: Total assets (book value) = \$27m + \$40m = \$67m.

Step 3: Net working capital (market value) = Current assets (market value) – Current liabilities (market value) = \$77m = Current assets (market value) – \$15m => Current assets (market value) = \$77m + \$15m = \$92m.

Step 4: Total assets (market value) = \$92m + \$50m = \$142m.

Difficulty: 2 Medium

Topic: Market and book values

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-02 Differentiate between book (or accounting) value and market value.

50) Glo's Glasses balance sheet lists net fixed assets as \$20 million. The fixed assets could currently be sold for \$25 million. Glo's current balance sheet shows current liabilities of \$7 million and net working capital of \$3 million. If all the current accounts were liquidated today, the company would receive \$9 million cash after paying \$7 million in liabilities. What is the book value of Glo's assets today? What is the market value of these assets?

- A) \$10 million, \$16 million
- B) \$10 million, \$35 million
- C) \$30 million, \$35 million
- D) \$30 million, \$41 million

Answer: D

Explanation:

	Book value	Market value
Assets		
Current assets	\$ 10m.	\$ 16m.
Fixed assets	<u>20m.</u>	<u>25m.</u>
Total	<u>\$ 30m.</u>	<u>\$ 41m.</u>

Step 1: Net working capital (book value) = Current assets (book value) – Current liabilities (book value) = \$3m = Current assets (book value) – \$7m => Current assets (book value) = \$3m + \$7m = \$10m.

Step 2: Total assets (book value) = \$10m + \$20m = \$30m.

Step 3: Net working capital (market value) = Current assets (market value) – Current liabilities (market value) = \$9m = Current assets (market value) – \$7m => Current assets (market value) = \$9m + \$7m = \$16m.

Step 4: Total assets (market value) = \$16m + \$25m = \$41m.

Difficulty: 2 Medium

Topic: Market and book values

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-02 Differentiate between book (or accounting) value and market value.

51) Rupert's Rims balance sheet lists net fixed assets as \$15 million. The fixed assets could currently be sold for \$17 million. Rupert's current balance sheet shows current liabilities of \$5 million and net working capital of \$3 million. If all the current accounts were liquidated today, the company would receive \$6 million cash after paying \$5 million in liabilities. What is the book value of Rupert's assets today? What is the market value of these assets?

- A) \$8 million, \$23 million
- B) \$23 million, \$25 million
- C) \$23 million, \$28 million
- D) \$31 million, \$28 million

Answer: C

Explanation:

	Book value	Market value
Assets		
Current assets	\$ 8m.	\$ 11m.
Fixed assets	<u>15m.</u>	<u>17m.</u>
Total	<u>\$ 23m.</u>	<u>\$ 28m.</u>

Step 1: Net working capital (book value) = Current assets (book value) – Current liabilities (book value) = \$3m = Current assets (book value) – \$5m => Current assets (book value) = \$3m + \$5m = \$8m.

Step 2: Total assets (book value) = \$8m + \$15m = \$23m.

Step 3: Net working capital (market value) = Current assets (market value) – Current liabilities (market value) = \$6m = Current assets (market value) – \$5m => Current assets (market value) = \$6m + \$5m = \$11m.

Step 4: Total assets (market value) = \$11m + \$17m = \$28m.

Difficulty: 2 Medium

Topic: Market and book values

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-02 Differentiate between book (or accounting) value and market value.

52) You are considering a stock investment in one of two firms (AllDebt, Inc. and AllEquity, Inc.), both of which operate in the same industry and have identical operating income of \$600,000. AllDebt, Inc. finances its \$1.2 million in assets with \$1 million in debt (on which it pays 10 percent interest annually) and \$0.2 million in equity. AllEquity, Inc. finances its \$1.2 million in assets with no debt and \$1.2 million in equity. Both firms pay a tax rate of 30 percent on their taxable income. What are the asset funders' (the debt holders and stockholders) resulting return on assets for the two firms?

- A) 29.17%, and 35%, respectively
- B) 37.5%, and 35%, respectively
- C) 37.5%, and 37.5%, respectively
- D) 50%, and 50%, respectively

Answer: B

Explanation:

	AllDebt	AllEquity
Operating income	\$ 0.6m.	\$ 0.6m.
Less: Interest	0.1m.	0m.
Taxable income	0.5m.	0.6m.
Less: Taxes (30%)	0.15m.	0.18m.
Net income	\$ 0.35m.	\$ 0.42m.
Income available for asset funders (= operating income – taxes)	\$ 0.45m.	\$ 0.42m.

Return on assets funders' investment:

Interest = \$1m. $\times$.1 = \$.1 m.

AllDebt = \$0.45m/\$1.2m = 37.50%.

AllEquity = \$0.42m/\$1.2m = 35.00%.

Difficulty: 2 Medium

Topic: Profitability ratios

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

53) You are considering a stock investment in one of two firms (AllDebt, Inc. and AllEquity, Inc.), both of which operate in the same industry and have identical operating income of \$3 million. AllDebt, Inc. finances its \$6 million in assets with \$5 million in debt (on which it pays 5 percent interest annually) and \$1 million in equity. AllEquity, Inc. finances its \$6 million in assets with no debt and \$6 million in equity. Both firms pay a tax rate of 40 percent on their taxable income. What are the asset funders' (the debt holders and stockholders) resulting return on assets for the two firms?

- A) 27.5%, and 30%, respectively
- B) 31.67%, and 30%, respectively
- C) 33%, and 30%, respectively
- D) 50%, and 50%, respectively

Answer: B

Explanation:

	AllDebt	AllEquity
Operating income	\$ 3m.	\$ 3m.
Less: Interest	0.25m.	0m.
Taxable income	2.75m.	3m.
Less: Taxes (40%)	1.1m.	1.2m.
Net income	\$ 1.65m.	\$ 1.8m.
Income available for asset funders (= operating income – taxes)	\$ 1.9m.	\$ 1.8m.

Return on assets funders' investment:

Interest = \$5m. $\times$.05 = \$0.25m.

AllDebt = \$1.9m/\$6m = 31.67%.

AllEquity = \$1.8m/\$6m = 30.00%.

Difficulty: 2 Medium

Topic: Profitability ratios

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

54) You are considering a stock investment in one of two firms (AllDebt, Inc. and AllEquity, Inc.), both of which operate in the same industry and have identical operating income of \$400,000. AllDebt, Inc. finances its \$800,000 in assets with \$600,000 in debt (on which it pays 5 percent interest annually) and \$200,000 in equity. AllEquity, Inc. finances its \$800,000 in assets with no debt and \$800,000 in equity. Both firms pay a tax rate of 30 percent on their taxable income. What are the asset funders' (the debt holders and stockholders) resulting return on assets for the two firms?

- A) 32.375%, and 35.00%, respectively
- B) 36.125%, and 35.00%, respectively
- C) 46.25%, and 50%, respectively
- D) 50%, and 50%, respectively

Answer: B

Explanation:

	AllDebt	AllEquity
Operating income	\$ 0.4m.	\$ 0.4m.
Less: Interest	0.03m.	0m.
Taxable income	0.37m.	0.4m.
Less: Taxes (30%)	0.111m.	0.12m.
Net income	\$ 0.259m.	\$ 0.28m.
Income available for asset funders	\$ 0.289m.	\$ 0.28m.
(= operating income – taxes)		

Return on assets funders' investment:

Interest = \$0.6m. $\times$.05 = \$0.03m.

AllDebt = \$0.289m/\$0.8m = 36.125%.

AllEquity = \$0.28m/\$0.8m = 35.00%.

Difficulty: 2 Medium

Topic: Profitability ratios

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

55) You have been given the following information for Fina's Furniture Corp.: Net sales = \$25,500,000; Cost of goods sold = \$10,250,000; Addition to retained earnings = \$305,000; Dividends paid to preferred and common stockholders = \$500,000; Interest expense = \$2,000,000. The firm's tax rate is 30 percent. What is the depreciation expense for Fina's Furniture Corp.?

- A) \$12,100,000
- B) \$12,400,000
- C) \$14,100,000
- D) \$14,400,000

Answer: A

Explanation:

Net sales (all credit)	\$ 25,500,000
Less: Cost of goods sold	<u>10,250,000</u>
Gross profits	\$ 15,250,000
Less: Depreciation	<u>\$ 12,100,000</u>
Earnings before interest and taxes (EBIT)	\$ 3,150,000
Less: Interest	<u>2,000,000</u>
Earnings before taxes (EBT)	\$ 1,150,000
Less: Taxes	
Net income	<u>\$ 805,000</u>
Less: Common and preferred stock dividends	<u>\$ 500,000</u>
Addition to retained earnings	\$ 305,000

Step 1: Net income = Common and preferred stock dividends + Addition to retained earnings = \$500,000 + \$305,000 = \$805,000.

Step 2: $EBT (1 - \text{tax rate}) = \text{Net income} \Rightarrow EBT = \text{Net income} / (1 - \text{tax rate}) = \$805,000 / (1 - 0.3) = \$1,150,000$.

Step 3: $EBIT - \text{Interest} = EBT \Rightarrow EBIT = EBT + \text{Interest} = \$1,150,000 + \$2,000,000 = \$3,150,000$.

Step 4: Gross profits = Net sales – Cost of goods sold = \$25,500,000 – 10,250,000 = \$15,250,000.

Step 5: Gross profits – Depreciation = EBIT $\Rightarrow$ Depreciation = Gross profits – EBIT = \$15,250,000 – \$3,150,000 = \$12,100,000.

Difficulty: 2 Medium

Topic: Income statement

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

56) You have been given the following information for Romeo's Rockers Corp.: Net sales = \$5,200,000; Cost of goods sold = \$2,100,000; Addition to retained earnings = \$1,000,000; Dividends paid to preferred and common stockholders = \$400,000; Interest expense = \$200,000. The firm's tax rate is 30 percent. What is the depreciation expense for Romeo's Rockers Corp.?

- A) \$900,000
- B) \$1,100,000
- C) \$1,500,000
- D) \$1,600,000

Answer: A

Explanation:

Net sales (all credit)	\$ 5,200,000
Less: Cost of goods sold	<u>2,100,000</u>
Gross profits	\$ 3,100,000
Less: Depreciation	<u>\$ 900,000</u>
Earnings before interest and taxes (EBIT)	\$ 2,200,000
Less: Interest	<u>200,000</u>
Earnings before taxes (EBT)	\$ 2,000,000
Less: Taxes	
Net income	<u>\$ 1,400,000</u>
Less: Common and preferred stock dividends	<u>\$ 400,000</u>
Addition to retained earnings	\$ 1,000,000

Step 1: Net income = Common and preferred stock dividends + Addition to retained earnings = \$400,000 + \$1,000,000 = \$1,400,000.

Step 2: $EBT (1 - \text{tax rate}) = \text{Net income} \Rightarrow EBT = \text{Net income} / (1 - \text{tax rate}) = \$1,400,000 / (1 - 0.3) = \$2,000,000$.

Step 3: $EBIT - \text{Interest} = EBT \Rightarrow EBIT = EBT + \text{Interest} = \$2,000,000 + \$200,000 = \$2,200,000$.

Step 4: Gross profits = Net sales – Cost of goods sold = \$5,200,000 – 2,100,000 = \$3,100,000.

Step 5: Gross profits – Depreciation = EBIT $\Rightarrow$ Depreciation = Gross profits – EBIT = \$3,100,000 – \$2,200,000 = \$900,000.

Difficulty: 2 Medium

Topic: Income statement

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

57) You have been given the following information for Nicole's Neckties Corp.: Net sales = \$2,500,000; Cost of goods sold = \$1,300,000; Addition to retained earnings = \$30,000; Dividends paid to preferred and common stockholders = \$300,000; Interest expense = \$50,000. The firm's tax rate is 40 percent. What is the depreciation expense for Nicole's Neckties Corp.?

A) \$550,000
 B) \$600,000
 C) \$650,000
 D) \$820,000

Answer: B

Explanation:

Net sales (all credit)	\$ 2,500,000
Less: Cost of goods sold	<u>1,300,000</u>
Gross profits	\$ 1,200,000
Less: Depreciation	<u>\$ 600,000</u>
Earnings before interest and taxes (EBIT)	\$ 600,000
Less: Interest	<u>50,000</u>
Earnings before taxes (EBT)	\$ 550,000
Less: Taxes	
Net income	<u>\$ 330,000</u>
Less: Common and preferred stock dividends	<u>\$ 300,000</u>
Addition to retained earnings	\$ 30,000

Step 1: Net income = Common and preferred stock dividends + Addition to retained earnings = \$300,000 + \$30,000 = \$330,000.

Step 2: $EBT (1 - \text{tax rate}) = \text{Net income} \Rightarrow EBT = \text{Net income} / (1 - \text{tax rate}) = \$330,000 / (1 - 0.4) = \$550,000$.

Step 3: $EBIT - \text{Interest} = EBT \Rightarrow EBIT = EBT + \text{Interest} = \$550,000 + \$50,000 = \$600,000$.

Step 4: Gross profits = Net sales – Cost of goods sold = \$2,500,000 – 1,300,000 = \$1,200,000.

Step 5: Gross profits – Depreciation = EBIT $\Rightarrow$ Depreciation = Gross profits – EBIT = \$1,200,000 – \$600,000 = \$600,000.

Difficulty: 2 Medium

Topic: Income statement

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

58) You have been given the following information for Sherry's Sandwich Corp.: Net sales = \$300,000; Gross profit = \$100,000; Addition to retained earnings = \$30,000; Dividends paid to preferred and common stockholders = \$8,500; Depreciation expense = \$25,000. The firm's tax rate is 30 percent. What are the cost of goods sold and the interest expense for Sherry's Sandwich Corp.?

- A) \$20,000, and \$200,000, respectively
- B) \$100,000, and \$20,000, respectively
- C) \$200,000, and \$20,000, respectively
- D) \$200,000, and \$36,500, respectively

Answer: C

Explanation:

Net sales (all credit)	\$ 300,000
Less: Cost of goods sold	<u>200,000</u>
Gross profits	\$ 100,000
Less: Depreciation	<u>\$ 25,000</u>
Earnings before interest and taxes (EBIT)	\$ 75,000
Less: Interest	<u>20,000</u>
Earnings before taxes (EBT)	\$ 55,000
Less: Taxes	
Net income	<u>\$ 38,500</u>
Less: Common and preferred stock dividends	<u>\$ 8,500</u>
Addition to retained earnings	\$ 30,000

Step 1: Net income = Common and preferred stock dividends + Addition to retained earnings = \$8,500 + \$30,000 = \$38,500.

Step 2: $EBT (1 - \text{tax rate}) = \text{Net income} \Rightarrow EBT = \text{Net income} / (1 - \text{tax rate}) = \$38,500 / (1 - 0.3) = \$55,000$.

Step 3: Gross profits = Net sales – Cost of goods sold $\Rightarrow$ Net Sales – Gross Profit = Cost of Goods Sold = \$300,000 – 100,000 = \$200,000.

Step 4: Gross profits – Depreciation = EBIT = \$100,000 – \$25,000 = \$75,000.

Step 5: EBIT – Interest = EBT $\Rightarrow$ Interest = EBIT – EBT = \$75,000 – \$55,000 = \$20,000.

Difficulty: 2 Medium

Topic: Income statement

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

59) You have been given the following information for Kaye's Krumpet Corp.: Net sales = \$150,000; Gross profit = \$100,000; Addition to retained earnings = \$20,000; Dividends paid to preferred and common stockholders = \$8,000; Depreciation expense = \$50,000. The firm's tax rate is 30 percent. What are the cost of goods sold and the interest expense for Kaye's Krumpet Corp.?

- A) \$10,000, and \$50,000, respectively
- B) \$50,000, and \$10,000, respectively
- C) \$50,000, and \$22,000, respectively
- D) \$62,000, and \$10,000, respectively

Answer: B

Explanation:

Net sales (all credit)	\$ 150,000
Less: Cost of goods sold	<u>50,000</u>
Gross profits	\$ 100,000
Less: Depreciation	<u>50,000</u>
Earnings before interest and taxes (EBIT)	\$ 50,000
Less: Interest	<u>10,000</u>
Earnings before taxes (EBT)	\$ 40,000
Less: Taxes	
Net income	<u>\$ 28,000</u>
Less: Common and preferred stock dividends	<u>8,000</u>
Addition to retained earnings	\$ 20,000

Step 1: Net income = Common and preferred stock dividends + Addition to retained earnings = \$8,000 + \$20,000 = \$28,000.

Step 2: $EBT (1 - \text{tax rate}) = \text{Net income} \Rightarrow EBT = \text{Net income} / (1 - \text{tax rate}) = \$28,000 / (1 - 0.3) = \$40,000$.

Step 3: Gross profits = Net sales – Cost of goods sold $\Rightarrow$ Net Sales – Gross Profit = Cost of Goods Sold = \$150,000 – 100,000 = \$50,000.

Step 4: Gross profits – Depreciation = EBIT = \$100,000 – \$50,000 = \$50,000.

Step 5: EBIT – Interest = EBT $\Rightarrow$ Interest = EBIT – EBT = \$50,000 – \$40,000 = \$10,000.

Difficulty: 2 Medium

Topic: Income statement

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

60) You have been given the following information for Ross's Rocket Corp.: Net sales = \$1,000,000; Gross profit = \$400,000; Addition to retained earnings = \$60,000; Dividends paid to preferred and common stockholders = \$90,000; Depreciation expense = \$50,000. The firm's tax rate is 40 percent. What are the cost of goods sold and the interest expense for Ross's Rocket Corp.?

- A) \$100,000, and \$600,000, respectively
- B) \$600,000, and \$100,000, respectively
- C) \$600,000, and \$200,000, respectively
- D) \$700,000, and \$100,000, respectively

Answer: B

Explanation:

Net sales (all credit)	\$ 1,000,000
Less: Cost of goods sold	<u>600,000</u>
Gross profits	\$ 400,000
Less: Depreciation	<u>\$ 50,000</u>
Earnings before interest and taxes (EBIT)	\$ 350,000
Less: Interest	<u>100,000</u>
Earnings before taxes (EBT)	\$ 250,000
Less: Taxes	
Net income	<u>\$ 150,000</u>
Less: Common and preferred stock dividends	<u>\$ 90,000</u>
Addition to retained earnings	\$ 60,000

Step 1: Net income = Common and preferred stock dividends + Addition to retained earnings = \$90,000 + \$60,000 = \$150,000.

Step 2: $EBT (1 - \text{tax rate}) = \text{Net income} \Rightarrow EBT = \text{Net income} / (1 - \text{tax rate}) = \$150,000 / (1 - 0.4) = \$250,000$.

Step 3: Gross profits = Net sales – Cost of goods sold $\Rightarrow \text{Net Sales} - \text{Gross Profit} = \text{Cost of Goods Sold} = \$1,000,000 - 400,000 = \$600,000$.

Step 4: Gross profits – Depreciation = EBIT = \$400,000 – \$50,000 = \$350,000.

Step 5: EBIT – Interest = EBT $\Rightarrow \text{Interest} = \text{EBIT} - \text{EBT} = \$350,000 - \$250,000 = \$100,000$.

Difficulty: 2 Medium

Topic: Income statement

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

61) The Carolina Corporation had a 2018 taxable income of \$3,000,000 from operations after all operating costs but before

- (1) interest charges of \$500,000,
- (2) dividends received of \$75,000,
- (3) dividends paid of \$1,000,000, and
- (4) income taxes.

Using the tax schedule in Table 2.3, what is Carolina's income tax liability? What are Carolina's average and marginal tax rates on taxable income from operations?

- A) \$857,650, 28.59%, 34%, respectively
- B) \$875,500, 29.18%, 34%, respectively
- C) \$875,500, 34.00%, 34%, respectively
- D) \$1,020,000, 34.00%, 34%, respectively

Answer: A

Explanation: The first 70 percent of the dividends received by Carolina Corp. is not taxable. Thus, only 30 percent of the dividends received are taxed, so:

Taxable income = \$3,000,000 – \$500,000 + (0.3)\$75,000 = \$2,522,500.

Now Carolina's Corp.'s tax liability will be:

Tax liability = \$113,900 + 0.34 (\$2,522,500 – \$335,000) = \$857,650.

Carolina Corp.'s resulting average tax rate is now:

Average tax rate = \$857,650/\$3,000,000 = 28.59%.

Finally, if Carolina Corp. earned \$1 more of taxable income, it would still pay 34 cents (based upon its marginal tax rate of 34 percent) more in taxes.

Difficulty: 2 Medium

Topic: Taxes

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-03 Explain how taxes influence corporate managers' and investors' decisions.

62) The Ohio Corporation had a 2018 taxable income of \$50,000,000 from operations after all operating costs but before

- (1) interest charges of \$500,000,
- (2) dividends received of \$45,000,
- (3) dividends paid of \$10,000,000, and
- (4) income taxes.

Using the tax schedule in Table 2.3, what is Ohio's income tax liability? What are Ohio's average and marginal tax rates on taxable income from operations?

- A) \$6,416,667, 12.83%, 35%, respectively
- B) \$13,829,725, 27.66%, 35%, respectively
- C) \$17,329,725, 34.66%, 35%, respectively
- D) \$17,340,750, 34.68%, 35%, respectively

Answer: C

Explanation: The first 70 percent of the dividends received by Ohio Corp. is not taxable. Thus, only 30 percent of the dividends received are taxed, so:

Taxable income = \$50,000,000 – \$500,000 + (0.3)\$45,000 = \$49,513,500.

Now Ohio's Corp.'s tax liability will be:

Tax liability = \$6,416,667 + 0.35 (\$49,513,500 – \$18,333,333) = \$17,329,725.45.

Ohio Corp.'s resulting average tax rate is now:

Average tax rate = \$17,329,725.45/\$50,000,000 = 34.66%.

Finally, if Ohio Corp. earned \$1 more of taxable income, it would still pay 35 cents (based upon its marginal tax rate of 35 percent) more in taxes.

Difficulty: 2 Medium

Topic: Taxes

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-03 Explain how taxes influence corporate managers' and investors' decisions.

63) The Sasnak Corporation had a 2018 taxable income of \$4,450,000 from operations after all operating costs but before

- (1) interest charges of \$750,000,
- (2) dividends received of \$900,000,
- (3) dividends paid of \$500,000, and
- (4) income taxes.

Using the tax schedule in Table 2.3, what is Sasnak's income tax liability? What are Sasnak's average and marginal tax rates on taxable income from operations?

- A) \$1,349,800, 30.33%, 34%, respectively
- B) \$1,349,800, 34.00%, 34%, respectively
- C) \$1,564,000, 34.00%, 34%, respectively
- D) \$1,564,000, 35.15%, 34%, respectively

Answer: A

Explanation: The first 70 percent of the dividends received by Sasnak Corp. is not taxable. Thus, only 30 percent of the dividends received are taxed, so:

Taxable income = \$4,450,000 – \$750,000 + (0.3)\$900,000 = \$3,970,000.

Now Sasnak's Corp.'s tax liability will be:

Tax liability = \$113,900 + 0.34 (\$3,970,000 – \$335,000) = \$1,349,800.

Sasnak Corp.'s resulting average tax rate is now:

Average tax rate = \$1,349,800/\$4,450,000 = 30.33%.

Finally, if Sasnak Corp. earned \$1 more of taxable income, it would still pay 34 cents (based upon its marginal tax rate of 34 percent) more in taxes.

Difficulty: 2 Medium

Topic: Taxes

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-03 Explain how taxes influence corporate managers' and investors' decisions.

64) The AOK Corporation had a 2018 taxable income of \$2,200,000 from operations after all operating costs but before

- (1) interest charges of \$90,000,
- (2) dividends received of \$750,000,
- (3) dividends paid of \$80,000, and
- (4) income taxes.

Using the tax schedule in Table 2.3, what is AOK's income tax liability? What are AOK's average and marginal tax rates on taxable income from operations?

- A) \$793,900, 34%, 34%, respectively
- B) \$793,900, 36.0864%, 34%, respectively
- C) \$972,400, 34%, 34%, respectively
- D) \$972,400, 44.2%, 34%, respectively

Answer: B

Explanation: The first 70 percent of the dividends received by AOK Corp. is not taxable. Thus, only 30 percent of the dividends received are taxed, so:

Taxable income = \$2,200,000 – \$90,000 + (0.3)\$750,000 = \$2,335,000.

Now AOK's Corp.'s tax liability will be:

Tax liability = \$113,900 + 0.34 (\$2,335,000 – \$335,000) = \$793,900.

AOK Corp.'s resulting average tax rate is now:

Average tax rate = \$793,900/\$2,200,000 = 36.0864%.

Finally, if AOK Corp. earned \$1 more of taxable income, it would still pay 34 cents (based upon its marginal tax rate of 34 percent) more in taxes.

Difficulty: 2 Medium

Topic: Taxes

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-03 Explain how taxes influence corporate managers' and investors' decisions.

65) Suppose that in addition to the \$5.5 million of taxable income from operations, Emily's Flowers, Inc. received \$500,000 of interest on state-issued bonds and \$300,000 of dividends on common stock it owns in Amy's Iris Bulbs, Inc. Using the tax schedule in Table 2.3 what is Emily's Flowers' income tax liability? What are Emily's Flowers' average and marginal tax rates on total taxable income?

- A) \$1,900,600, 34%, 34%, respectively
- B) \$1,972,000, 34%, 34%, respectively
- C) \$2,070,600, 34%, 34%, respectively
- D) \$2,142,000, 34%, 34%, respectively

Answer: A

Explanation: Interest on the state-issued bonds is not taxable and should not be included in taxable income. Further, the first 70 percent of the dividends received from Amy's is not taxable. Thus, only 30 percent of the dividends received are taxed, so:

Taxable income = \$5,500,000 + (0.3) \$300,000 = \$5,590,000.

Now Emily's tax liability will be:

Tax liability = \$113,900 + 0.34 (\$5,590,000 – \$335,000) = \$1,900,600.

Emily's resulting average tax rate is now:

Average tax rate = \$1,900,600/\$5,590,000 = 34%.

Finally, if Emily earned \$1 more of taxable income, it would still pay 34 cents (based upon its marginal tax rate of 34 percent) more in taxes.

Difficulty: 2 Medium

Topic: Taxes

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-03 Explain how taxes influence corporate managers' and investors' decisions.

66) Suppose that in addition to the \$300,000 of taxable income from operations, Liam's Burgers, Inc. received \$25,000 of interest on state-issued bonds and \$50,000 of dividends on common stock it owns in Sodas, Inc. Using the tax schedule in Table 2.3 what is Liam's income tax liability? What are Liam's average and marginal tax rates on total taxable income?

- A) \$106,100, 33.68%, 39%, respectively
- B) \$122,850, 39.00%, 39%, respectively
- C) \$129,500, 34.53%, 39%, respectively
- D) \$139,250, 37.13%, 39%, respectively

Answer: A

Explanation: Interest on the state-issued bonds is not taxable and should not be included in taxable income. Further, the first 70 percent of the dividends received from Sodas is not taxable. Thus, only 30 percent of the dividends received are taxed, so:

Taxable income = \$300,000 + (0.3) \$50,000 = \$315,000.

Now Liam's tax liability will be:

Tax liability = \$22,250 + 0.39 (\$315,000 – \$100,000) = \$106,100.

Liam's resulting average tax rate is now:

Average tax rate = \$106,100/\$315,000 = 33.68%.

Finally, if Liam earned \$1 more of taxable income, it would still pay 39 cents (based upon its marginal tax rate of 39 percent) more in taxes.

Difficulty: 2 Medium

Topic: Taxes

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-03 Explain how taxes influence corporate managers' and investors' decisions.

67) Fina's Faucets, Inc. has net cash flows from operating activities for the last year of \$17 million. The income statement shows that net income is \$15 million and depreciation expense is \$6 million. During the year, the change in inventory on the balance sheet was an increase of \$4 million, change in accrued wages and taxes was an increase of \$1 million and change in accounts payable was an increase of \$1 million. At the beginning of the year the balance of accounts receivable was \$5 million. What was the end of year balance for accounts receivable?

- A) \$2 million
- B) \$3 million
- C) \$7 million
- D) \$9 million

Answer: C

Explanation:

Cash Flows from Operating Activities

Net income	\$ 15m.
Additions (sources of cash):	
Depreciation	6m.
Increase in accrued wages and taxes	1m.
Increase in accounts payable	1m.
Subtractions (uses of cash):	
Increase in accounts receivable	-2m.
Increase in inventory	-4m.
Net cash flow from operating activities:	<u>\$ 17m.</u>

Increase in accounts receivable = \$17m. - \$15m. - \$6m. - \$1m. - \$1m. + \$4m.
= \$-2m.

Thus, end of year balance of accounts receivable = \$5m + \$2m = \$7m.

Difficulty: 2 Medium

Topic: Operating activities

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

68) Zoe's Dog Biscuits, Inc. has net cash flows from operating activities for the last year of \$226 million. The income statement shows that net income is \$150 million and depreciation expense is \$85 million. During the year, the change in inventory on the balance sheet was an increase of \$14 million, change in accrued wages and taxes was an increase of \$15 million and change in accounts payable was an increase of \$10 million. At the beginning of the year the balance of accounts receivable was \$45 million. What was the end of year balance for accounts receivable?

- A) \$20 million
- B) \$25 million
- C) \$45 million
- D) \$65 million

Answer: D

Explanation:

Cash Flows from Operating Activities

Net income	\$ 150m.
Additions (sources of cash):	
Depreciation	85m.
Increase in accrued wages and taxes	15m.
Increase in accounts payable	10m.
Subtractions (uses of cash):	
Increase in accounts receivable	-20m.
Increase in inventory	-14m.
Net cash flow from operating activities:	<u>\$ 226m.</u>

Increase in accounts receivable = \$226m. - \$150m. - \$85m. - \$15m. - \$10m. + \$14m. = \$-20m.

Thus, end of year balance of accounts receivable = \$45m + \$20m = \$65m.

Difficulty: 2 Medium

Topic: Operating activities

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

69) Nickolas's Nut Farms, Inc. has net cash flows from operating activities for the last year of \$25 million. The income statement shows that net income is \$15 million and depreciation expense is \$6 million. During the year, the change in inventory on the balance sheet was a decrease of \$4 million, change in accrued wages and taxes was a decrease of \$1 million and change in accounts payable was a decrease of \$1 million. At the beginning of the year the balance of accounts receivable was \$5 million. What was the end of year balance for accounts receivable?

- A) \$2 million
- B) \$3 million
- C) \$7 million
- D) \$9 million

Answer: B

Explanation:

Cash Flows from Operating Activities

Net income	\$ 15m.
Additions (sources of cash):	
Depreciation	6m.
Decrease in accounts receivable	2m.
Decrease in inventory	4m.
Subtractions (uses of cash):	
Decrease in accrued wages and taxes	-1m.
Decrease in accounts payable	-1m.
Net cash flow from operating activities:	<u>\$ 25m.</u>

Decrease in accounts receivable = \$25m. - \$15m. - \$6m. - \$4m. + \$1m. + \$1m. = \$2m.

Thus, end of year balance of accounts receivable = \$5m - \$2m = \$3m.

Difficulty: 2 Medium

Topic: Operating activities

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

70) Crispy Corporation has net cash flow from financing activities for the last year of \$20 million. The company paid \$5 million in dividends last year. During the year, the change in notes payable on the balance sheet was an increase of \$2 million, and change in common and preferred stock was an increase of \$3 million. The end of year balance for long-term debt was \$45 million. What was their beginning of year balance for long-term debt?

- A) \$15 million
- B) \$20 million
- C) \$25 million
- D) \$35 million

Answer: C

Explanation:

Cash Flows from Financing Activities

Additions:

Increase in notes payable	\$ 2m.
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Increase in long-term debt	20m.
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Increase in common and preferred stock	3m.
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Subtractions:

Pay stock dividends	<u>-5m.</u>
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Net cash flow from financing activities:	<u>\$ 20m.</u>
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Increase in long-term debt = \$20m. + \$5m. - \$2m. - \$3m. = \$20m.

Thus, beginning of year balance for long-term debt = \$45m - \$20m = \$25m.

Difficulty: 2 Medium

Topic: Financing activities

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

71) Full Moon Productions Inc. has net cash flow from financing activities for the last year of \$105 million. The company paid \$15 million in dividends last year. During the year, the change in notes payable on the balance sheet was an increase of \$40 million, and change in common and preferred stock was an increase of \$50 million. The end of year balance for long-term debt was \$50 million. What was their beginning of year balance for long-term debt?

- A) \$5 million
- B) \$20 million
- C) \$30 million
- D) \$35 million

Answer: B

Explanation:

Cash Flows from Financing Activities

Additions:

Increase in notes payable	\$ 40m.
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Increase in long-term debt	30m.
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Increase in common and preferred stock	50m.
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Subtractions:

Pay stock dividends	<u>-15m.</u>
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Net cash flow from financing activities:	<u>\$ 105m.</u>
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Increase in long-term debt = \$105m. + \$15m. - \$40m. - \$50m. = \$30m.

Thus, beginning of year balance for long-term debt = \$50m - \$30m = \$20m.

Difficulty: 2 Medium

Topic: Financing activities

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

72) Café Creations Inc. has net cash flow from financing activities for the last year of \$25 million. The company paid \$15 million in dividends last year. During the year, the change in notes payable on the balance sheet was a decrease of \$40 million, and change in common and preferred stock was an increase of \$50 million. The end of year balance for long-term debt was \$40 million. What was their beginning of year balance for long-term debt?

- A) \$10 million
- B) \$20 million
- C) \$30 million
- D) \$40 million

Answer: A

Explanation:

Cash Flows from Financing Activities

Additions:

Increase in long-term debt	30m.
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Increase in common and preferred stock	50m.
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Subtractions:

Decrease in notes payable	-40m.
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Pay stock dividends	-15m.
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Net cash flow from financing activities:	<u>\$ 25m.</u>
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Increase in long-term debt = \$25m. + \$15m. + \$40m. - \$50m. = \$30m.

Thus, beginning of year balance for long-term debt = \$40m - \$30m = \$10m.

Difficulty: 2 Medium

Topic: Financing activities

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

73) The 2010 income statement for Pete's Pumpkins shows that depreciation expense is \$250 million, EBIT is \$500 million, EBT is \$320 million, and the tax rate is 30 percent. At the beginning of the year, the balance of gross fixed assets was \$1,600 million and net operating working capital was \$640 million. At the end of the year gross fixed assets was \$2,000 million. Pete's free cash flow for the year was \$630 million. What is their end of year balance for net operating working capital?

- A) \$24 million
- B) \$264 million
- C) \$654 million
- D) \$1,064 million

Answer: B

Explanation: Taxes = $\$320\text{m} \times (0.3) = \$96\text{m} \Rightarrow$ Pete's operating cash flow was: $\text{OCF} = \text{EBIT} - \text{Taxes} + \text{Depreciation} = (\$500\text{m} - \$96\text{m} + \$250\text{m}) = \$654\text{m}$.

Pete's free cash flow for 2010 was: $\text{FCF} = \text{Operating cash flow} - \text{Investment in operating capital}$.

$\$630\text{m} = \$654\text{m} - \text{Investment in operating capital} \Rightarrow \text{Investment in operating capital} = \$654\text{m} - \$630\text{m} = \24m .

Accordingly, investment in operating capital for 2010 was: $\text{IOC} = \Delta\text{Gross fixed assets} + \Delta\text{Net operating working capital} \Rightarrow \$24\text{m} = (\$2,000\text{m} - \$1,600\text{m}) + (\text{Ending net operating working capital} - \$640\text{m}) \Rightarrow \text{Ending net operating working capital} = \$24\text{m} - (\$2,000\text{m} - \$1,600\text{m}) + \$640\text{m} = \264m .

Difficulty: 2 Medium

Topic: Free cash flow

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

74) The 2018 income statement for Lou's Shoes shows that depreciation expense is \$2 million, EBIT is \$5 million, EBT is \$3 million, and the tax rate is 40 percent. At the beginning of the year, the balance of gross fixed assets was \$16 million and net operating working capital was \$6 million. At the end of the year gross fixed assets was \$20 million. Lou's free cash flow for the year was \$4 million. What is their end of year balance for net operating working capital?

- A) \$1.8 million
- B) \$3.8 million
- C) \$5.8 million
- D) \$12.2 million

Answer: B

Explanation: Taxes = $\$3\text{m} \times (0.4) = \$1.2\text{m} \Rightarrow$

Lou's operating cash flow was:

OCF = EBIT – Taxes + Depreciation.

= $(\$5\text{m} - \$1.2\text{m} + \$2\text{m}) = \5.8m .

Lou's free cash flow for 2018 was:

FCF = Operating cash flow – Investment in operating capital.

$\$4\text{m} = \$5.8\text{m} - \text{Investment in operating capital}$.

$\Rightarrow \text{Investment in operating capital} = \$5.8\text{m} - \$4\text{m} = \1.8m .

Accordingly, investment in operating capital for 2018 was:

IOC = $\Delta \text{Gross fixed assets} + \Delta \text{Net operating working capital}$.

$\$1.8\text{m} = (\$20\text{m} - \$16\text{m}) + (\text{Ending net operating working capital} - \$6\text{m})$.

$\Rightarrow \text{Ending net operating working capital} = \$1.8\text{m} - (\$20\text{m} - \$16\text{m}) + \$6\text{m} = \3.8m .

Difficulty: 2 Medium

Topic: Free cash flow

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

75) The 2018 income statement for Paige's Purses shows that depreciation expense is \$10 million, EBIT is \$25 million, EBT is \$15 million, and the tax rate is 30 percent. At the beginning of the year, the balance of gross fixed assets was \$80 million and net operating working capital was \$30 million. At the end of the year gross fixed assets was \$100 million. Paige's free cash flow for the year was \$20 million. What is their end of year balance for net operating working capital?

- A) \$10.5 million
- B) \$14 million
- C) \$20.5 million
- D) \$30.5 million

Answer: C

Explanation: Taxes = \$15m $\times$ (0.3) = \$4.5m =>

Paige's operating cash flow was:

OCF = EBIT – Taxes + Depreciation.

= (\$25m – \$4.5m + \$10m) = \$30.5m.

Paige's free cash flow for 2018 was:

FCF = Operating cash flow – Investment in operating capital.

\$20m = \$30.5m – Investment in operating capital.

=> Investment in operating capital = \$30.5m – \$20m = \$10.5m.

Accordingly, investment in operating capital for 2018 was:

IOC = Δ Gross fixed assets + Δ Net operating working capital.

\$10.5m = (\$100m – \$80m) + (Ending net operating working capital – \$30m).

=> Ending net operating working capital = \$10.5m – (\$100m – \$80m) + 30m = \$20.5m.

Difficulty: 2 Medium

Topic: Free cash flow

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

76) The 2018 income statement for Betty's Barstools shows that depreciation expense is \$100 million, EBIT is \$400 million, and taxes are \$120 million. At the end of the year, the balance of gross fixed assets was \$510 million. The increase in net operating working capital during the year was \$94 million. Betty's free cash flow for the year was \$625 million. What was the beginning of year balance for gross fixed assets?

- A) \$359 million
- B) \$380 million
- C) \$849 million
- D) \$1,094 million

Answer: C

Explanation: Betty's operating cash flow was:

OCF = EBIT – Taxes + Depreciation.

= (\$400m – \$120m + \$100m) = \$380m.

Betty's free cash flow for 2018 was:

FCF = Operating cash flow – Investment in operating capital.

\$625m = \$380m – Investment in operating capital.

=> Investment in operating capital = \$380m – \$625m = –\$245m.

Accordingly, investment in operating capital for 2018 was:

IOC = ΔGross fixed assets + ΔNet operating working capital.

–\$245m = (\$510m – Beginning of year gross fixed assets) + \$94m.

=> Beginning of year gross fixed assets = 510m – (–\$245m) + \$94m = \$849m.

Difficulty: 2 Medium

Topic: Free cash flow

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

77) The 2018 income statement for John's Gym shows that depreciation expense is \$20 million, EBIT is \$80 million, and taxes are \$24 million. At the end of the year, the balance of gross fixed assets was \$102 million. The increase in net operating working capital during the year was \$18 million. John's free cash flow for the year was \$41 million. What was the beginning of year balance for gross fixed assets?

- A) \$43 million
- B) \$85 million
- C) \$84 million
- D) \$163 million

Answer: B

Explanation: John's operating cash flow was:

$OCF = EBIT - Taxes + Depreciation$

$= (\$80m - \$24m + \$20m) = \$76m$

John's free cash flow for 2018 was:

$FCF = Operating\ cash\ flow - Investment\ in\ operating\ capital$

$\$41m = \$76m - Investment\ in\ operating\ capital$

$\Rightarrow Investment\ in\ operating\ capital = \$76m - \$41m = \$35m$

Accordingly, investment in operating capital for 2018 was:

$IOC = \Delta Gross\ fixed\ assets + \Delta Net\ operating\ working\ capital$

$\$35m = (\$102m - Beginning\ of\ year\ gross\ fixed\ assets) + \$18m$

$\Rightarrow Beginning\ of\ year\ gross\ fixed\ assets = 102m - \$35m + \$18m = \$85m$

Difficulty: 2 Medium

Topic: Free cash flow

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

78) Bike and Hike, Inc. started the year with a balance of retained earnings of \$100 million and ended the year with retained earnings of \$128 million. The company paid dividends of \$9 million to the preferred stock holders and \$22 million to common stock holders. What was Bike and Hike's net income for the year?

- A) \$28 million
- B) \$31 million
- C) \$59 million
- D) \$128 million

Answer: C

Explanation: Statement of Retained Earnings as of December 31, 2018 (in millions of dollars)

Balance of retained earnings, December 31, 2017		\$ 100m
Plus: Net income for 2018 (= \$128m + 31m – 100m)		59m
Less: Cash dividends paid		
Preferred stock	\$ 9m	
Common stock	<u>22m</u>	
Total cash dividends paid		<u>31m</u>
Balance of retained earnings, December 31, 2018		<u>\$ 128m</u>

Net income for 2018 = \$128m + 31m – 100m = 59m.

Difficulty: 2 Medium

Topic: Statement of retained earnings

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

79) Soccer Starz, Inc. started the year with a balance of retained earnings of \$25 million and ended the year with retained earnings of \$32 million. The company paid dividends of \$2 million to the preferred stock holders and \$6 million to common stock holders. What was Soccer Starz's net income for the year?

- A) \$7 million
- B) \$15 million
- C) \$40 million
- D) \$49 million

Answer: B

Explanation: Statement of Retained Earnings as of December 31, 2018 (in millions of dollars)

Balance of retained earnings, December 31, 2017		\$ 25m
Plus: Net income for 2018 (= \$32m + 8m – 25m)		15m
Less: Cash dividends paid		
Preferred stock	\$ 2m	
Common stock	<u>6m</u>	
Total cash dividends paid		<u>8m</u>
Balance of retained earnings, December 31, 2018		<u>\$ 32m</u>

Net income for 2018 = \$32m + 8m – 25m = 15m.

Difficulty: 2 Medium

Topic: Statement of retained earnings

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

80) Jamaican Ice Cream Corp. started the year with a balance of retained earnings of \$100 million. The company reported net income for the year of \$45 million, paid dividends of \$2 million to the preferred stockholders and \$15 million to common stockholders. What is Jamaican Ice Cream's end of year balance in retained earnings?

- A) \$38 million
- B) \$55 million
- C) \$128 million
- D) \$162 million

Answer: C

Explanation: Statement of Retained Earnings as of December 31, 2018 (in millions of dollars)

Balance of retained earnings, December 31, 2017		\$ 100m
Plus: Net income for 2018		45m
Less: Cash dividends paid		
Preferred stock	\$ 2m	
Common stock	15m	
Total cash dividends paid		17m
Balance of retained earnings, December 31, 2018		\$ 128m

Difficulty: 2 Medium

Topic: Statement of retained earnings

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

81) The following is the 2017 income statement for Lamps, Inc.

Lamps, Inc. Income Statement for Year Ending December 31, 2017 (in millions of dollars)	
Net sales	\$ 100
Less: Cost of goods sold	<u>80</u>
Gross profits	20
Less: Depreciation	<u>5</u>
Earnings before interest and taxes (EBIT)	15
Less: Interest	<u>2</u>
Earnings before taxes (EBT)	13
Less: Taxes	<u>5</u>
Net income	<u>\$ 8</u>

The CEO of Lamps wants the company to earn a net income of \$12 million in 2018. Cost of goods sold is expected to be 75 percent of net sales, depreciation expense is not expected to change, interest expense is expected to increase to \$4 million, and the firm's tax rate will be 40 percent. What is the net sales needed to produce net income of \$12 million?

- A) \$29 million
- B) \$112 million
- C) \$116 million
- D) \$124 million

Answer: C

Explanation:

Lamps, INC.
Income Statement for Year Ending December 31, 2018
(in millions of dollars)

Net sales	\$ 116
Less: Cost of goods sold	87
Gross profits	<u>29</u>
Less: Depreciation	5
Earnings before interest and taxes (EBIT)	<u>24</u>
Less: Interest	4
Earnings before taxes (EBT)	<u>20</u>
Less: Taxes	<u>8</u>
Net income	<u>\$ 12</u>

Step 1: $EBT(1 - t) = \text{Net income} = \$12\text{m} = EBT(1 - 0.4) \Rightarrow EBT = \$12\text{m}/(1 - 0.4) = \$20\text{m}$.

Step 2: $EBIT = EBT + \text{Interest} = \$20\text{m} + \$4\text{m} = \24m .

Step 3: $\text{Gross profits} = EBIT + \text{Depreciation} = \$24\text{m} + \$5\text{m} = \29m .

Step 4: $\text{Net sales} = \text{Gross profits}/(1 - \text{Cost of goods sold percent}) = \$29\text{m}/(1 - 0.75) = \116m .

Step 5: $\text{Cost of goods sold} = \text{Sales} - \text{Gross profits} = \$116\text{m} - \$29 = \87m .

Difficulty: 3 Hard

Topic: Income statement

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

82) You have been given the following information for Halle's Holiday Store Corp. for the year 2017: Net sales = \$50,000,000; Cost of goods sold = \$35,000,000; Addition to retained earnings = \$2,000,000; Dividends paid to preferred and common stockholders = \$3,000,000; Interest expense = \$3,000,000. The firm's tax rate is 30 percent. In 2018, net sales are expected to increase by \$5 million, cost of goods sold is expected to be 65 percent of net sales, expensed depreciation is expected to be the same as in 2017, interest expense is expected to be \$2,500,000, the tax rate is expected to be 30 percent of EBT, and dividends paid to preferred and common stockholders will not change. What is the addition to retained earnings expected in 2018?

- A) \$2,000,000
- B) \$5,325,000
- C) \$8,447,500
- D) \$10,304,643

Answer: B

Explanation:

Income Statement for Year Ending December 31, 2017
(in millions of dollars)

Net sales (all credits)	\$ 50,000,000
Less: Cost of goods sold	<u>35,000,000</u>
Gross profits	15,000,000
Less: Depreciation (\$15m. – \$10,142,857)	<u>4,857,143</u>
Earnings before interest and taxes (EBIT) (\$7,142,857 + \$3m)	10,142,857
Less: Interest	<u>3,000,000</u>
Earnings before taxes (EBT)	7,142,857
Less: Taxes	
Net income	<u>\$ 5,000,000</u>
Less: Preferred and common stock dividends	\$ 3,000,000
Addition to retained earnings	\$ 2,000,000

Depreciation = \$15,000,000 – \$10,142,857 = \$4,857,143.

Earnings before interest and taxes (EBIT) = \$7,142,857 + \$3,000,000 = \$10,142,857.

Earnings before taxes (EBT) = \$5,000,000 / (1 – 0.30) = \$7,142,857.

Difficulty: 3 Hard

Topic: Income statement

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

83) Martha's Moving Van 4U, Inc. had free cash flow during 2018 of \$1 million, EBIT of \$30 million, tax expense of \$8 million, and depreciation of \$4 million.

- Beginning of the year gross fixed assets were \$30m and end of the year gross fixed assets were \$40m.
- Beginning of the year current assets were \$110m and end of the year current assets were \$130m.
- Beginning of the year current liabilities were \$85m.
- Accrued wages and taxes at the end of the year were \$20m and Notes Payable at the end of the year were \$35m.

Using the above information, what was Martha's Accounts Payable ending balance in 2018?

- A) \$5 million
- B) \$15 million
- C) \$35 million
- D) \$45 million

Answer: C

Explanation: Martha's operating cash flow for 2018 was:

$$\text{OCF} = \text{EBIT} - \text{Taxes} + \text{Depreciation} = (\$30\text{m} - \$8\text{m} + \$4\text{m}) = \$26\text{m}$$

Martha's free cash flow was:

$$\text{FCF} = \text{Operating cash flow} - \text{Investment in operating capital}$$

$$\$1\text{m} = \$26\text{m} - \text{Investment in operating capital}$$

$$\text{So, Investment in operating capital} = \$26\text{m} - \$1\text{m} = \$25\text{m}$$

$$\text{IOC} = \Delta \text{Gross fixed assets} + \Delta \text{Net operating working capital}$$

$$\$25\text{m} = (\$40\text{m} - \$30\text{m}) + \Delta \text{Net operating working capital}$$

$$\Rightarrow \Delta \text{Net operating working capital} = \$25\text{m} - (\$40\text{m} - \$30\text{m}) = \$15\text{m}$$

$$\Delta \text{Net operating working capital} = \$15\text{m} = \Delta \text{Current assets} - \Delta \text{Current liabilities}$$

$$\$15\text{m} = (\$130\text{m} - \$110\text{m}) - \Delta \text{Current liabilities}$$

$$\Rightarrow \Delta \text{Current liabilities} = (\$130\text{m} - \$110\text{m}) - \$15\text{m} = \$5\text{m}$$

$$\Rightarrow 2018 \text{ Current liabilities} = \$85\text{m} + \$5\text{m} = \$90\text{m} \text{ and } 2018 \text{ Current liabilities} = \text{Accrued wages and taxes} + \text{Accounts payable} + \text{Notes payable}$$

$$\$90\text{m} = \$20\text{m} + \text{Accounts payable} + \$35\text{m}$$

$$\Rightarrow \text{Accounts payable} = \$90\text{m} - \$20\text{m} - \$35\text{m} = \$35\text{m}$$

Martha's Moving Van 4U, Inc. Balance Sheet as of December 31, 2017 and 2018 (in millions of dollars)					
Assets	2017	2018	Liabilities and Equity	2017	2018
Current assets			Current liabilities		
Cash and marketable securities	\$ 10	\$ 15	Accrued wages and taxes	\$ 15	\$ 20
Accounts receivable	20	25	Accounts payable	40	35
Inventory	80	90	Notes payable	30	35
Total	\$ 110	\$ 130	Total	\$ 85	\$ 90
Fixed assets:			Long-term debt:	\$ 20	\$ 25
Gross plant and equipment	\$ 30	\$ 40	Stockholders' equity:		
Less: Depreciation	10	12	Preferred stock (5m shares)	\$ 5	\$ 5
Net plant and equipment	\$ 20	\$ 28	Common stock and paid-in-surplus (20m shares)	10	10
Other long-term assets	30	30	Retained earnings	40	58
Total	\$ 50	\$ 58	Total	\$ 55	\$ 73
Total assets	\$ 160	\$ 188	Total liabilities and equity	\$ 160	\$ 188

Difficulty: 3 Hard

Topic: Free cash flow

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

84) You are evaluating the balance sheet for Goodman's Bees Corporation. From the balance sheet you find the following balances: cash and marketable securities = \$200,000, accounts receivable = \$1,100,000, inventory = \$2,000,000, accrued wages and taxes = \$500,000, accounts payable = \$600,000, and notes payable = \$100,000. Calculate Goodman's Bees' net working capital.

- A) \$2,000,000
- B) \$2,100,000
- C) \$1,400,000
- D) \$1,900,000

Answer: B

Explanation: $(0.2m + 1.1m + 2.0m) - (0.5m + 0.6m + 0.1m) = 2.1m$.

Difficulty: 1 Easy

Topic: Net working capital

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

85) Zoeckler Mowing & Landscaping's year-end 2018 balance sheet lists current assets of \$350,000, fixed assets of \$325,000, current liabilities of \$145,000, and long-term debt of \$185,000. Calculate Zoeckler's total stockholders' equity.

- A) \$115,000
- B) \$490,000
- C) \$345,000
- D) \$500,000

Answer: C

Explanation: $(0.350 + 0.325) - (0.145 + 0.185) = 0.345m$.

Difficulty: 1 Easy

Topic: Balance sheet

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

86) Reed's Birdie Shot, Inc.'s 2018 income statement lists the following income and expenses: EBIT = \$550,000, interest expense = \$43,000, and net income = \$300,000. Calculate the 2018 taxes reported on the income statement.

- A) \$85,000
- B) \$107,000
- C) \$309,000
- D) \$207,000

Answer: D

Explanation: $(0.550\text{m} - 0.043\text{m}) - 0.3\text{m} = 0.207\text{m}$.

Difficulty: 1 Easy

Topic: Income statement

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

87) Reed's Birdie Shot, Inc.'s 2018 income statement lists the following income and expenses: EBIT = \$555,000, interest expense = \$178,000, and taxes = \$148,000. Reed's has no preferred stock outstanding and 100,000 shares of common stock outstanding. Calculate the 2018 earnings per share.

- A) \$3.49
- B) \$2.29
- C) \$3.14
- D) \$2.79

Answer: B

Explanation: $(0.555\text{m} - 0.178\text{m} - 0.148\text{m})/0.1\text{m} = \2.29 .

Difficulty: 1 Easy

Topic: Per-share valuations

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

88) Oakdale Fashions Inc. had \$255,000 in 2018 taxable income. If the firm paid \$82,100 in taxes, what is the firm's average tax rate?

- A) 34.70%
- B) 32.20%
- C) 29.90%
- D) 28.20%

Answer: B

Explanation: $82,100/255,000 = 32.20\%$.

Difficulty: 1 Easy

Topic: Taxes

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-03 Explain how taxes influence corporate managers' and investors' decisions.

89) Hunt Taxidermy, Inc. is concerned about the taxes paid by the company in 2018. In addition to \$36.5 million of taxable income, the firm received \$1,250,000 of interest on state-issued bonds and \$400,000 of dividends on common stock it owns in Hunt Taxidermy, Inc. Calculate Hunt Taxidermy's taxable income.

- A) \$40,250,000
- B) \$38,150,000
- C) \$36,900,000
- D) \$36,620,000

Answer: D

Explanation: $\$36.5\text{m} + (0.3)0.4\text{m} = 36.620\text{m}$.

Difficulty: 1 Easy

Topic: Taxes

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-03 Explain how taxes influence corporate managers' and investors' decisions.

90) Ramakrishnan Inc. reported 2018 net income of \$20 million and depreciation of \$1,500,000. The top part of Ramakrishnan, Inc.'s 2017 and 2018 balance sheets is listed as follows (in millions of dollars).

Assets	2017	2018	Liabilities & Equity	2017	2018
Current assets			Current liabilities		
Cash and marketable securities	\$ 15	\$ 20	Accrued wages and taxes	\$ 18	\$ 20
Accounts receivable	75	84	Accounts payable	45	50
Inventory	110	121	Notes payable	40	45
Total	<u>\$ 200</u>	<u>\$ 225</u>	Total	<u>\$ 103</u>	<u>\$ 115</u>

Calculate the 2018 net cash flow from operating activities for Ramakrishnan, Inc.

- A) \$12,500,000
- B) \$10,500,000
- C) \$8,500,000
- D) \$7,100,000

Answer: C

Explanation: $20 + (1.5 + 2 + 5) - (9 + 11) = \8.5m.

Difficulty: 1 Easy

Topic: Operating activities

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-04 Differentiate between accounting income and cash flows.

91) In 2018, Usher Sports Shop had cash flows from investing activities of (\$2,150,000) and cash flows from financing activities of (\$3,219,000). The balance in the firm's cash account was \$980,000 at the beginning of 2018 and \$1,025,000 at the end of the year. Calculate Usher Sports Shop's cash flow from operations for 2018.

- A) \$6,219,000
- B) \$5,414,000
- C) \$4,970,000
- D) \$5,980,000

Answer: B

Explanation: $(1,025,000 - 980,000) = X - 2,150,000 - 3,219,000$; $\Rightarrow X = \text{Cash flow from operations} = \$5,414,000$.

Difficulty: 1 Easy

Topic: Operating activities

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-04 Differentiate between accounting income and cash flows.

92) You are considering an investment in Fields and Struthers, Inc. and want to evaluate the firm's free cash flow. From the income statement, you see that Fields and Struthers earned an EBIT of \$52 million, paid taxes of \$10 million, and its depreciation expense was \$5 million. Fields and Struthers' gross fixed assets increased by \$38 million from 2017 to 2018. The firm's current assets increased by \$20 million and spontaneous current liabilities increased by \$12 million. Calculate Fields and Struthers' operating cash flow (OCF), investment in operating capital (IOC), and free cash flow (FCF) for 2018.

- A) OCF = \$42,000,000; IOC = \$37,000,000; FCF = \$5,000,000
- B) OCF = \$47,000,000; IOC = \$37,000,000; FCF = \$10,000,000
- C) OCF = \$42,000,000; IOC = \$46,000,000; FCF = -\$4,000,000
- D) OCF = \$47,000,000; IOC = \$46,000,000; FCF = \$1,000,000

Answer: D

Explanation: $\text{OCF} = \text{EBIT} - \text{Taxes} + \text{Depreciation} = (\$52\text{m} - \$10\text{m} + \$5\text{m}) = \$47\text{m}$.

Investment in operating capital: $\Delta \text{Gross fixed assets} + \Delta \text{Net operating working capital} = \$38\text{m} + (\$20\text{m} - \$12\text{m}) = \$46\text{m}$. Accordingly, Fields and Struthers' free cash flow for 2018 was: $\text{FCF} = \text{Operating cash flow} - \text{Investment in operating capital} = \$47\text{m} - \$46\text{m} = \1m .

Difficulty: 1 Easy

Topic: Free cash flow

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

93) Tater and Pepper Corp. reported free cash flows for 2018 of \$20 million and investment in operating capital of \$15 million. Tater and Pepper listed \$8 million in depreciation expense and \$12 million in taxes on its 2018 income statement. Calculate Tater and Pepper's 2018 EBIT.

- A) \$49,000,000
- B) \$42,000,000
- C) \$39,000,000
- D) \$47,000,000

Answer: C

Explanation: $FCF = \text{Operating cash flow} - \text{Investment in operating capital}$; $\$20\text{m} = X - \15m ; $X = \$35\text{m}$; $OCF = EBIT - \text{Taxes} + \text{Depreciation}$; $\$35\text{m} = (EBIT - \$12\text{m} + \$8\text{m})$; $EBIT = \$39\text{m}$.

Difficulty: 1 Easy

Topic: Free cash flow

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

94) Mr. Husker's Tuxedos, Corp. began the year 2018 with \$205 million in retained earnings. The firm earned net income of \$30 million in 2018 and paid \$5 million to its preferred stockholders and \$12 million to its common stockholders. What is the year-end 2018 balance in retained earnings for Mr. Husker's Tuxedos?

- A) \$193,000,000
- B) \$200,000,000
- C) \$213,000,000
- D) \$218,000,000

Answer: D

Explanation: $\$205\text{m} + \$30\text{m} - \$5\text{m} - \$12\text{m} = \$218\text{m}$.

Difficulty: 1 Easy

Topic: Statement of retained earnings

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

95) Brenda's Bar and Grill has total assets of \$17 million of which \$5 million are current assets. Cash makes up 12 percent of the current assets and accounts receivable makes up another 40 percent of current assets. Brenda's gross plant and equipment has a cost value of \$12 million and other long-term assets have a cost value of \$1,000,000. Using this information, what are the balance of inventory and the balance of depreciation on Brenda's Bar and Grill's balance sheet?

- A) \$2.4 million; \$1 million
- B) \$3.4 million; \$2 million
- C) \$1.4 million; \$1 million
- D) \$0.4 million; \$3 million

Answer: A

Explanation: Step 1: Find Inventory: $CA = 5 = \text{Cash} + A/R + \text{Inv} = 0.12 \times 5 + 0.40 \times 5 + \text{Inv}$;
 $\Rightarrow \text{Inv} = \2.4m ;

Step 2: Find Depreciation Expense: $TA = CA + FA - \text{Accumulated Depreciation.}; 17 = 5 + (12 + 1) - \text{Accumulated Depreciation}; \Rightarrow \text{Accumulated Depreciation} = \1m .

Difficulty: 2 Medium

Topic: Balance sheet

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

96) Ed's Tobacco Shop has total assets of \$100 million. Fifty percent of these assets are financed with debt of which \$37 million is current liabilities. The firm has no preferred stock but the balance in common stock and paid-in surplus is \$32 million. Using this information what is the balance for long-term debt and retained earnings on Ed's Tobacco Shop's balance sheet?

- A) \$18 million; \$27 million
- B) \$12 million; \$12 million
- C) \$14 million; \$29 million
- D) \$13 million; \$18 million

Answer: D

Explanation: Step 1: Find long-term debt: $TL = CL + \text{long-term debt} = 0.5 \times 100 = 37 + \text{long-term debt}$; long-term debt = \$13 million;

Step 2: Find RE: Total equity = $0.5 \times 100 = 50 = CS + P + RE = 32 + RE$; RE = \$18 million.

Difficulty: 2 Medium

Topic: Balance sheet

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

97) Muffin's Masonry, Inc.'s balance sheet lists net fixed assets as \$16 million. The fixed assets could currently be sold for \$17 million. Muffin's current balance sheet shows current liabilities of \$5.5 million and net working capital of \$6.5 million. If all the current accounts were liquidated today, the company would receive \$10.25 million cash after paying \$5.5 million in liabilities. What is the book value of Muffin's Masonry's assets today? What is the market value of these assets?

- A) Book Value: \$28m; Market Value: \$32.75m
- B) Book Value: \$32m; Market Value: \$42.25m
- C) Book Value: \$32m; Market Value: \$32.75m
- D) Book Value: \$28m; Market Value: \$42.25m

Answer: A

Explanation: Step 1: Find CA (book value): $= CA - CL = NWC$; $\Rightarrow CA \text{ (book value)} = 6.5m + 5.5m = \$12m$.

Step 2: Find TA (book value): $TA = \text{Net FA} + CA = \$16m + \$12m = \$28m$.

Step 3: Find CA (market value): $NWC \text{ (market)} + CL = \$10.25 + \$5.5m = \$15.75m$.

Step 4: Find TA (market value): $\text{Net FA} + CA = \$17m + \$15.75m = \$32.75m$.

Difficulty: 2 Medium

Topic: Market and book values

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-02 Differentiate between book (or accounting) value and market value.

98) Ed's Tobacco Shop has total assets of \$100 million. Fifty percent of these assets are financed with debt of which \$37 million is current liabilities. The firm has no preferred stock but the balance in common stock and paid-in surplus is \$32 million. Using this information what is the balance for long-term debt and retained earnings on Ed's Tobacco Shop's balance sheet?

- A) \$1,970,842.88
- B) \$1,214,285.71
- C) \$1,521,989.23
- D) \$2,364,285.71

Answer: B

Explanation: Step 1: $NI = \text{Dividends} + \text{Addition to RE} = 4,000,000.00 + 995,000 = \$4,995,000.$

Step 2: $NI = EBT (1 - \text{tax rate}) \Rightarrow EBT = NI / (1 - \text{tax rate}) = \$4,995,000 / (1 - 0.30) = \$7,135,714.29.$

Step 3: $EBIT - \text{Interest} = EBT \Rightarrow EBIT = \$7,135,714.29 + \$1,150,000 = \$8,285,714.29.$

Step 4: $\text{Gross profits} = \text{Net sales} - \text{COGS} = \$15,250,000 - \$5,750,000 = \$9,500,000.$

Step 5: $\text{Gross profits} - \text{Depreciation} = EBIT \Rightarrow \text{Depreciation} = \$9,500,000 - \$8,285,714.29 = \$1,214,285.71.$

Difficulty: 2 Medium

Topic: Income statement

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

99) Dogs 4 U Corporation has net cash flow from financing activities for the last year of \$10 million. The company paid \$8 million in dividends last year. During the year, the change in notes payable on the balance sheet was \$9 million, and change in common and preferred stock was \$0 million. The end of year balance for long-term debt was \$44 million. Calculate the beginning of year balance for long-term debt.

- A) \$37 million
- B) \$34 million
- C) \$33 million
- D) \$35 million

Answer: D

Explanation: $\$10 = \$9 - \$8 - \$0 + \text{Change in long-term debt}; \Rightarrow \text{change in long-term debt} = \$9 = \text{Ending Bal} - \text{Change in long-term debt}; \Rightarrow \text{Beg balance of long-term debt} = \$35.$

Difficulty: 2 Medium

Topic: Financing activities

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

100) The 2011 income statement for Duffy's Pest Control shows that depreciation expense is \$180 million, EBIT is \$420 million, EBT is \$240 million, and the tax rate is 30 percent. At the beginning of the year, the balance of gross fixed assets was \$1,500 million and net operating working capital was \$500 million. At the end of the year gross fixed assets was \$1,803 million. Duffy's free cash flow for the year was \$425 million. Calculate the end of year balance for net operating working capital.

- A) \$403 million
- B) \$300 million
- C) \$203 million
- D) \$103 million

Answer: B

Explanation: Step 1: Find OCF: $OCF = \$420 - (\$240 \times 0.3) + \$180 = \528 ;

Step 2: Find investment in operating capital: $FCF = \$425 = \$528 - \text{Investment in Op Cap}$;

Investment in operating capital = \$103

Step 3: Find ending level of net op. working cap: $\$103 = (\$1,803 - \$1,500) + (\text{Ending net op. working capital} - \$500)$;

Ending net op. working capital = \$300

Difficulty: 2 Medium

Topic: Free cash flow

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

101) The CEO of Tom and Sue's wants the company to earn a net income of \$3.25 million in 2018. Cost of goods sold is expected to be 60 percent of net sales, depreciation expense is \$2.9 million, interest expense is expected to increase to \$1.050 million, and the firm's tax rate will be 30 percent. Calculate the net sales needed to produce net income of \$3.25 million.

- A) \$26.02 million
- B) \$29.36 million
- C) \$21.48 million
- D) \$28.25 million

Answer: C

Explanation: Work backwards (up) the income statement: $EBT = 3.25 / (1 - 0.3) =$

$\$4.64\text{m}$; $EBIT = \$4.64\text{m} + \$1.05\text{m} = \$5.69\text{m}$; $\text{Gross Profits} = \$5.69\text{m} + \$2.9 = \$8.59\text{m}$;

$\text{Net sales} = \$8.59 / (1 - 0.6) = \21.475m

Difficulty: 3 Hard

Topic: Income statement

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

102) All of the following would be a result of changing to the MACRS method of depreciation *EXCEPT*

- A) higher depreciation expense.
- B) lower taxes in the early years of a project's life.
- C) lower taxable income in the early years of a project's life.
- D) All of these choices are correct.

Answer: D

Difficulty: 1 Easy

Topic: Depreciation methods

Bloom's: Understand

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

103) Which of the following is *NOT* a source of cash?

- A) The firm reduces its inventory.
- B) The firm pays off some of its long-term debt.
- C) The firm has positive net income.
- D) The firm sells more common stock.

Answer: B

Difficulty: 2 Medium

Topic: Sources and uses of cash

Bloom's: Analyze

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

104) Which of the following is a use of cash?

- A) The firm takes its depreciation expense.
- B) The firm sells some of its fixed assets.
- C) The firm issues more long-term debt.
- D) The firm decreases its accrued wages and taxes.

Answer: D

Difficulty: 2 Medium

Topic: Sources and uses of cash

Bloom's: Analyze

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

105) Is it possible for a firm to have positive net income and yet to have cash flow problems?

- A) No, this is impossible since net income increases the firm's cash.
- B) Yes, this can occur when a firm is growing very rapidly.
- C) Yes, this is possible if the firm window-dressed its financial statements.
- D) No, this is impossible since net income and cash are highly correlated.

Answer: B

Difficulty: 1 Easy

Topic: Statement of cash flows

Bloom's: Understand

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-04 Differentiate between accounting income and cash flows.

106) All of the following are cash flows from operations *EXCEPT*

- A) increases or decreases in cash.
- B) net income.
- C) depreciation.
- D) increases or decreases in accounts payable.

Answer: A

Difficulty: 2 Medium

Topic: Operating activities

Bloom's: Understand

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

107) All of the following are cash flows from financing *EXCEPT* a(n)

- A) increase in accounts payable.
- B) issuing stock.
- C) stock repurchases.
- D) paying dividends.

Answer: A

Difficulty: 2 Medium

Topic: Financing activities

Bloom's: Understand

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

108) Cash flows available to pay the firm's stockholders and debt holders after the firm has made the necessary working capital investments, fixed asset investments, and developed the necessary new products to sustain the firm's ongoing operations is referred to as:

- A) operating cash flow.
- B) net operating working capital.
- C) free cash flow.

Answer: C

Difficulty: 2 Medium

Topic: Free cash flow

Bloom's: Understand

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

109) Investment in operating capital is:

- A) the change in assets plus the change in current liabilities.
- B) the change in gross fixed assets plus depreciation.
- C) the change in gross fixed assets plus the change in free cash flow.
- D) None of the options.

Answer: D

Difficulty: 2 Medium

Topic: Free cash flow

Bloom's: Understand

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

110) A firm had EBIT of \$1,000, paid taxes of \$225, expensed depreciation at \$13, and its gross fixed assets increased by \$25. What was the firm's operating cash flow?

- A) \$763
- B) \$737
- C) \$813
- D) \$788

Answer: D

Explanation: $\$1,000 - \$225 + \$13 = \788 .

Difficulty: 2 Medium

Topic: Operating cash flow

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

111) Which of the following is an example of a capital structure?

- A) 15 percent current assets and 85 percent fixed assets
- B) 10 percent current liabilities and 90 percent long-term debt
- C) 20 percent debt and 80 percent equity

Answer: C

Difficulty: 2 Medium

Topic: Capital structure

Bloom's: Understand

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

112) Lemmon Inc. lists fixed assets of \$100 on its balance sheet. The firm's fixed assets have recently been appraised at \$140. The firm's balance sheet also lists current assets at \$15. Current assets were appraised at \$16.50. Current liabilities book and market values stand at \$12 and the firm's long-term debt is \$40. Calculate the market value of the firm's stockholders' equity.

- A) \$156.50
- B) \$112.50
- C) \$104.50
- D) \$144.50

Answer: C

Explanation: $(\$140 + \$16.50) - \$12 - \$40 = \$104.50$

Difficulty: 2 Medium

Topic: Market and book values

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

113) A firm has operating income of \$1,000, depreciation expense of \$185, and its investment in operating capital is \$400. The firm is 100 percent equity financed and has a 35 percent tax rate. What is the firm's operating cash flow?

- A) \$725
- B) \$795
- C) \$835
- D) \$965

Answer: C

Explanation: $(\$1,000 - \$350 + \$185) = \835 .

Difficulty: 2 Medium

Topic: Operating cash flow

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-02 Differentiate between book (or accounting) value and market value.

114) All of the following are reasons that one should be cautious in interpreting financial statements *EXCEPT*

- A) firms can take steps to over- or understate earnings at various times.
- B) it is difficult to compare two firms that use different depreciation methods.
- C) financial managers have quite a bit of latitude in using accounting rules to manage their reported earnings.
- D) All of these choices are correct.

Answer: D

Difficulty: 2 Medium

Topic: Financial statements

Bloom's: Understand

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-06 Observe cautions that should be taken when examining financial statements.

115) Which of the following statements is correct?

- A) The bottom line on the statement of cash flows equals the change in the retained earnings on the balance sheet.
- B) The reason the statement of cash flows is important is because cash is what pays the firm's obligations, not accounting profit.
- C) If a firm has accounting profit, its cash account will always increase.
- D) All of these choices are correct.

Answer: B

Difficulty: 2 Medium

Topic: Statement of cash flows

Bloom's: Understand

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-04 Differentiate between accounting income and cash flows.

116) ABC Inc. has \$100 in cash on its balance sheet at the end of 2017. During 2018, the firm issued \$450 in common stock, reduced its notes payable by \$40, purchased fixed assets in the amount of \$750, and had cash flows from operating activities of \$315. How much cash did ABC Inc. have on its balance sheet at the end of 2018?

- A) \$75
- B) \$140
- C) \$225
- D) -\$25

Answer: A

Explanation: $100 + 315 - 40 - 750 + 450 = \75 .

Difficulty: 2 Medium

Topic: Statement of cash flows

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-03 Explain how taxes influence corporate managers' and investors' decisions.

117) LLV Inc. originally forecasted the following financial data for next year: sales = \$1,000, cost of goods sold = \$675, and interest expense = \$90. The firm believes that COGS will always be 67.5 percent of sales. Due to increased global demand, the firm is now projecting that sales will be 20 percent higher than the original forecast. What is the additional net income (as compared to the original forecast) the firm can expect assuming a 35 percent tax rate?

- A) \$59.45
- B) \$195.00
- C) \$42.25
- D) \$74.00

Answer: C

Explanation: Step 1: Original forecasted NI = $[(1,000 - 675) - 90](1 - 0.35) = 152.75$;

Step 2: NI under increase in sales = $[1,200 - (0.675 \times 1,200) - 90](1 - 0.35) = 195$; Additional NI = $195 - 152.75 = 42.25$.

Difficulty: 3 Hard

Topic: Income statement

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-02 Differentiate between book (or accounting) value and market value.

118) LLV Inc. originally forecasted the following financial data for next year: sales = \$1,000, cost of goods sold = \$710, and interest expense = \$95. The firm believes that COGS will always be 71 percent of sales. Due to pressure from shareholders, the firm wants to achieve a net income of \$150. Assuming the interest expense will remain the same, how large must sales be to achieve this goal? Assume a 35 percent tax rate.

- A) \$1,403.82
- B) \$1,3009.18
- C) \$1,123.34
- D) \$1,296.51

Answer: C

Explanation: $150 / (1 - 0.35) = \text{EBT} = 230.77$; $\text{EBT} + \text{Int Exp} = \text{EBIT} = 325.77$; $\text{EBIT} / (1 - 0.71) = \text{Sales} = 1,123.34$.

Difficulty: 3 Hard

Topic: Income statement

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

119) A firm has sales of \$690, EBIT of \$300, depreciation of \$40, and fixed assets increased by \$265. If the firm's tax rate is 40 percent and there were no increases in net operating working capital, what is the firm's free cash flow?

- A) \$15
- B) \$75
- C) -\$45
- D) -\$55

Answer: C

Explanation: $[300 - (300 \times 0.4) + 40] - 265 = \text{FCF} = -\45 .

Difficulty: 2 Medium

Topic: Free cash flow

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

120) GW Inc. had \$800 million in retained earnings at the beginning of the year. During the year, the firm paid \$0.75 per share dividend and generated \$1.92 earnings per share. The firm has 100 million shares outstanding. At the end of year, what was the level of retained earnings for GW?

- A) \$725 million
- B) \$917 million
- C) \$882 million
- D) \$807 million

Answer: B

Explanation: $800m + \{1.92 \times 100m\} - \{0.75 \times 100m\} = \$917m$.

Difficulty: 3 Hard

Topic: Statement of retained earnings

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

121) For which of the following would one expect the book value of the asset to differ widely from its market value?

- A) accounts receivable
- B) accounts payable
- C) notes payable
- D) equity

Answer: D

Difficulty: 1 Easy

Topic: Market and book values

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-02 Differentiate between book (or accounting) value and market value.

122) Which of these is the term for the ease of conversion of an asset into cash at a fair value?

- A) Liquidity
- B) Fair Market Value (FMV)
- C) Book Value
- D) Current Asset

Answer: A

Difficulty: 1 Easy

Topic: Financial statements

Bloom's: Remember

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

123) Epic, Inc.'s 2018 income statement lists the following income and expenses: EBIT = \$1,000,000, interest expense = \$75,000, and taxes = \$277,500. Epic has no preferred stock outstanding and 100,000 shares of common stock outstanding. What are its 2018 earnings per share?

- A) \$10.00
- B) \$9.25
- C) \$7.225
- D) \$6.475

Answer: D

Explanation: Using the setup of an Income Statement in Table 2.2:

EBIT	\$ 1,000,000
Interest expense	<u>– 75,000</u>
EBT	925,000
Taxes	<u>– 277,500</u>
Net income	<u>647,500</u>

Thus,

Earnings per share (EPS) = $\$647,500 / 100,000 = \6.475 per share.

Difficulty: 1 Easy

Topic: Per-share valuations

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

124) Downtown Development, Inc.'s 2018 income statement lists the following income and expenses: EBIT = \$700,000, interest expense = \$100,000, and taxes = \$168,000. Downtown has no preferred stock outstanding and 50,000 shares of common stock outstanding. What are its 2018 earnings per share?

- A) \$14.00
- B) \$12.00
- C) \$10.64
- D) \$8.64

Answer: D

Explanation: Using the setup of an Income Statement in Table 2.2:

EBIT	\$ 700,000
Interest expense	<u>– 100,000</u>
EBT	600,000
Taxes	<u>– 168,000</u>
Net income	<u>432,000</u>

Thus,

Earnings per share (EPS) = $\$432,000 / 50,000 = \8.64 EPS.

Difficulty: 1 Easy

Topic: Per-share valuations

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

125) You are evaluating the balance sheet for Epic Corporation. From the balance sheet you find the following balances: cash and marketable securities = \$500,000, accounts receivable = \$200,000, inventory = \$100,000, accrued wages and taxes = \$50,000, accounts payable = \$60,000, and notes payable = \$200,000. Calculate Epic's net working capital.

- A) \$490,000
- B) \$540,000
- C) \$690,000
- D) \$800,000

Answer: A

Explanation: $(500,000 + 200,000 + 100,000) - (50,000 + 60,000 + 200,000) = 490,000$.

Difficulty: 1 Easy

Topic: Net working capital

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

126) You are evaluating the balance sheet for Ultra Corporation. From the balance sheet you find the following balances: cash and marketable securities = \$10,000, accounts receivable = \$2,000, inventory = \$20,000, accrued wages and taxes = \$1,000, accounts payable = \$3,000, and notes payable = \$10,000. Calculate Ultra's net working capital.

- A) \$ 8,000
- B) \$18,000
- C) \$28,000
- D) \$32,000

Answer: B

Explanation: $(10,000 + 2,000 + 20,000) - (1,000 + 3,000 + 10,000) = 18,000$.

Difficulty: 1 Easy

Topic: Net working capital

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.

127) Which of the following is the term within the GAAP framework whereby firms can engage in a process of controlling their earnings, otherwise known as "smoothing" their earnings, as long as it's not taken to an extreme.

- A) commingling
- B) delisting
- C) window dressing
- D) earnings management

Answer: D

Difficulty: 2 Medium

Topic: Ethics, governance, and regulation

Bloom's: Understand

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-06 Observe cautions that should be taken when examining financial statements.

128) A firm has sales of \$10,000, EBIT of \$3,000, depreciation of \$400, and fixed assets increased by \$2,000. If the firm's tax rate is 30 percent and there were no increases in net operating working capital, what is the firm's free cash flow?

- A) \$7400
- B) \$600
- C) \$500
- D) -\$1,220

Answer: C

Explanation: $[3,000 - (3,000 \times 0.3) + 400] - 2,000 = \text{FCF} = \500 .

Difficulty: 2 Medium

Topic: Free cash flow

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

129) A firm has sales of \$50,000, EBIT of \$10,000, depreciation of \$4,000, and fixed assets increased by \$2,000. If the firm's tax rate is 30 percent and there was a \$1,000 increase in net operating working capital, what is the firm's free cash flow?

- A) \$10,000
- B) \$9,000
- C) \$8,000
- D) \$1,200

Answer: C

Explanation: $[10,000 - (10,000 \times 0.3) + 4,000] - (2,000 + 1,000) = \text{FCF} = \$8,000$.

Difficulty: 2 Medium

Topic: Free cash flow

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.

130) Ultra Inc. had \$100 million in retained earnings at the beginning of the year. During the year, the firm paid \$0.25 per share dividend and generated \$2.00 earnings per share. The firm has 10 million shares outstanding. At the end of year, what was the level of retained earnings for GW?

- A) \$100 million
- B) \$117.5 million
- C) \$120 million
- D) \$145 million

Answer: B

Explanation: $100\text{m} + (2.00 \times 10\text{m}) - (0.25 \times 10\text{m}) = \117.5m .

Difficulty: 3 Hard

Topic: Statement of retained earnings

Bloom's: Apply

AACSB: Analytical Thinking

Accessibility: Keyboard Navigation

Learning Goal: 02-05 Demonstrate how to use a firm's financial statements to calculate its cash flows.