

Chapter 02

Reviewing Financial Statements

Multiple Choice Questions

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
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
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
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

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
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
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
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
9. 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

10. Common stockholders' equity divided by number of shares of common stock outstanding is the formula for calculating:
- A. Earnings per share (EPS).
 - B. Dividends per share (DPS).
 - C. Book value per share (BVPS).
 - D. Market value per share (MVPS).
11. 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 stock holders
 - B. The number of shares of stock outstanding
 - C. The earnings per share (EPS)
 - D. All of the choices
12. 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
13. 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-finance firm.
 - D. not pay any income taxes.
14. 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.

15. 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 costs
 - 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
16. 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
17. 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
18. 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
19. If a company reports a large amount of net income on its income statement during a year, the firm will have:
- A. positive cash flow.
 - B. negative cash flow.
 - C. zero cash flow.
 - D. Any of these scenarios are possible.

20. 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.

21. 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

22. 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

23. Jack and Jill Corporation's year-end 2013 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 stockholder's equity.

24. Bullseye, Inc.'s 2013 income statement lists the following income and expenses: EBIT = \$900,000, interest expense = \$85,000, and net income = \$570,000. What are the 2013 taxes reported on the income statement?
- A. \$245,000
 - B. \$330,000
 - C. \$815,000
 - D. There is not enough information to calculate 2013 taxes.
25. 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
26. 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
27. Barnyard, Inc.'s 2013 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 2013 earnings per share?
- A. \$2.50
 - B. \$2.275
 - C. \$1.74
 - D. \$1.515

28. Eccentricity, Inc. had \$300,000 in 2013 taxable income. Using the tax schedule from Table 2-3, what are the company's 2013 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	\$13,500	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%

29. Swimmy, Inc. had \$400,000 in 2013 taxable income. Using the tax schedule from Table 2-3, what are the company's 2013 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	\$13,500	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%

30. Scuba, Inc. is concerned about the taxes paid by the company in 2013. 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?

- 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%

31. Paige's Properties Inc. reported 2013 net income of \$5 million and depreciation of \$1,500,000. The top part Paige's Properties, Inc.'s 2012 and 2013 balance sheets is listed as follows (in millions of dollars).

Current assets	2012	2013	Current liabilities	2012	2013
Cash and marketable securities	\$ 10	\$ 20	Accrued wages and taxes	\$ 5	\$ 11
Accounts receivable	20	34	Accounts payable	25	29
Inventory	<u>10</u>	<u>11</u>	Notes payable	<u>10</u>	<u>25</u>
Total	\$ 40	\$ 65	Total	\$ 40	\$ 65

What is the 2013 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
32. In 2013, 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 2013 and \$105,000 at the end of the year. What was Upper Crust's cash flow from operations for 2013?
- A. \$15,000
 B. \$105,000
 C. \$400,000
 D. \$415,000
33. In 2013, 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 2013 and \$65,000 at the end of the year. What was Lower Case's cash flow from operations for 2013?
- A. -\$15,000
 B. -\$150,000
 C. -\$165,000
 D. -\$65,000
34. 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 2007 to 2008. 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 2013, respectively in millions?
- A. \$23, \$10, \$13
 B. \$23, \$12, \$11
 C. \$27, \$10, \$17
 D. \$27, \$12, \$15

35. 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 2012 to 2013. 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 2013, respectively, in millions?
- A. \$202, \$70, \$130
 - B. \$226, \$70, \$156
 - C. \$226, \$54, \$172
 - D. \$226, \$74, \$152
36. Catering Corp. reported free cash flows for 2013 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 2008 income statement. What was Catering's 2013 EBIT?
- A. \$7 million
 - B. \$10 million
 - C. \$11 million
 - D. \$13 million
37. TriCycle, Corp. began the year 2013 with \$25 million in retained earnings. The firm earned net income of \$7 million in 2008 and paid \$1 million to its preferred stockholders and \$3 million to its common stockholders. What is the year-end 2013 balance in retained earnings for TriCycle?
- A. \$25 million
 - B. \$28 million
 - C. \$32 million
 - D. \$36 million
38. Night Scapes, Corp. began the year 2013 with \$10 million in retained earnings. The firm suffered a net loss of \$2 million in 2013 and yet paid \$2 million to its preferred stockholders and \$1 million to its common stockholders. What is the year-end 2013 balance in retained earnings for Night Scapes?
- A. \$5 million
 - B. \$8 million
 - C. \$9 million
 - D. \$15 million

39. Use the following information to find dividends paid to common stockholders during 2013.

Balance of Retained Earnings, December 31, 2012	\$52m
Plus: Net Income for 2013	21m
Less: Cash Dividends Paid	
Preferred Stock	\$7m
Common Stock	<u>10m</u>
Total Cash Dividends Paid	<u>17m</u>
Balance of Retained Earnings, December 31, 2013	\$56m

- A. \$3 million
 B. \$4 million
 C. \$10 million
 D. \$17 million
40. 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
41. 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
42. 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

43. 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
44. 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
45. 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
46. 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

47. 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
48. 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
49. 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
50. 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

51. 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
52. 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
53. 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

54. 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
55. 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
56. The Carolina Corporation had a 2013 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

57. The Ohio Corporation had a 2013 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

58. The Sasnak Corporation had a 2013 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

59. The AOK Corporation had a 2013 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

60. 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

61. 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

62. 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

63. 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

64. 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
65. 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
66. 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
67. 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

68. 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
69. The 2013 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
70. The 2013 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
71. The 2013 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

72. The 2013 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
73. 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
74. 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
75. 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 stock holders and \$15 million to common stock holders. 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

76. The following is the 2013 income statement for Lamps, Inc.

Lamps, Inc
Income Statement for Year Ending December 31, 2013
(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 2014. 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

77. You have been given the following information for Halle's Holiday Store Corp. for the year 2013:

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 2014, 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 2013,

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 2014?

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

78. Martha's Moving Van 4U, Inc. had free cash flow during 2013 of \$1 million, EBIT of \$30 million, tax expense of \$8 million, and depreciation of \$4 million. Using this information, what was Martha's Accounts Payable ending balance in 2013?
- A. \$5 million
 - B. \$15 million
 - C. \$35 million
 - D. \$45 million
79. 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
80. Zoeckler Mowing & Landscaping's year-end 2011 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
81. Reed's Birdie Shot, Inc.'s 2013 income statement lists the following income and expenses: EBIT = \$550,000, interest expense = \$43,000, and net income = \$300,000. Calculate the 2013 taxes reported on the income statement.
- A. \$85,000
 - B. \$107,000
 - C. \$309,000
 - D. \$207,000
82. Reed's Birdie Shot, Inc.'s 2013 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 2013 earnings per share.
- A. \$3.49
 - B. \$2.29
 - C. \$3.14
 - D. \$2.79

83. Oakdale Fashions Inc. had \$255,000 in 2013 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%
84. Hunt Taxidermy, Inc. is concerned about the taxes paid by the company in 2013. 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
85. Ramakrishnan Inc. reported 2013 net income of \$20 million and depreciation of \$1,500,000. The top part of Ramakrishnan, Inc.'s 2012 and 2013 balance sheets is listed as follows (in millions of dollars).

	2012	2013		2012	2013
Assets			Liabilities & Equity		
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	\$200	\$225	Total	\$103	\$115

Calculate the 2013 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
86. In 2014, 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 2014 and \$1,025,000 at the end of the year. Calculate Usher Sports Shop's cash flow from operations for 2014.
- A. \$6,219,000
B. \$5,414,000
C. \$4,970,000
D. \$5,980,000

87. 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 2012 to 2013. 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 2013.
- 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
88. Tater and Pepper Corp. reported free cash flows for 2013 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 2010 income statement. Calculate Tater and Pepper's 2013 EBIT.
- A. \$49,000,000
 - B. \$42,000,000
 - C. \$39,000,000
 - D. \$47,000,000
89. Mr. Husker's Tuxedos, Corp. began the year 2013 with \$205 million in retained earnings. The firm earned net income of \$30 million in 2013 and paid \$5 million to its preferred stockholders and \$12 million to its common stockholders. What is the year-end 2013 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
90. 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

91. 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
92. 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
93. You have been given the following information for Corky's Bedding Corp.:
- Net sales = \$15,250,000;
 - Cost of goods sold = \$5,750,000;
 - Addition to retained earnings = \$4,000,000;
 - Dividends paid to preferred and common stockholders = \$995,000;
 - Interest expense = \$1,150,000.
- The firm's tax rate is 30 percent. Calculate the depreciation expense for Corky's Bedding Corp.
- A. \$1,210,000
 - B. \$1,970,000
 - C. \$1,520,000
 - D. \$1,725,000
94. 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 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

95. 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
96. The CEO of Tom and Sue's wants the company to earn a net income of \$3.25 million in 2014. 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
97. 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.
98. 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.
99. 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.

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

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- 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.

101 All of the following are cash flows from operations EXCEPT:

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

102 All of the following are cash flows from financing EXCEPT a(n):

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

103 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:

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- A. operating cash flow.
- B. net operating working capital.
- C. free cash flow.
- D.
None of these.

104 Investment in operating capital is:

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- 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 these.

105 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

106 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
- D. None of these

107 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

108 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

109 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 are reasons to be cautious in interpreting financial statements.

110 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 statements are correct.

111 ABC Inc. has \$100 in cash on its balance sheet at the end of 2009. During 2010, 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 2010?

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

112 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

113 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

114 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

115 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

Chapter 02 Reviewing Financial Statements **Answer Key**

Multiple Choice Questions

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

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 1 Basic

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

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

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 1 Basic

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

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

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 1 Basic

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.
Topic: Statement of cash flows

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

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 1 Basic

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.
Topic: Statement of retained earnings

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

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 1 Basic

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

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

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 1 Basic

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.
Topic: Statement of cash flows

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

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 1 Basic
Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.
Topic: Balance sheet

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

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Remember
Difficulty: 1 Basic
Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.
Topic: Financial statements

9. 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

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 1 Basic
Learning Goal: 02-02 Differentiate between book (or accounting) value and market value.
Topic: Market and book values

10. Common stockholders' equity divided by number of shares of common stock outstanding is the formula for calculating:

- A. Earnings per share (EPS).
- B. Dividends per share (DPS).
- C.** Book value per share (BVPS).
- D. Market value per share (MVPS).

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 1 Basic
Learning Goal: 02-02 Differentiate between book (or accounting) value and market value.
Topic: Per-share valuations

11. 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 stock holders
B. The number of shares of stock outstanding
C. The earnings per share (EPS)
D. All of the choices

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 2 Intermediate
Learning Goal: 02-03 Explain how taxes influence corporate managers and investors decisions.
Topic: Capital structure basics

12. 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

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 1 Basic
Learning Goal: 02-03 Explain how taxes influence corporate managers and investors decisions.
Topic: Taxes

13. 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-finance firm.
D. not pay any income taxes.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 2 Intermediate
Learning Goal: 02-03 Explain how taxes influence corporate managers and investors decisions.
Topic: Taxes

14. 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.

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Blooms: Understand

Difficulty: 2 Intermediate

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

Topic: Taxes

15. 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 costs
- 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

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Blooms: Understand

Difficulty: 2 Intermediate

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

Topic: Free cash flow

16. 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**

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Blooms: Understand

Difficulty: 1 Basic

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

Topic: Free cash flow

17. 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

AACSB: Reflective Thinking

Accessibility: Keyboard Navigation

Blooms: Understand

Difficulty: 2 Intermediate

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

Topic: Sources and uses of cash

18. 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

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 1 Basic

Learning Goal: 02-05 Demonstrate how to use a firms financial statements to calculate its cash flows.
Topic: Investing activities

19. If a company reports a large amount of net income on its income statement during a year, the firm will have:

- A. positive cash flow.
- B. negative cash flow.
- C. zero cash flow.
- D. Any of these scenarios are possible.**

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 2 Intermediate

Learning Goal: 02-05 Demonstrate how to use a firms financial statements to calculate its cash flows.
Topic: Cash flows

20. 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.

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 2 Intermediate

Learning Goal: 02-05 Demonstrate how to use a firms financial statements to calculate its cash flows.
Topic: Free cash flow

21. 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

AACSB: Reflective Thinking
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 2 Intermediate

Learning Goal: 02-06 Observe cautions that should be taken when examining financial statements.
Topic: Ethics, governance, and regulation

22. 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

net working capital = current assets - current liabilities.

Cypress's current assets =

Cash and marketable securities	=	\$400,000
Accounts receivable	=	\$200,000
Inventory	=	<u>\$100,000</u>
Total current assets		\$700,000

and current liabilities =

Accrued wages and taxes	=	\$ 10,000
Accounts payable	=	\$300,000
Notes payable	=	<u>\$600,000</u>
Total current liabilities		\$910,000

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

AACSB: Analytic
Blooms: Apply
Difficulty: 1 Basic

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

23. Jack and Jill Corporation's year-end 2013 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 stockholder's equity.

Recall the balance sheet identity in Equation 2-1: Assets = Liabilities + Equity.
 Rearranging this equation: Equity = Assets - 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	<u>800,000</u>	Long-term debt	300,000
Total	\$1,050,000	Stockholders' equity	<u>555,000</u>
		Total	\$1,050,000

AACSB: Analytic
 Blooms: Apply
 Difficulty: 1 Basic

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

24. Bullseye, Inc.'s 2013 income statement lists the following income and expenses: EBIT = \$900,000, interest expense = \$85,000, and net income = \$570,000. What are the 2013 taxes reported on the income statement?

- A. \$245,000**
 B. \$330,000
 C. \$815,000
 D. There is not enough information to calculate 2013 taxes.

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	\$570,000

AACSB: Analytic
 Blooms: Apply
 Difficulty: 1 Basic

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

25. 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

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

AACSB: Analytic
 Blooms: Apply
 Difficulty: 1 Basic

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

26. 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

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 ($\$20,000,000 \times 0.05$)	<u>1,000,000</u>	
-Interest ($\$15,000,000 \times 0.05$)		<u>750,000</u>
EBT	\$4,000,000	\$4,250,000
-Taxes (40%)	<u>1,600,000</u>	<u>1,700,000</u>
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

AACSB: Analytic
 Blooms: Apply
 Difficulty: 1 Basic

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

27. Barnyard, Inc.'s 2013 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 2013 earnings per share?
- A. \$2.50
B. \$2.275
C. \$1.74
D. \$1.515

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	\$303,000

Thus,

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

AACSB: Analytic
Blooms: Apply
Difficulty: 1 Basic

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

28. Eccentricity, Inc. had \$300,000 in 2013 taxable income. Using the tax schedule from Table 2-3, what are the company's 2013 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	\$13,500	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%

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.

AACSB: Analytic
 Blooms: Apply
 Difficulty: 1 Basic
 Learning Goal: 02-03 Explain how taxes influence corporate managers and investors decisions.
 Topic: Taxes

29. Swimmy, Inc. had \$400,000 in 2013 taxable income. Using the tax schedule from Table 2-3, what are the company's 2013 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	\$13,500	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%

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.

AACSB: Analytic
 Blooms: Apply
 Difficulty: 1 Basic
 Topic: Taxes

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

30. Scuba, Inc. is concerned about the taxes paid by the company in 2013. 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?

- 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%

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.

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 1 Basic
Learning Goal: 02-03 Explain how taxes influence corporate managers and investors decisions.
Topic: Taxes

31. Paige's Properties Inc. reported 2013 net income of \$5 million and depreciation of \$1,500,000. The top part Paige's Properties, Inc.'s 2012 and 2013 balance sheets is listed as follows (in millions of dollars).

Current assets	2012	2013	Current liabilities	2012	2013
Cash and marketable securities	\$ 10	\$ 20	Accrued wages and taxes	\$ 5	\$ 11
Accounts receivable	20	34	Accounts payable	25	29
Inventory	<u>10</u>	<u>11</u>	Notes payable	<u>10</u>	<u>25</u>
Total	\$ 40	\$ 65	Total	\$ 40	\$ 65

What is the 2013 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

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
Subtractions (uses of cash):	
Increase in accounts receivable	-14,000,000
Increase in inventory	<u>- 1,000,000</u>
Net cash flow from operating activities:	\$ 1,500,000

AACSB: Analytic

Blooms: Apply

Difficulty: 1 Basic

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

Topic: Operating activities

32. In 2013, 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 2013 and \$105,000 at the end of the year. What was Upper Crust's cash flow from operations for 2013?

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

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 = \$ 15,000

AACSB: Analytic

Blooms: Apply

Difficulty: 1 Basic

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

Topic: Operating activities

33. In 2013, 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 2013 and \$65,000 at the end of the year. What was Lower Case's cash flow from operations for 2013?

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

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 = -\$15,000

AACSB: Analytic

Blooms: Apply

Difficulty: 1 Basic

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

Topic: Operating activities

34. 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 2007 to 2008. 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 2013, respectively in millions?
- A. \$23, \$10, \$13
B. \$23, \$12, \$11
C. \$27, \$10, \$17
D. \$27, \$12, \$15

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 2013 Crew Cut had cash flows of \$15 million available to pay its stockholders and debt holders.

AACSB: Analytic

Blooms: Apply

Difficulty: 1 Basic

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

Topic: Free cash flow

35. 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 2012 to 2013. 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 2013, respectively, in millions?
- A. \$202, \$70, \$130
B. \$226, \$70, \$156
C. \$226, \$54, \$172
D. \$226, \$74, \$152

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 2008 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 2008 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 2013 Cruise had cash flows of \$172 million available to pay its stockholders and debt holders.

AACSB: Analytic
Blooms: Apply
Difficulty: 1 Basic

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

36. Catering Corp. reported free cash flows for 2013 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 2008 income statement. What was Catering's 2013 EBIT?

A. \$7 million
B. \$10 million
C. \$11 million
D. \$13 million

Catering's free cash flow for 2013 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

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 1 Basic
Learning Goal: 02-05 Demonstrate how to use a firms financial statements to calculate its cash flows.
Topic: Free cash flow

37. TriCycle, Corp. began the year 2013 with \$25 million in retained earnings. The firm earned net income of \$7 million in 2008 and paid \$1 million to its preferred stockholders and \$3 million to its common stockholders. What is the year-end 2013 balance in retained earnings for TriCycle?

A. \$25 million
B. \$28 million
C. \$32 million
D. \$36 million

The statement of retained earnings for 2013 is as follows:

Balance of Retained Earnings, December 31, 2012	\$25m
Plus: Net Income for 2013	7m
Less: Cash Dividends Paid	
Preferred Stock	\$1m
Common Stock	<u>3m</u>
Total Cash Dividends Paid	<u>4m</u>
Balance of Retained Earnings, December 31, 2013	\$28m

AACSB: Analytic
Blooms: Apply
Difficulty: 1 Basic

38. Night Scares, Corp. began the year 2013 with \$10 million in retained earnings. The firm suffered a net loss of \$2 million in 2013 and yet paid \$2 million to its preferred stockholders and \$1 million to its common stockholders. What is the year-end 2013 balance in retained earnings for Night Scares?

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

The statement of retained earnings for 2013 is as follows:

Balance of Retained Earnings, December 31, 2012	\$10m
Less: Net Loss for 2013	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, 2013	\$ 5m

AACSB: Analytic
Blooms: Apply
Difficulty: 1 Basic

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.
Topic: Statement of retained earnings

39. Use the following information to find dividends paid to common stockholders during 2013.

Balance of Retained Earnings, December 31, 2012	\$52m
Plus: Net Income for 2013	21m
Less: Cash Dividends Paid	
Preferred Stock	\$7m
Common Stock	<u>10m</u>
Total Cash Dividends Paid	<u>17m</u>
Balance of Retained Earnings, December 31, 2013	\$56m

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

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

AACSB: Analytic
Blooms: Apply
Difficulty: 1 Basic

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.
Topic: Statement of retained earnings

40. 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

Current assets:

Cash and marketable

Securities (.2 x \$1) \$ 0.20

Accounts receivable (.05 x \$1) 0.05

Inventory step 1. .75 (\$ 1- \$0.2 - \$0.05)

Total \$ 1.0

Fixed assets:

Gross plant and
equipment

Less: Depreciation step 4. 0.5 (\$1.5- \$1.0)

Net plant and
equipment step 3. \$1.0 (\$2.0 - \$1.0)

Other long-term
assets 1.0

Total step 2. \$ 2.0 (\$3.0 - \$1.0)

Total assets \$ 3.0

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Balance sheet

41. 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

Current assets:

Cash and marketable

Securities (.10 x \$6)		\$ 0.6	
Accounts receivable (.40 x \$6)		2.4	
Inventory	step 1.	<u>3.0</u>	(\$ 6- \$0.6 - \$3.0)
Total		\$ 6.0	

Fixed assets:

Gross plant and
equipment

		\$ 13.0	
Less: Depreciation	step 4.	<u>3.0</u>	(\$13- \$10)

Net plant and
equipment

	step 3.	\$10.0	(\$12 - \$2)
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Other long-term
assets

		<u>2.0</u>	
Total	step 2.	\$12.0	(\$18 - \$6)

Total assets \$ 18.0

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Balance sheet

42. 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

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

AACSB: Analytic
 Blooms: Apply
 Difficulty: 2 Intermediate
 Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.
 Topic: Balance sheet

43. 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

Total current liabilities		\$ 1
Long-term debt:	step 3.	<u>\$ 2</u> (= \$3 - \$1)
Total debt:	step 2.	\$ 3 (= .2 x \$15 m)
Stockholders' equity:		
Preferred stock		\$ 0
Common stock and paid-in surplus (2 million shares)		8
Retained earnings	step 5.	<u>4</u> (= \$12 - \$8)
Total	step 4	\$12 (= \$15 - \$3)
Total liabilities and equity	step 1.	<u>\$15</u> (= Total Assets)

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Balance sheet

44. 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

	Book value		Market value
Assets			
Current assets step 1.	\$27m.	step 3.	\$92m.
Fixed assets	<u>40m.</u>		<u>50m.</u>
Total step 2.	\$67m.		\$142m.

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

AACSB: Analytic
 Blooms: Apply

Difficulty: 2 Intermediate

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

45. 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

	Book value		Market value
Assets			
Current assets step 1.	\$10m.	step 3.	\$16m.
Fixed assets	<u>20m.</u>		<u>25m.</u>
Total step 2.	\$30m.		\$41m.

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

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Market and book values

46. 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

	Book value		Market value
Assets			
Current assets step 1.	\$ 8m.	step 3.	\$11m.
Fixed assets	<u>15m.</u>		<u>17m.</u>
Total step 2.	\$23m.		\$28m.

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

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Market and book values

47. 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

	<u>AllDebt</u>	<u>AllEquity</u>
Operating income	\$.6m.	\$.6m.
Less: Interest (\$1m. x .1)	<u>.1m.</u>	<u>0m.</u>
Taxable income	.5m.	.6m.
Less: Taxes (30%)	<u>.15m.</u>	<u>.18m.</u>
Net income	<u><u>\$.35m.</u></u>	<u><u>\$.42m.</u></u>
Income available for asset funders (= operating income - taxes)	\$.45m.	\$.42m.

Return on assets funders' investment $\$0.45m/\$1.2m = 37.50\%$
 $\$0.42m/\$1.2m = 35.00\%$

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Profitability ratios

48. 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

	<u>AllDebt</u>	<u>AllEquity</u>
Operating income	\$ 3m.	\$ 3m.
Less: Interest (\$5m. × .05)	<u>.25m.</u>	<u>0m.</u>
Taxable income	2.75m.	3m.
Less: Taxes (40%)	<u>1.1m.</u>	<u>1.2m.</u>
Net income	<u>\$1.65m.</u>	<u>\$1.8m.</u>
Income available for asset funders (= operating income - taxes)	\$ 1.9m.	\$1.8m.

Return on assets funders' investment $\$1.9m/\$6m = 31.67\%$
 $\$1.8m/\$6m = 30.00\%$

AACSB: Analytic
 Blooms: Apply
 Difficulty: 2 Intermediate

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

49. 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

	<u>AllDebt</u>	<u>AllEquity</u>
Operating income	\$.4m.	\$.4m.
Less: Interest (\$6m. × .05)	<u>.03m.</u>	<u>0m.</u>
Taxable income	.37m.	.4m.
Less: Taxes (30%)	<u>.111m.</u>	<u>.12m.</u>
Net income	<u>\$.259m.</u>	<u>\$.28m.</u>
Income available for asset funders (= operating income - taxes)	\$.289m.	\$.28m.

Return on assets funders' investment $\$0.289m/\$0.8m = 36.125\%$
 $\$0.28m/\$0.8m = 35.00\%$

AACSB: Analytic
 Blooms: Apply
 Difficulty: 2 Intermediate
 Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.
 Topic: Profitability ratios

50. 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

Net sales (all credit)		\$25,500,000
Less: Cost of goods sold		<u>10,250,000</u>
Gross profits	step 4.	\$15,250,000
Less: Depreciation	step 5.	<u>\$12,100,000</u>
Earnings before interest and taxes (EBIT)	step 3.	\$ 3,150,000
Less: Interest		<u>2,000,000</u>
Earnings before taxes (EBT)	step 2.	\$1,150,000
Less: Taxes		
Net income	step 1.	<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 - tax rate) = Net income => EBT = Net income / (1 - tax rate) = \$805,000 / (1 - 0.3) = \$1,150,000

Step 3: EBIT - Interest = EBT => EBIT = EBT + 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 => Depreciation = Gross profits - EBIT = \$15,250,000 - \$3,150,000 = \$12,100,000

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Income statement

51. 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

Net sales (all credit)		\$5,200,000
Less: Cost of goods sold		<u>2,100,000</u>
Gross profits	step 4.	\$3,100,000
Less: Depreciation	step 5.	<u>\$ 900,000</u>
Earnings before interest and taxes (EBIT)	step 3.	\$2,200,000
Less: Interest		<u>200,000</u>
Earnings before taxes (EBT)	step 2.	\$2,000,000
Less: Taxes		
Net income	step 1.	<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 - tax rate) = Net income => EBT = Net income/(1 - tax rate) = \$1,400,000/(1 - 0.3) = \$2,000,000
 Step 3: EBIT - Interest = EBT => EBIT = EBT + 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 => Depreciation = Gross profits - EBIT = \$3,100,000 - \$2,200,000 = \$900,000

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Income statement

52. 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

Net sales (all credit)		\$ 2,500,000
Less: Cost of goods sold		<u>1,300,000</u>
Gross profits	step 4.	\$ 1,200,000
Less: Depreciation	step 5.	<u>\$ 600,000</u>
Earnings before interest and taxes (EBIT)	step 3.	\$ 600,000
Less: Interest		<u>50,000</u>
Earnings before taxes (EBT)	step 2.	\$ 550,000
Less: Taxes		
Net income	step 1.	<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 - tax rate) = Net income => EBT = Net income/(1 - tax rate) = \$330,000/(1 - 0.4) = \$550,000
 Step 3: EBIT - Interest = EBT => EBIT = EBT + 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 => Depreciation = Gross profits - EBIT = \$1,200,000 - \$600,000 = \$600,000

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Income statement

53. 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

Net sales (all credit)		\$300,000
Less: Cost of goods sold	step 3.	<u>200,000</u>
Gross profits		\$100,000
Less: Depreciation		<u>\$ 25,000</u>
Earnings before interest and taxes (EBIT)	step 4.	\$ 75,000
Less: Interest	step 5.	<u>20,000</u>
Earnings before taxes (EBT)	step 2.	\$ 55,000
Less: Taxes		
Net income	step 1.	<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 - tax rate) = Net income => EBT = Net income / (1 - tax rate) = \$38,500 / (1 - 0.3) = \$55,000

Step 3: Gross profits = Net sales - Cost of goods sold => 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 => Interest = EBIT - EBT = \$75,000 - \$55,000 = \$20,000

AACSB: Analytic
Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Income statement

54. 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

Net sales (all credit)		\$150,000
Less: Cost of goods sold	step 3.	<u>50,000</u>
Gross profits		\$100,000
Less: Depreciation		<u>\$50,000</u>
Earnings before interest and taxes (EBIT)	step 4.	\$ 50,000
Less: Interest	step 5.	<u>10,000</u>
Earnings before taxes (EBT)	step 2.	\$ 40,000
Less: Taxes		
Net income	step 1.	<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 - tax rate) = Net income => EBT = Net income / (1 - tax rate) = \$28,000 / (1 - 0.3) = \$40,000
 Step 3: Gross profits = Net sales - Cost of goods sold => Net Sales - Gross Profit = Cost of Goods Sold \$150,000 - 50,000 = \$100,000
 Step 4: Gross profits - Depreciation = EBIT = \$100,000 - \$50,000 = \$50,000
 Step 5: EBIT - Interest = EBT => Interest = EBIT - EBT = \$50,000 - \$40,000 = \$10,000

AACSB: Analytic
 Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Income statement

55. 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

Net sales (all credit)		\$1,000,000
Less: Cost of goods sold	step 3.	<u>600,000</u>
Gross profits		\$ 400,000
Less: Depreciation		<u>\$ 50,000</u>
Earnings before interest and taxes (EBIT)	step 4.	\$ 350,000
Less: Interest	step 5 .	<u>100,000</u>
Earnings before taxes (EBT)	step 2.	\$ 250,000
Less: Taxes		
Net income	step 1.	<u><u>\$ 150,000</u></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 - tax rate) = Net income => EBT = Net income/(1 - tax rate) = \$150,000/(1 - 0.4) = \$250,000
 Step 3: Gross profits = Net sales - Cost of goods sold => Net Sales - Gross Profit = 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 => Interest = EBIT - EBT = \$350,000 - \$250,000 = \$100,000

AACSB: Analytic
 Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Income statement

56. The Carolina Corporation had a 2013 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

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.

AACSB: Analytic

Accessibility: Keyboard Navigation

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Taxes

57. The Ohio Corporation had a 2013 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

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

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.

AACSB: Analytic

Accessibility: Keyboard Navigation

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Taxes

58. The Sasnak Corporation had a 2013 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

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.

AACSB: Analytic

Accessibility: Keyboard Navigation

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Taxes

59. The AOK Corporation had a 2013 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

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.

AACSB: Analytic

Accessibility: Keyboard Navigation

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Taxes

60. 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

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.

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 2 Intermediate
Learning Goal: 02-03 Explain how taxes influence corporate managers and investors decisions.
Topic: Taxes

61. 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

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.

AACSB: Analytic

Accessibility: Keyboard Navigation

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Taxes

62. 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

Cash Flows from Operating Activities

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

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

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Operating activities

63. 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

Cash Flows from Operating Activities

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

Net cash flow from operating activities: \$ 226m.

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

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Operating activities

64. 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

Cash Flows from Operating Activities

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

Net cash flow from operating activities:\$25m.

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

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Operating activities

65. 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

Cash Flows from Financing Activities

Additions:

Increase in notes payable	\$ 2m.
Increase in long-term debt	20m. ($=\$20m. + \$5m. - \$2m. - 3m$)
Increase in common and preferred stock	3m.

Subtractions:

Pay stock dividends	<u>- 5m.</u>
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Net cash flow from financing activities: \$20m.

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

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Financing activities

66. 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

Cash Flows from Financing Activities

Additions:

Increase in notes payable	\$ 40m.
Increase in long-term debt	30m. ($=\$105\text{m.} + \$15\text{m.} - \$40\text{m.} - 50\text{m.}$)
Increase in common and preferred stock	50m.

Subtractions:

Pay stock dividends	<u>- 15m.</u>
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Net cash flow from financing activities: \$105m.

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

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Financing activities

67. 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

Cash Flows from Financing Activities

Additions:

Increase in long-term debt	30m. ($=\$25m. + \$15m. + \$40m. - 50m$)
Increase in common and preferred stock	50m.

Subtractions:

Decrease in notes payable	- 40m.
Pay stock dividends	<u>- 15m.</u>

Net cash flow from financing activities: \$25m.

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

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Financing activities

68. 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

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

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 2 Intermediate
Learning Goal: 02-05 Demonstrate how to use a firms financial statements to calculate its cash flows.
Topic: Free cash flow

69. The 2013 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

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

Lou's operating cash flow was:

$$\text{OCF} = \text{EBIT} - \text{Taxes} + \text{Depreciation}$$

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

Lou's free cash flow for 2010 was:

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

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

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

Accordingly, investment in operating capital for 2010 was:

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

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

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

AACSB: Analytic

Accessibility: Keyboard Navigation

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Free cash flow

70. The 2013 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

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 2010 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 2010 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

AACSB: Analytic

Accessibility: Keyboard Navigation

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Free cash flow

71. The 2013 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

Betty's operating cash flow was:

$$\text{OCF} = \text{EBIT} - \text{Taxes} + \text{Depreciation} \\ = (\$400\text{m} - \$120\text{m} + \$100\text{m}) = \$380\text{m}$$

Betty's free cash flow for 2010 was:

$$\text{FCF} = \text{Operating cash flow} - \text{Investment in operating capital} \\ \$625\text{m} = \$380\text{m} - \text{Investment in operating capital} \\ \Rightarrow \text{Investment in operating capital} = \$380\text{m} - \$625\text{m} = -\$245\text{m}$$

Accordingly, investment in operating capital for 2010 was:

$$\text{IOC} = \Delta \text{Gross fixed assets} + \Delta \text{Net operating working capital} \\ -\$245\text{m} = (\$510\text{m} - \text{Beginning of year gross fixed assets}) + \$94\text{m} \\ \Rightarrow \text{Beginning of year gross fixed assets} = \$510\text{m} - (-\$245\text{m}) + \$94\text{m} = \$849\text{m}$$

AACSB: Analytic

Accessibility: Keyboard Navigation

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Free cash flow

72. The 2013 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

John's operating cash flow was:

$$\text{OCF} = \text{EBIT} - \text{Taxes} + \text{Depreciation}$$

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

John's free cash flow for 2010 was:

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

$$\$41\text{m} = \$76\text{m} - \text{Investment in operating capital}$$

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

Accordingly, investment in operating capital for 2010 was:

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

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

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

AACSB: Analytic

Accessibility: Keyboard Navigation

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Free cash flow

73. 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

Statement of Retained Earnings as of December 31, 2013
(in millions of dollars)

Balance of Retained Earnings, December 31, 2012	\$100m
Plus: Net Income for 2013	59m
(= \$128m + 31m - 100m)	
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, 2013	\$ 128m

AACSB: Analytic
Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Statement of retained earnings

74. 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

Statement of Retained Earnings as of December 31, 2013
(in millions of dollars)

Balance of Retained Earnings, December 31, 2012	\$ 25m
Plus: Net Income for 2013	15m
(= \$32m + 8m - 25m)	
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, 2013	\$ 32m

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Statement of retained earnings

75. 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 stock holders and \$15 million to common stock holders. 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

Statement of Retained Earnings as of December 31, 2013
(in millions of dollars)

Balance of Retained Earnings, December 31, 2012	\$100m
Plus: Net Income for 2013	45m
Less: Cash Dividends Paid	
Preferred Stock	\$2m
Common Stock	<u>15m</u>
Total Cash Dividends Paid	<u>17m</u>
Balance of Retained Earnings, December 31, 2013	\$ 128m

AACSB: Analytic

Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Statement of retained earnings

76. The following is the 2013 income statement for Lamps, Inc.

Lamps, Inc
Income Statement for Year Ending December 31, 2013
(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><u>\$ 8</u></u>

The CEO of Lamps wants the company to earn a net income of \$12 million in 2014. 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

Lamps, Inc
Income Statement for Year Ending December 31, 2014
(in millions of dollars)

Net sales	Step 4	\$ 116
Less: Cost of goods sold	Step 5	<u>87</u>
Gross profits	Step 3	29
Less: Depreciation		<u>5</u>
Earnings before interest and taxes (EBIT)	Step 2	24
Less: Interest		<u>2</u>
Earnings before taxes (EBT)	Step 1	20
Less: Taxes		
Net Income		<u><u>\$ 12</u></u>

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

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

AACSB: Analytic

Blooms: Apply

Difficulty: 3 Advanced

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

Topic: Income statement

77. You have been given the following information for Halle's Holiday Store Corp. for the year 2013:

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 2014, 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 2013,

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 2014?

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

Income Statement for Year Ending December 31, 2013

(in millions of dollars)

Net sales (all credit)		\$50,000,000
Less: Cost of goods sold		<u>35,000,000</u>
Gross profits		15,000,000
Less: Depreciation (\$15,000,000 – \$10,142,857)		<u>4,857,143</u>
Earnings before interest and taxes (EBIT) \$7,142,857 + \$3,000,000		10,142,857
Less: Interest		<u>3,000,000</u>
Earnings before taxes (EBT)	\$5,000,000/(1 – 0.30)	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

AACSB: Analytic

Blooms: Apply

Difficulty: 3 Advanced

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

Topic: Income statement

78. Martha's Moving Van 4U, Inc. had free cash flow during 2013 of \$1 million, EBIT of \$30 million, tax expense of \$8 million, and depreciation of \$4 million. Using this information, what was Martha's Accounts Payable ending balance in 2013?

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

Martha's operating cash flow for 2013 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:

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

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

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

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

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

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

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

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

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

$$\Rightarrow 2011 \text{ Current liabilities} = \$85\text{m} + \$5\text{m} = \$90\text{m}$$

$$\text{and } 2011 \text{ Current liabilities} = \text{Accrued wages and taxes} + \text{Accounts payable} + \text{Notes payable}$$

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

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

Martha's Moving Van 4U, Inc.
 Balance Sheet as of December 31, 2012 and 2013
 (in millions of dollars)

	2012	2013		2012	2013
Assets			Liabilities & Equity		
Current Assets			Current liabilities		
Cash and marketable securities	\$10	\$15	Accrued wages and taxes	\$10	\$20
Accounts receivable	20	25	Accounts payable	40	35
Inventory	80	90	Notes payable	30	35
Total	\$110	\$130	Total	\$85	\$95
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 & equity	\$160	\$188

AACSB: Analytic

Blooms: Apply

Difficulty: 3 Advanced

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

79. 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

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

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 1 Basic

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

80. Zoeckler Mowing & Landscaping's year-end 2011 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

$$[0.350 + 0.325] - [0.145 + 0.185] = 0.345m$$

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 1 Basic

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

81. Reed's Birdie Shot, Inc.'s 2013 income statement lists the following income and expenses:
EBIT = \$550,000, interest expense = \$43,000, and net income = \$300,000. Calculate the 2013 taxes reported on the income statement.

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

$$[0.550\text{m} - 0.043\text{m}] - 0.3\text{m} = 0.207\text{m}$$

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 1 Basic
Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.
Topic: Income statement

82. Reed's Birdie Shot, Inc.'s 2013 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 2013 earnings per share.

A. \$3.49
B. \$2.29
C. \$3.14
D. \$2.79

$$[0.555\text{m} - 0.178\text{m} - 0.148\text{m}]/0.1\text{m} = \$2.29$$

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 1 Basic
Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.
Topic: Per-share valuations

83. Oakdale Fashions Inc. had \$255,000 in 2013 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%

$$82100/255000 = 32.20\%$$

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply

84. Hunt Taxidermy, Inc. is concerned about the taxes paid by the company in 2013. 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

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

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 1 Basic
Learning Goal: 02-03 Explain how taxes influence corporate managers and investors decisions.
Topic: Taxes

85. Ramakrishnan Inc. reported 2013 net income of \$20 million and depreciation of \$1,500,000. The top part of Ramakrishnan, Inc.'s 2012 and 2013 balance sheets is listed as follows (in millions of dollars).

	2012	2013		2012	2013
Assets			Liabilities & Equity		
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	\$200	\$225	Total	\$103	\$115

Calculate the 2013 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

$$20 + [1.5 + 2 + 5] - [9 + 11] = \$8.5\text{m}$$

AACSB: Analytic
Blooms: Apply
Difficulty: 1 Basic
Learning Goal: 02-04 Differentiate between accounting income and cash flows.
Topic: Operating activities

86. In 2014, 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 2014 and \$1,025,000 at the end of the year. Calculate Usher Sports Shop's cash flow from operations for 2014.

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

$$[1,025,000 - 980,000] = X - 2,150,000 - 3,219,000; \Rightarrow X = \text{Cash flow from operations} = \$5,414,000$$

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 1 Basic

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

87. 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 2012 to 2013. 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 2013.

- 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

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

$$\begin{aligned} \text{Investment in operating capital: } \Delta \text{Gross fixed assets} + \Delta \text{Net operating working capital} &= \$38\text{m} \\ &+ (\$20\text{m} - \$12\text{m}) = \$46\text{m} \end{aligned}$$

Accordingly, Fields and Struthers' free cash flow for 2008 was: $\text{FCF} = \text{Operating cash flow} - \text{Investment in operating capital} = \$47\text{m} - \$46\text{m} = \1m

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 1 Basic

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

88. Tater and Pepper Corp. reported free cash flows for 2013 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 2010 income statement. Calculate Tater and Pepper's 2013 EBIT.

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

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

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 1 Basic

Learning Goal: 02-05 Demonstrate how to use a firms financial statements to calculate its cash flows.
Topic: Free cash flow

89. Mr. Husker's Tuxedos, Corp. began the year 2013 with \$205 million in retained earnings. The firm earned net income of \$30 million in 2013 and paid \$5 million to its preferred stockholders and \$12 million to its common stockholders. What is the year-end 2013 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

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

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 1 Basic

Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.
Topic: Statement of retained earnings

90. 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

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

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 2 Intermediate
Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.
Topic: Balance sheet

91. 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

Step 1: Find long-term debt: $TL = CL + \text{long-term debt} = 0.5 \times 100 = 50 = 37 + \text{long-term debt}$;
long-term debt = \$13 million;
Step 2: Find RE: $\text{Total equity} = 0.5 \times 100 = 50 = CS + P - I - S + RE = 32 + RE$; RE = \$18 million

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 2 Intermediate
Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.
Topic: Balance sheet

92. 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

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): $\text{Net FA} + CA = \$17m + \$15.75m = \$32.75m$

AACSB: Analytic
 Accessibility: Keyboard Navigation
 Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Market and book values

93. You have been given the following information for Corky's Bedding Corp.:
 Net sales = \$15,250,000;
 Cost of goods sold = \$5,750,000;
 Addition to retained earnings = \$4,000,000;
 Dividends paid to preferred and common stockholders = \$995,000;
 Interest expense = \$1,150,000.
 The firm's tax rate is 30 percent. Calculate the depreciation expense for Corky's Bedding Corp.

- A.** \$1,210,000
 B. \$1,970,000
 C. \$1,520,000
 D. \$1,725,000

Step 1: $NI = \text{Dividends} + \text{Addition to RE} = 4m + 0.995m = \$4.995m$

Step 2: $NI = EBT (1 - \text{tax rate}) \Rightarrow EBT = NI / (1 - \text{tax rate}) = \$4.995m / (1 - 0.30) = \$7.14m$

Step 3: $EBIT - \text{Interest} = EBT \Rightarrow EBIT = \$7.14m + \$1.15m = \$8.29m$

Step 4: $\text{Gross profits} = \text{Net sales} - \text{COGS} = \$15.25m - \$5.75m = \$9.5m$

Step 5: $\text{Gross profits} - \text{Depreciation} = EBIT \Rightarrow \text{Depreciation} = \$9.5m - \$8.29m = \$1.21m$

AACSB: Analytic
 Accessibility: Keyboard Navigation
 Blooms: Apply

Difficulty: 2 Intermediate

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

Topic: Income statement

94. 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 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

$\$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

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply

Difficulty: 2 Intermediate
Learning Goal: 02-05 Demonstrate how to use a firms financial statements to calculate its cash flows.
Topic: Financing activities

95. 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

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

Step 2: Find investment in operating capital: $\text{FCF} = \$425 = \$528 - \text{Investment in Op Cap}$;
Investment in operating capital = \$103

Step 3: Find ending level of net op. working cap: $\$103 = (\$1803 - \$1500) + (\text{Ending net op. working capital} - \$500)$; Ending net op. working capital = \$300

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply

Difficulty: 2 Intermediate
Learning Goal: 02-05 Demonstrate how to use a firms financial statements to calculate its cash flows.
Topic: Free cash flow

96. The CEO of Tom and Sue's wants the company to earn a net income of \$3.25 million in 2014. 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

Work backwards (up) the income statement: $EBT = 3.25 / 1 - 0.3 = \$4.64m$; $EBIT = \$4.64m + \$1.05m = \$5.69m$; Gross profits = $\$5.69m + \$2.9 = \$8.59m$; Net sales = $\$8.59 / (1 - 0.6) = \$21.475m$

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply

Difficulty: 3 Advanced
Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.
Topic: Income statement

97. 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.

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 1 Basic

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

98. 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.

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Analyze
Difficulty: 2 Intermediate

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

99. 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.

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Analyze
Difficulty: 2 Intermediate
Learning Goal: 02-05 Demonstrate how to use a firms financial statements to calculate its cash flows.
Topic: Sources and uses of cash

100. Is it possible for a firm to have positive net income and yet 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.

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 1 Basic
Learning Goal: 02-04 Differentiate between accounting income and cash flows.
Topic: Statement of cash flows

101. 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.

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 2 Intermediate
Learning Goal: 02-05 Demonstrate how to use a firms financial statements to calculate its cash flows.
Topic: Operating activities

102. 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.

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 2 Intermediate
Learning Goal: 02-05 Demonstrate how to use a firms financial statements to calculate its cash flows.

103. 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.
D.
None of these.

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 2 Intermediate
Learning Goal: 02-05 Demonstrate how to use a firms financial statements to calculate its cash flows.
Topic: Free cash flow

104. 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 these.

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 2 Intermediate
Learning Goal: 02-05 Demonstrate how to use a firms financial statements to calculate its cash flows.
Topic: Free cash flow

105. 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

$$\$1,000 - \$225 + \$13 = \$788$$

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 2 Intermediate
Learning Goal: 02-05 Demonstrate how to use a firms financial statements to calculate its cash flows.
Topic: Operating cash flow

106. 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**
- D. None of these

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 2 Intermediate
Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.
Topic: Capital structure

107. 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

$$[\$140 + \$16.50] - \$12 - \$40 = \$104.50$$

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 2 Intermediate
Learning Goal: 02-01 Recall the major financial statements that firms must prepare and provide.
Topic: Market and book values

108. 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

$$[\$1,000 - \$350 + \$185] = \$835$$

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 2 Intermediate
Learning Goal: 02-02 Differentiate between book (or accounting) value and market value.
Topic: Operating cash flow

109. 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 are reasons to be cautious in interpreting financial statements.**

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 2 Intermediate

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

110. 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 statements are correct.

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Understand
Difficulty: 2 Intermediate

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

111. ABC Inc. has \$100 in cash on its balance sheet at the end of 2009. During 2010, 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 2010?

- A. \$75**
- B. \$140
- C. \$225
- D. -\$25

$$100 + 315 - 40 - 750 + 450 = \$75$$

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 2 Intermediate

Learning Goal: 02-03 Explain how taxes influence corporate managers and investors decisions.
Topic: Statement of cash flows

112. 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

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 = $195 - 152.75 = 42.25$

AACSB: Analytic
Accessibility: Keyboard Navigation

Blooms: Apply

Difficulty: 3 Advanced

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

Topic: Income statement

113. 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

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

AACSB: Analytic
Accessibility: Keyboard Navigation

Blooms: Apply

Difficulty: 3 Advanced

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

Topic: Income statement

114. 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

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

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 2 Intermediate
Learning Goal: 02-05 Demonstrate how to use a firms financial statements to calculate its cash flows.
Topic: Free cash flow

115. 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

$$800\text{m} + [1.92 \times 100\text{m}] - [0.75 \times 100\text{m}] = \$917\text{m}$$

AACSB: Analytic
Accessibility: Keyboard Navigation
Blooms: Apply
Difficulty: 3 Advanced
Learning Goal: 02-05 Demonstrate how to use a firms financial statements to calculate its cash flows.
Topic: Statement of retained earnings