

CHAPTER 1

THE ROLE OF ACCOUNTING IN BUSINESS

CLASS DISCUSSION QUESTIONS

1. The objective of most businesses is to maximize profits. Profit is the difference between the amounts received from customers for goods or services provided and the amounts paid for the inputs used to provide those goods or services.
2. A manufacturing business changes basic inputs into products that are sold to customers. In contrast, a merchandising business purchases products in a form that can be sold to customers without any additional changes. Examples of manufacturing businesses include Alcoa, Boeing, Caterpillar, and Dow Chemical. Examples of merchandising businesses include Best Buy, Macy's, Target, and Wal-Mart.
3. A manufacturing business changes basic inputs into products that are sold to customers. A service business provides services rather than products to customers. A restaurant, such as McDonald's, has characteristics of both a manufacturing and a service business in that McDonald's takes raw inputs, such as cheese, fish, and beef, and processes them into products for consumption by its customers. At the same time, McDonald's provides services of waiting on its customers.
4. The corporate form allows the company to obtain large amounts of resources by issuing stock. In addition, in a corporation the stockholders' liability to creditors for the debts of the company is limited to their investment in the corporation. For these reasons, most large companies that require large investments in property, plant, and equipment are organized as corporations.
5. The business emphasis of KIA is a low-cost emphasis. In contrast, the business emphasis of BMW is a premium-price emphasis. The difference in emphases is directly reflected in the prices of the autos. For example, a new KIA starts for just over \$15,000, but a new BMW starts for just over \$30,000.
6. Super Wal-Mart will compete for customers using a low-cost strategy. The size and buying power of Wal-Mart Corporation provides Wal-Mart a competitive advantage over your friend in the ability to offer low prices. Thus, your friend should attempt to compete using a premium-price emphasis. For example, your friend could offer personalized service to customers such as knowing customers' names and providing a friendly atmosphere, home delivery of medicines, help in filing insurance forms, 24-hour call service, etc.
7. eBay services its customers by developing a Web-based community in which buyers and sellers are brought together in an efficient format to browse, buy, and sell items such as collectibles, automobiles, high-end or premium art pieces, jewelry, consumer electronics, and a host of practical and miscellaneous items.
8. No. The stakeholders within a group do not always share the same interests. For example, bankers are primarily concerned about the ability of the business to repay its debt, including interest. In contrast, stockholders are more concerned about the long-term profitability of the business, the business's ability to pay dividends, and the future appreciation of their stock.
9. Examples of financing activities for Southwest Airlines could include issuing stock, borrowing from banks, and paying dividends. Examples of investing activities could include purchasing new aircraft, acquiring new terminal facilities, and upgrading its computerized reservation systems. Examples of operating activities could include transporting passengers and freight.
10. The role of accounting is to provide information for managers to use in operating the business. In addition, accounting provides information to other stakeholders to use in assessing the economic performance and condition of the business.
11. The income statement presents a summary of the revenues and expenses of a business for a specific period of time. The statement of stockholders' equity indicates the changes in retained

earnings that have occurred over a specific period of time. The balance sheet presents a listing of the assets, liabilities, and stockholders' equity of a business as of a specific date. The statement of cash flows presents a summary of the cash receipts and cash payments of a business entity for a specific period of time.

12. Net loss of \$1,636 million (\$72,618 million – \$74,254 million).
13. Net income or net loss will appear on the income statement and the statement of stockholders' equity. The Retained Earnings and Common Stock balances at the end of the period will appear on the statement of stockholders' equity

and the balance sheet. Finally, the Cash balance at the end of the period will appear on the balance sheet and the statement of cash flows.

14. No. The business entity concept limits the recording of economic data to transactions directly affecting the activities of the business. The payment of the interest of \$6,000 is a personal transaction of Billy Jessop and should not be recorded by Valley Delivery Service.
15. The land should be recorded at its cost of \$110,000 to Wok Repair Service. This is consistent with the cost concept.
16. No. The offer of \$975,000 and the increase in the assessed value should not be recognized in the accounting records. This is consistent with the cost concept.

EXERCISES

E1-1

- | | | |
|------------------|-------------------|-------------------|
| 1. service | 6. merchandise | 11. manufacturing |
| 2. merchandise | 7. manufacturing | 12. service |
| 3. manufacturing | 8. manufacturing | 13. service |
| 4. manufacturing | 9. service | 14. service |
| 5. service | 10. manufacturing | 15. merchandise |

E1-2

- | | | |
|--------------------|--------------------|---------------------|
| 1. a—low-cost | 5. a—low-cost | 10. a—low-cost |
| 2. a—low-cost | 6. b—premium-price | 11. b—premium-price |
| 3. b—premium-price | 7. a—low-cost | 12. b—premium-price |
| 4. a—low-cost | 8. b—premium-price | |
| | 9. b—premium-price | |

E1-3

Best Buy stockholders' equity: $\$15,256 - \$10,261 = \$4,995$

Gamestop stockholders' equity: $\$4,246 - \$2,179 = \$2,067$

E1-4

Apple: $\$290,479 - \$171,124 = \$119,355$

Dell: $\$103,206 - \$76,475 = \$26,731$

E1-5

- $\$475,000 (\$175,000 + \$300,000)$
- $\$355,000 (\$880,000 - \$525,000)$
- $\$1,500,000 (\$2,100,000 - \$600,000)$

E1-6

- a. \$10,617 (\$33,440 – \$22,823)
- b. \$27,407 (\$41,404 – \$13,997)
- c. \$203,706 (\$122,312 + \$81,394)

E1-7

It would be incorrect to say the business had incurred a net loss of \$10,000. The excess of the dividends over the net income for the period is a decrease in the amount of retained earnings in the business.

E1-8

Company Chang

Stockholders' equity at end of year (\$900,000 – \$300,000)	\$600,000
Stockholders' equity at beginning of year (\$775,000 – \$400,000)	<u>375,000</u>
Net income (increase in stockholders' equity)	<u>\$225,000</u>

Company Henry

Increase in stockholders' equity (as determined for Chang).....	\$225,000
Add dividends.....	<u>90,000</u>
Net income.....	<u>\$315,000</u>

Company Nagel

Increase in stockholders' equity (as determined for Chang).....	\$225,000
Deduct additional issuance of capital stock	<u>125,000</u>
Net income.....	<u>\$100,000</u>

Company Wilcox

Increase in stockholders' equity (as determined for Chang).....	\$225,000
Deduct additional issuance of capital stock	<u>125,000</u>
	\$100,000
Add dividends.....	<u>90,000</u>
Net income.....	<u>\$190,000</u>

E1-9

- a. (1) \$5,008,669 (\$10,313,728 – \$5,305,059)
(2) \$6,132,263 (\$11,174,876 – \$5,042,613)
- b. \$134,526 (\$22,492,360 – \$16,691,324 – \$5,518,665 – \$14,236 – \$133,609)

E1-10

Balance sheet items: 1, 2, 3, 7, 8

E1-11

Income statement items: 4, 5, 6, 9, 10

E1-12

- | | |
|----------------|----------------|
| 1. a—asset | 6. a—asset |
| 2. b—liability | 7. b—liability |
| 3. a—asset | 8. d—expense |
| 4. e—dividend | 9. d—expense |
| 5. c—revenue | 10. d—expense |

E1-13

WEBBER COMPANY
Statement of Stockholders' Equity
For the Month Ended June 30, 20Y7

	<u>Common Stock</u>	<u>Retained Earnings</u>	<u>Total</u>
Balances, June 1, 20Y7	\$60,000	\$290,000	\$350,000
Issuance of common stock.....	40,000		40,000
Net income		175,000	175,000
Dividends		<u>(30,000)</u>	<u>(30,000)</u>
Balances, June 30, 20Y7	<u>\$100,000</u>	<u>\$435,000</u>	<u>\$535,000</u>

E1-14

MAYNARD SERVICES
Income Statement
For the Month Ended August 31, 20Y5

Fees earned.....		\$3,400,000
Operating expenses:		
Wages expense	\$2,150,000	
Rent expense.....	320,000	
Supplies expense.....	30,000	
Miscellaneous expense	<u>55,000</u>	
Total operating expenses.....		<u>(2,555,000)</u>
Net income		<u>\$ 845,000</u>

E1-15

In each case, solve for a single unknown, using the following equation:
**Stockholders' Equity (beginning) + Additional Issue of Capital Stock – Dividends
 + Revenue – Expenses = Stockholders' Equity (ending)**

AL	Stockholders' equity at end of year (\$800,000 – \$450,000).....	\$ 350,000
	Stockholders' equity at beginning of year (\$400,000 – \$200,000)..	<u>200,000</u>
	Increase in stockholders' equity.....	\$ 150,000
	Deduct increase due to net income (\$175,000 – \$65,000).....	<u>110,000</u>
		\$ 40,000
	Add dividends	<u>50,000</u>
	Additional issue of capital stock (a)	<u>\$ 90,000</u>
CO	Stockholders' equity at end of year (\$460,000 – \$110,000).....	\$ 350,000
	Stockholders' equity at beginning of year (\$300,000 – \$130,000)..	<u>170,000</u>
	Increase in stockholders' equity.....	\$ 180,000
	Add dividends	<u>20,000</u>
		\$ 200,000
	Deduct additional issue of capital stock	<u>50,000</u>
	Increase due to net income	\$ 150,000
	Add expenses	<u>70,000</u>
	Revenue..... (b)	<u>\$ 220,000</u>
KS	Stockholders' equity at end of year (\$660,000 – \$360,000).....	\$ 300,000
	Stockholders' equity at beginning of year (\$550,000 – \$325,000)..	<u>225,000</u>
	Increase in stockholders' equity.....	\$ 75,000
	Add decrease due to net loss (\$115,000 – \$130,000)	<u>15,000</u>
		\$ 90,000
	Deduct additional issue of capital stock	<u>(100,000)</u>
	Dividends..... (c)	<u>\$ (10,000)</u>
MT	Stockholders' equity at end of year (\$1,200,000 – \$700,000).....	\$ 500,000
	Add decrease due to net loss (\$420,000 – \$480,000)	<u>60,000</u>
		\$ 560,000
	Add dividends	<u>90,000</u>
		\$ 650,000
	Deduct additional issue of capital stock	<u>100,000</u>
	Stockholders' equity at beginning of year	\$ 550,000
	Add liabilities at beginning of year	<u>350,000</u>
	Assets at beginning of year (d)	<u>\$ 900,000</u>

E1-16

a. **MONTANA INTERIORS**
Balance Sheet
October 31, 20Y8

Assets		
Cash		\$110,000
Accounts receivable		75,000
Supplies		<u>15,000</u>
Total assets		<u>\$200,000</u>
Liabilities		
Accounts payable.....		\$ 40,000
Stockholders' Equity		
Capital stock.....	\$ 60,000	
Retained earnings	<u>100,000*</u>	<u>160,000</u>
Total liabilities and stockholders' equity		<u>\$200,000</u>

*\$100,000 = \$110,000 + \$75,000 + \$15,000 – \$40,000 – \$60,000

MONTANA INTERIORS
Balance Sheet
November 30, 20Y8

Assets		
Cash		\$ 140,000
Accounts receivable		118,000
Supplies		<u>20,000</u>
Total assets		<u>\$278,000</u>
Liabilities		
Accounts payable.....		\$ 65,000
Stockholders' Equity		
Capital stock.....	\$ 60,000	
Retained earnings	<u>153,000**</u>	<u>213,000</u>
Total liabilities and stockholders' equity		<u>\$278,000</u>

**\$153,000 = \$140,000 + \$118,000 + \$20,000 – \$65,000 – \$60,000

E1-16, Concluded

b. Retained earnings, November 30	\$ 153,000
Retained earnings, October 31	<u>100,000</u>
Net income	<u>\$ 53,000</u>
c. Retained earnings, November 30	\$ 153,000
Retained earnings, October 31	<u>100,000</u>
Increase in retained earnings	<u>\$ 53,000</u>
Add dividends	<u>20,000</u>
Net income	<u>\$ 73,000</u>

E1-17

Balance sheet: a, b, c, d, f, g, h, i, j, l, m
Income statement: e, k, n, o

E1-18

- | | |
|-------------------------|--------------------------|
| 1. c—financing activity | 6. b—investing activity |
| 2. a—operating activity | 7. a—operating activity |
| 3. b—investing activity | 8. a—operating activity |
| 4. a—operating activity | 9. a—operating activity |
| 5. c—financing activity | 10. c—financing activity |

E1-19

- | | |
|-------------------------|-------------------------|
| 1. c—financing activity | 3. a—operating activity |
| 2. a—operating activity | 4. b—investing activity |

E1-20

LOONEY INC.
Statement of Cash Flows
For the Month Ended July 31, Year 1

Cash flows from operating activities:		
Cash received from customers	\$ 600,000	
Cash paid for expenses	<u>(380,000)</u>	
Net cash flows from operating activities.....		\$220,000
Cash flows from investing activities:		
Cash paid for purchase of equipment.....		(95,000)
Cash flows from financing activities:		
Cash received from issuance of common stock	\$200,000	
Cash received from note payable	75,000	
Cash dividends paid to stockholders.....	<u>(25,000)</u>	
Net cash flows from financing activities		<u>250,000</u>
Net increase in cash.....		\$375,000
July 1, Year 1 cash balance		<u>0</u>
July 31, Year 1 cash balance		<u>\$375,000</u>

E1-21

Situation 1: The income statement of Dell would provide the most useful information on whether the company’s business emphasis is working and, thus, whether the company will be around to provide warranty and other support services for your personal computer.

Situation 2: The statement of cash flows would be a primary focus to determine whether LinkedIn is generating positive cash flows from operations. Because LinkedIn is a relatively new company using an innovative business emphasis, it has generated losses on its income statement. Thus, the income statement does not provide as much useful information as the statement of cash flows. In the long run, LinkedIn must generate positive cash flows from its operations to survive and succeed.

Situation 3: A current balance sheet would be a primary focus to determine whether the grocery store chain has sufficient cash or other assets such as receivables that will enable the chain to repay the credit within 60 days. The balance sheet would also report any other liabilities of the chain.

E1–21, Concluded

Situation 4: The income statements of Sears and JCPenney would provide the most useful information on which company's business emphasis is working best and, thus, generating profits.

Situation 5: The statement of cash flows would be a primary focus to determine whether the annual cash flows from operating activities is sufficient to pay the interest on a continuing basis. Most large companies, like Target, will use credit lines to cover cash shortages throughout the year because of the seasonality of the retail industry.

E1–22

- | | | |
|------------|--------|------------|
| 1. BS | 6. IS | 11. IS |
| 2. BS | 7. BS | 12. IS |
| 3. BS, SCF | 8. SCF | 13. BS |
| 4. IS | 9. SCF | 14. IS |
| 5. IS | 10. IS | 15. SE, BS |

E1-23

AMAZON.COM INC.
Income Statement
For the Year Ended December 31
(in Millions)

Revenues:		
Net sales	\$88,988	
Other income	<u>76</u>	
Total revenue		\$89,064
Expenses:		
Cost of sales	\$62,752	
Selling, general, and administrative expenses	26,058	
Interest expense	210	
Income tax expense	167	
Other expense	<u>118</u>	
Total expenses		<u>(89,305)</u>
Net loss.....		<u>\$ (241)</u>

E1-24

- | | | | |
|------------|--------|------------|------------|
| 1. BS | 6. IS | 11. IS, RE | 16. IS |
| 2. BS | 7. IS | 12. SCF | 17. BS |
| 3. BS, SCF | 8. IS | 13. BS | 18. BS |
| 4. SCF | 9. BS | 14. BS | 19. SE, BS |
| 5. SE, BS | 10. BS | 15. IS | 20. IS |

E1-25

- 1. All financial statements should contain the name of the business in their headings. The statement of stockholders' equity is incorrectly headed as "Julie Baxter" rather than Outlaw Realty. The headings of the balance sheet and statement of cash flows need the name of the business.**
- 2. The income statement, retained earnings statement, and statement of cash flows cover a period of time and should be labeled "For the Month Ended August 31, 20Y7."**
- 3. The year in the heading for the statement of stockholders' equity should be 20Y7 rather than Year 1.**
- 4. The balance sheet should be labeled "August 31, 20Y7," rather than "For the Month Ended August 31, 20Y7."**
- 5. On the income statement, the total operating expenses are incorrectly subtracted from the sales commissions, resulting in an incorrect net income amount. The correct net income should be \$94,500. This also affects the retained earnings statement and the amount of retained earnings that appears on the balance sheet.**
- 6. On the statement of stockholders' equity, the common stock issued during the month should be shown in the Common Stock column. The dividends should be subtracted rather than added to retained earnings. Beginning retained earnings should be zero. Ending amounts reported for common stock, retained earnings, and total stockholders' equity should agree with the amounts reported on the balance sheet.**
- 7. Accounts payable should be listed as a liability on the balance sheet.**
- 8. Accounts receivable and prepaid expenses should be listed as assets on the balance sheet.**
- 9. The balance sheet assets should equal the sum of the liabilities and stockholders' equity.**
- 10. The statement of cash flows omits the cash flows from investing activities section. This section should report cash flows used to purchase land of \$60,000.**
- 11. The net cash flows and cash balance should be dated August 31, 20Y7, and should be the same as the ending cash reported on the balance sheet of \$51,600.**

E1–25, Continued

Corrected financial statements appear as follows:

OUTLAW REALTY
Income Statement
For the Month Ended August 31, 20Y7

Sales commissions		\$408,400
Operating expenses:		
Office salaries expense	\$272,600	
Rent expense	31,200	
Automobile expense	7,900	
Miscellaneous expense	<u>2,200</u>	
Total operating expenses.....		<u>(313,900)</u>
Net income		<u>\$ 94,500</u>

OUTLAW REALTY
Statement of Stockholders' Equity
For the Month Ended August 31, 20Y7

	<u>Common Stock</u>	<u>Retained Earnings</u>	<u>Total</u>
Balances, August 1, 20Y7	\$ 0	\$ 0	\$ 0
Issuance of common stock.....	100,000		100,000
Net income		94,500	94,500
Dividends		<u>(12,000)</u>	<u>(12,000)</u>
Balances, August 30, 20Y7	<u>\$100,000</u>	<u>\$82,500</u>	<u>\$182,500</u>

OUTLAW REALTY
Balance Sheet
August 31, 20Y7

Assets	
Cash.....	\$ 51,600
Accounts receivable.....	81,200
Prepaid expenses	7,200
Land.....	<u>60,000</u>
Total assets.....	<u>\$200,000</u>
Liabilities	
Accounts payable.....	\$ 17,500
Stockholders' Equity	
Common stock.....	\$100,000
Retained earnings	<u>82,500</u>
Total liabilities and stockholders' equity.....	<u>\$200,000</u>

E1–25, Concluded

OUTLAW REALTY
Statement of Cash Flows
For the Month Ended August 31, 20Y7

Cash flows from operating activities:		
Cash received from customers	\$327,200	
Cash paid for operating expenses	<u>(303,600)</u>	
Net cash flows from operating activities		\$ 23,600
Cash flows from investing activities:		
Cash paid for purchase of land		(60,000)
Cash flows from financing activities:		
Cash received from issuance of common stock	\$100,000	
Dividends paid to stockholders	<u>(12,000)</u>	
Net cash flows from financing activities		<u>88,000</u>
Net increase in cash during year		\$ 51,600
Cash as of August 1		<u>0</u>
Cash as of August 31		<u>\$ 51,600</u>

E1–26

- | | |
|------|-------|
| 1. G | 6. D |
| 2. D | 7. C |
| 3. M | 8. U |
| 4. B | 9. O |
| 5. O | 10. P |

E1–27

- | | | |
|------|------|-------|
| 1. C | 5. B | 9. X |
| 2. C | 6. C | 10. M |
| 3. X | 7. B | |
| 4. C | 8. M | |

PROBLEMS

P1-1

1. GLACIER TRAVEL SERVICE
Income Statement
For the Year Ended September 30, 20Y6

Fees earned		\$900,000
Operating expenses:		
Wages expense	\$425,000	
Rent expense	180,000	
Utilities expense.....	75,000	
Supplies expense.....	38,000	
Taxes expense	30,000	
Miscellaneous expense	<u>37,000</u>	
Total operating expenses		<u>(785,000)</u>
Net income		<u>\$115,000</u>

2. GLACIER TRAVEL SERVICE
Statement of Stockholders' Equity
For the Year Ended September 30, 20Y6

	<u>Common Stock</u>	<u>Retained Earnings</u>	<u>Total</u>
Balances, Oct. 1, 20Y5	\$50,000	\$150,000	\$200,000
Issuance of common stock	20,000		20,000
Net income		115,000	115,000
Dividends		<u>(10,000)</u>	<u>(10,000)</u>
Balances, Sept. 30, 20Y6	<u>\$70,000</u>	<u>\$255,000</u>	<u>\$325,000</u>

3. GLACIER TRAVEL SERVICE
Balance Sheet
September 30, 20Y6

Assets		
Cash		\$166,000
Accounts receivable		321,000
Supplies		<u>13,000</u>
Total assets		<u>\$500,000</u>
Liabilities		
Accounts payable.....		\$175,000
Stockholders' Equity		
Capital stock.....	\$ 70,000	
Retained earnings	<u>255,000</u>	<u>325,000</u>
Total liabilities and stockholders' equity		<u>\$500,000</u>

P1-2

1. Realty businesses, such as Paradise Realty, are service businesses that aid their clients in buying or selling real estate.

2.
 - a. Wages expense, \$29,850 ($\$69,300 - \$14,400 - \$12,000 - \$8,100 - \$4,950$)
 - b. Net income, \$80,000 ($\$149,300 - \$69,300$)
 - c. Net income for November, \$80,000
 - d. Dividends, \$(36,000) from statement of cash flows
 - e. Retained earnings, November 30, 20Y3, \$44,000 ($\$80,000 - \$36,000$)
 - f. Land, \$216,000 from statement of cash flows
 - g. Total assets, \$321,200 ($\$99,200 + \$6,000 + \$216,000$)
 - h. Common stock, \$270,000 from statement of stockholders' equity or statement of cash flows
 - i. Retained earnings, \$44,000 [see (e)]
 - j. Total stockholders' equity, \$314,000 ($\$270,000 + \$44,000$) from statement of stockholders' equity
 - k. Total liabilities and stockholders' equity, \$321,200 ($\$7,200 + \$314,000$)
 - l. Cash received from customers, \$149,300 ($\$81,200 + \$68,100$) or from income statement
 - m. Net cash flows from operating activities, \$81,200 ($\$149,300 - \$68,100$) or ($\$99,200 - \$234,000 + \$216,000$)
 - n. Net cash flows from financing activities, \$234,000 ($\$270,000 - \$36,000$)
 - o. Net cash flows and November 30, 20Y3, cash balance, \$99,200 from balance sheet

P1-3

1. **TARGET CORPORATION**
Income Statement
For the Year Ended January 31
(in millions)

Sales.....		\$72,618
Expenses:		
Cost of goods sold	\$51,278	
Selling, general, and administrative expenses.....	14,676	
Income tax expense.....	1,204	
Interest expense.....	882	
Other expenses	<u>6,214</u>	
Total expenses.....		<u>(74,254)</u>
Net loss		<u>\$ (1,636)</u>

2. **TARGET CORPORATION**
Statement of Stockholders' Equity
For the Year Ended January 31
(in millions)

	<u>Common Stock</u>	<u>Retained Earnings</u>	<u>Other Items</u>	<u>Total</u>
Balances, Feb. 1 of prior year ...	\$53	\$12,599	\$3,579	\$16,231
Net loss for year		(1,636)		(1,636)
Dividends		(1,319)		(1,319)
Other items			721	721
Balances, January 31.....	<u>\$53</u>	<u>\$ 9,644</u>	<u>\$4,300</u>	<u>\$13,997</u>

**Note to Instructors:* Other items in stockholders' equity include additional paid-in capital from issuance of common stock, which is discussed in a later chapter.

P1–3, Concluded

3.

TARGET CORPORATION
Balance Sheet
January 31
(in millions)

Assets		
Cash.....		\$ 2,210
Inventories		8,790
Property, plant, and equipment.....		25,958
Other assets.....		<u>4,446</u>
Total assets.....		<u>\$41,404</u>
Liabilities		
Accounts payable.....	\$ 7,759	
Debt and other borrowings.....	12,705	
Other liabilities.....	<u>6,943</u>	
Total liabilities.....		\$27,407
Stockholders' Equity		
Common stock.....	\$ 53	
Retained earnings	9,644	
Other stockholder equity items.....	<u>4,300</u>	
Total stockholders' equity		<u>13,997</u>
Total liabilities and stockholders' equity.....		<u>\$41,404</u>

ALPHABET (GOOGLE) INC.
Statement of Cash Flows
For the Year Ended December 31
(in millions)

Cash flows from operating activities		\$ 26,024
Cash flows from investing activities:		
Purchases for property, plant, and equipment.....	\$ (9,915)	
Purchase of investments (marketable securities).....	<u>(13,796)</u>	
Net cash flows from investing activities		(23,711)
Cash flows from financing activities:		
Payments on debt		<u>(4,111)</u>
Net decrease in cash.....		\$ (1,798)
Cash as of January 1.....		<u>18,347</u>
Cash as of December 31		<u>\$ 16,549</u>

P1-5

1. **PENDRAY SYSTEMS CORPORATION**
Income Statement
For the Year Ended December 31, 20Y5

Revenue:		
Sales.....		\$1,175,000
Expenses:		
Cost of sales.....	\$650,000	
Selling and administrative expenses	100,000	
Income tax expense	87,000	
Interest expense	3,000	(840,000)
Net income		<u>\$ 335,000</u>

2. **PENDRAY SYSTEMS CORPORATION**
Statement of Stockholders' Equity
For the Year Ended December 31, 20Y5

	<u>Common Stock</u>	<u>Retained Earnings</u>	<u>Total</u>
Balances, Jan. 1, 20Y5	\$ 0	\$ 0	\$ 0
Issuance of common stock.....	120,000		120,000
Net income		335,000	335,000
Dividends		(90,000)	(90,000)
Balances, Dec. 31, 20Y5.....	<u>\$120,000</u>	<u>\$245,000</u>	<u>\$365,000</u>

P1–5, Continued

**3. PENDRAY SYSTEMS CORPORATION
Balance Sheet
December 31, 20Y5**

Assets		
Cash*		\$ 36,000
Accounts receivable		88,000
Inventories		111,000
Property, plant, and equipment		<u>265,000</u>
Total assets		<u>\$500,000</u>
 Liabilities		
Accounts payable	\$ 40,000	
Income taxes payable	15,000	
Note payable (due in fifteen years)	<u>80,000</u>	
Total liabilities		\$135,000
 Stockholders' Equity		
Common stock	\$120,000	
Retained earnings	<u>245,000</u>	
Total stockholders' equity		<u>365,000</u>
Total liabilities and stockholders' equity		<u>\$500,000</u>

***500,000 – \$265,000 – \$111,000 – \$88,000 = \$36,000 or from statement of cash flows**

P1–5, Concluded

**4. PENDRAY SYSTEMS CORPORATION
Statement of Cash Flows
For the Year Ended December 31, 20Y5**

Cash flows from operating activities:		
Cash receipts from operating activities	\$1,087,000	
Cash payments for operating activities	<u>(896,000)</u>	
Net cash flows from operating activities.....		\$ 191,000
Cash flows used for investing activities:		
Investments in property, plant, and equipment.....		(265,000)
Cash flows from financing activities:		
Cash receipt from issuance of note payable	\$ 80,000	
Cash receipt from issuance of common stock.....	120,000	
Cash payments for dividends	<u>(90,000)</u>	
Net cash flows from financing activities		<u>110,000</u>
Net increase in cash during 20Y5		\$ 36,000
Cash as of January 1, 20Y5		<u>0</u>
Cash as of December 31, 20Y5.....		<u><u>\$ 36,000</u></u>

Note to Instructors: The determination of cash receipts and payments from operating activities is not discussed in Chapter 1 and is beyond the student level of understanding or comprehension at this point in the text. This topic will be covered in later chapters. However, for completeness of the solution, the cash receipts and payments for operating activities are computed as follows:

Cash receipts from operating activities: \$1,175,000 (sales) – \$88,000 (accounts receivable) = \$1,087,000

Cash payments from operating activities: \$840,000 (total expenses) – \$40,000 (accounts payable) – \$15,000 (income taxes payable) + \$111,000 (inventories) = \$896,000

METRIC-BASED ANALYSIS

MBA 1–1

1. The following metrics appear on the companies' respective 10-Ks:

Interpublic Group of Companies Inc.

- Change in operating amounts, including revenues and various expenses (salaries, office, and general expenses)
- Operating expenses as a percentage of total revenue
- Revenue by business sector and geographic region

Twitter

- Monthly Active Users (MAUs)
- Timeline views (the number of timelines requested and delivered when registered users visit Twitter or refresh a home timeline, but not other timelines or view search results)
- Timeline views per MAU
- Advertising revenue per timeline view
- Adjusted earnings before interest, taxes, depreciation, and amortization (adjusted EBITDA)
- Non-GAAP net income (reported net income on the income statement adjusted for stock-based compensation and other items)

2. In general, the differences in the metrics used by each company can be explained by looking at each company's operations. Interpublic Group of Companies Inc. uses traditional metrics based upon the financial statements. Twitter uses nontraditional metrics based upon its operations involving Tweets.

MBA 1–2

1. The following metrics appear on the companies' respective 10-Ks:

JetBlue

- **Available seat miles (ASM)**
- **Number of revenue passengers**
- **Number of passenger miles**
- **Load factor (percent of occupied seats)**
- **Aircraft utilization (hours per day aircraft is in use)**
- **Operating revenue per ASM**
- **Operating expense per ASM**
- **Number of departures**
- **Average number of operating aircraft**
- **Cost per available seat mile (CASM)**
- **Net promoter score (NPS) (This score is an index that measures customer satisfaction by the willingness of customers to recommend the company to others.)**
- **Return on invested capital**
- **Free cash flow (Computed by subtracting capital expenditures from net cash flows from operations.)**

Costco

- **Net sales (less merchandise costs)**
- **Gross margin (profit) as a percentage of net sales**
- **Operating income**
- **Net property, plant, and equipment**
- **Increase in total company warehouse sales**
- **Number of warehouses**
- **Total paid members**

2. In general, the differences in the metrics used by each company can be explained by looking at each company's operations. JetBlue uses nontraditional metrics based upon its operations. Costco uses more traditional retail metrics based upon the financial statements.

MBA 1–3

1. \$6,644
2. \$3,784
3. \$661
4. 57.0% ($\$3,784 \div \$6,644$) (Rounded)
5. 75.6% (Rounded)

The markup percentage is computed as follows:

Cost of Sales + (Markup % × Cost of Sales) = Sales

$$\$3,784 + (\text{Markup \%} \times \$3,784) = \$6,644$$

$$\text{Markup \%} = \frac{\$6,644 - \$3,784}{\$3,784} = \frac{\$2,860}{\$3,784} = 75.6\% \text{ (Rounded)}$$

6. 9.9% ($\$661 \div \$6,644$) (Rounded)
7. Return on Assets = $\$661 \div [(\$4,754 + \$4,412) \div 2]$
 $= \$661 \div \$4,583 = 14.4\%$

MBA 1–4

1. 63.0% ($\$342 \div \543) (Rounded)
2. 58.8% (Rounded)

The markup percentage is computed as follows:

Cost of Sales + (Markup % × Cost of Sales) = Sales

$$\$342 + (\text{Markup \%} \times \$342) = \$543$$

$$\text{Markup \%} = \frac{\$543 - \$342}{\$342} = \frac{\$201}{\$342} = 58.8\% \text{ (Rounded)}$$

3. 11.6% ($\$63 \div \543) (Rounded)
4. Return on Assets = $\$63 \div \$899 = 7.0\%$

MBA 1–4, Concluded

5. Hershey's markup percentage of 75.6% is higher than Tootsie Roll's markup percentage of 58.8%. As a result, Hershey's return on assets is 14.4% compared to only 7.0% for Tootsie Roll. Overall, Hershey is more profitable than Tootsie Roll.

MBA 1–5

1. *Note to Instructors:* Answers will vary. The purpose of this requirement is to get students thinking about businesses and their profitability. This is done by focusing on real-world companies and their products with which students are familiar. Requirements (2) and (3) provide the opportunity for students to compare their rankings with real-world results.

2. Pfizer:

$$\begin{aligned}\text{Return on Assets} &= \$9,135 \div [(\$172,101 + \$169,274) \div 2] \\ &= \$9,135 \div \$170,688 = 5.4\%\end{aligned}$$

Ford:

$$\begin{aligned}\text{Return on Assets} &= \$3,187 \div [(\$202,179 + \$208,527) \div 2] \\ &= \$3,187 \div \$205,353 = 1.6\%\end{aligned}$$

Microsoft:

$$\begin{aligned}\text{Return on Assets} &= \$12,193 \div [(\$172,384 + \$176,223) \div 2] \\ &= \$12,193 \div \$174,304 = 7.0\%\end{aligned}$$

From highest to lowest, the companies are ranked as follows: Microsoft, Pfizer, and Ford.

3. Microsoft has the highest return on assets of 7.0%. This is due to the widespread acceptance and use of its products. Pfizer has the next highest return of 5.4%. Ford has the lowest return of 1.6%. Microsoft has been challenged by competitors such as Alphabet (Google); however, it recently released Windows 10 and has been developing its cloud-based operations. Pfizer operates in a research-intensive industry where it spends years developing and testing new drugs. Recently, one of Pfizer's most profitable drugs, Lipitor, lost its patent protection and has suffered decreasing sales as a result of competing generic drugs. Ford is slowly starting to rebound from depressed U.S. and world economies.

MBA 1–6

1. **Note to Instructors:** Answers will vary. The purpose of this requirement is to get students thinking about businesses and their profitability. This is done by focusing on real-world companies and their products with which students are familiar. Requirements (2) and (3) provide the opportunity for students to compare their rankings with real-world results.

2. **ExxonMobil:**

$$\begin{aligned}\text{Return on Assets} &= \$32,520 \div [(\$346,808 + \$349,493) \div 2] \\ &= \$32,520 \div \$348,151 = 9.3\%\end{aligned}$$

Coca-Cola:

$$\begin{aligned}\text{Return on Assets} &= \$7,098 \div [(\$90,055 + \$92,023) \div 2] \\ &= \$7,098 \div \$91,039 = 7.8\%\end{aligned}$$

Wal-Mart:

$$\begin{aligned}\text{Return on Assets} &= \$16,363 \div [(\$204,751 + \$203,706) \div 2] \\ &= \$16,363 \div \$204,229 = 8.0\%\end{aligned}$$

From highest to lowest, the companies are ranked as follows: ExxonMobil, Wal-Mart, and Coca-Cola.

3. ExxonMobil has the highest return on assets of 9.3%. This is due to the high demand for petroleum based products. At the same time, ExxonMobil's operations have the most risks. These risks include such factors as oil spills, with their resulting fines and clean-up costs, as well as the uncertainty of exploration and changing political climates in countries where ExxonMobil has operations. Wal-Mart (8.0%) and Coca-Cola (7.8%) have approximately the same rates of return. This reflects the fact that both companies operate in highly competitive markets.

MBA 1–7

1. $\text{Return on Assets} = \$891 \div [(\$4,752 + \$5,181) \div 2]$
 $= \$891 \div \$4,967 = 17.9\%$
2. Tiffany's return on assets of 17.9% is over twice that of Wal-Mart's return on assets of 8.0%. This reflects Tiffany's premium-price strategy that allows it to sell its products at higher prices and markups. In contrast, Wal-Mart operates in a highly competitive market with a low-cost (price) strategy.

CASES

Case 1–1

Management's actions are ethical. Management has a responsibility to the company's stockholders to remain competitive and profitable. Similarly, many companies have moved their production offshore to take advantage of cheaper labor. However, management should consider the impact of its proposal on workers' attitudes, including its motivations to innovate and be productive. Workers will be particularly upset if Hershey later decides not to invest the \$30 million to modernize the plants or if future work is not forthcoming. In the latter case, it would be unethical for management to pledge modernization and future work with no intention of fulfilling its promises.

Case 1–2

1. Acceptable professional conduct requires that Loretta Smith supply City National Bank with all the relevant financial statements necessary for the bank to make an informed decision. Therefore, Loretta should provide the complete set of financial statements. These can be supplemented with a discussion of the net loss in the past year or other data explaining why granting the loan is a good investment by the bank.

2. a. Owners are generally willing to provide bankers with information about the operating and financial condition of the business, such as the following:

Operating Information:

- description of business operations
- results of past operations
- preliminary results of current operations
- plans for future operations

Financial Condition:

- list of assets and liabilities (balance sheet)
- estimated current values of assets
- stockholders' investment in the business
- stockholders' commitment to invest additional funds in the business

Owners are normally reluctant to provide proprietary operating information to bankers. Such information, which could hurt the business if it becomes known by competitors, might include special processes used by

Case 1–2, Concluded

the business or future plans to expand operations into areas not currently served by a competitor.

- b. Bankers typically want as much information as possible about the ability of the business to repay the loan with interest. Examples of such information are described in the preceding answer.
- c. Bankers and business owners share the common interest of the business doing well and being successful. If the business is successful, the bankers will receive their loan payments on time with interest and the owners (and stockholders) will be rewarded.

Case 1–3

- 1. In a commodity business like poultry production, the dominant business emphasis is a low-cost emphasis because customers cannot differentiate between chickens produced by different companies. The implication of a low-cost emphasis is that you would put most of your efforts into designing and running efficient operations. In addition, you would spend significant amounts of monies in research and development activities trying to discover and develop new ways to breed and raise bigger chickens with less feed.
- 2. A major business risk includes the selling of contaminated chickens and the possibility that competitors will develop lower-cost methods of breeding and raising chickens. Also, a major cost of raising chickens is the cost of feed. Thus, fluctuations in feed costs such as corn can dramatically influence the profitability of chicken production. To manage feed cost risk, chicken producers enter into hedging transactions for feed that involve commodity futures and options. Finally, another major risk is that consumer tastes may change, with the result that the demand for chicken products may decrease significantly.
- 3. The company could differentiate its products by emphasizing that it raises its chickens with only “natural” feeds without the use of artificial ingredients such as steroids, etc. The company could then sell its products as the “healthy choice” and use a premium-price strategy.

Case 1–4

The difference in the two bank balances, \$175,000 ($\$215,000 - \$40,000$), may not be pure profit from an accounting perspective. To determine the accounting profit for the 8-month period, the revenues for the period would need to be matched with the related expenses. The revenues minus the expenses would indicate whether the business generated net income (profit) or a net loss for the period. Using only the difference between the two bank account balances ignores such factors as amounts due from customers (receivables), liabilities (accounts payable) that need to be paid for wages or other operating expenses, additional investments that Dr. Tempkin may have made in the business during the period, or dividends paid during the period.

Some businesses that have few, if any, receivables or payables may use a “cash” basis of accounting. The cash basis of accounting ignores receivables and payables because they are assumed to be insignificant in amount. However, even with the cash basis of accounting, additional investments during the period and any dividends during the period have to be considered in determining the net income (profit) or net loss for the period.

Case 1–5

Note to Instructors: Answers will vary. The purpose of this activity is to show students that the accounting equation has real-world impact. By illustrating how the accounting equation applies to well-known companies, the importance of accounting and the concepts discussed in this chapter are emphasized to students.

Case 1–6

As can be seen from the balance sheet data in the case, Enron was financed largely by debt as compared to equity. Specifically, Enron's stockholders' equity represented only 17.5% ($\$11,470 \div \$65,503$) of Enron's total assets. The remainder of Enron's total assets, 82.5%, was financed by debt. When a company is financed largely by debt, it is said to be highly leveraged.

In late 2001 and early 2002, allegations arose as to possible misstatements of Enron's financial statements. These allegations revolved around the use of "special-purpose entities" (partnerships) and related-party transactions. The use of special-purpose entities allowed Enron to hide a significant amount of additional debt off its balance sheet. The result was that Enron's total assets were even more financed by debt than the balance sheet indicated.

After the allegations of misstatements became public, Enron's stock rapidly declined and the company filed for bankruptcy. Subsequently, numerous lawsuits were filed against the company and its management. In addition, the Securities and Exchange Commission, the Justice Department, and Congress launched investigations into Enron. As a result, several of Enron's top executives were criminally prosecuted and were sentenced to prison.

Note to Instructors: The role of the auditors and board of directors of Enron also might be discussed. These topics are not covered in Chapter 1 but will be covered in later chapters.