

***Horngrens Financial and Managerial Accounting 8th
edition Miller-Nobles Solutions Manual***

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Chapter F:1

Accounting and the Business Environment

Review Questions

1. What is accounting?

Accounting is the information system that measures business activities, processes the information into reports, and communicates the results to decision makers. Accounting is the language of business.

2. Briefly describe the two major fields of accounting.

Financial accounting provides information for external decision makers, such as outside investors, lenders, customers, and the federal government. Managerial accounting focuses on information for internal decision makers, such as the company's managers and employees.

3. Describe the various types of individuals who use accounting information and how they use that information to make important decisions.

Individuals use accounting information to help them manage their money, evaluate a new job, and better decide whether they can afford to make a new purchase. Business owners use accounting information to set goals, measure progress toward those goals, and make adjustments when needed. Investors use accounting information to help them decide whether or not a company is a good investment and once they have invested, they use a company's financial statements to analyze how their investment is performing. Creditors use accounting information to decide whether to lend money to a business and to evaluate a company's ability to make the loan payments. Taxing authorities use accounting information to calculate the amount of income tax that a company has to pay.

4. What are various certifications available for accountants? Briefly explain each certification.

Certified Public Accountants (CPAs) are licensed professional accountants who serve the general public. They work for public accounting firms, businesses, government, or educational institutions. A Chartered Global Management Accountant (CGMA) is an accountant who has advanced knowledge in finance, operations, strategy, and management. Certified Management Accountants (CMAs) specialize in accounting and financial management knowledge. They work for a single company. Certified Financial Planners (CFPs) work with individuals to help them budget, plan for retirement, save for education, and manage their finances.

5. What is the role of the Financial Accounting Standards Board (FASB)?

The FASB oversees the creation and governance of accounting standards. They work with governmental regulatory agencies, congressionally created groups, and private groups.

6. Explain the purpose of Generally Accepted Accounting Principles (GAAP), including the organization currently responsible for the creation and governance of these standards in the United States.

The guidelines for accounting information are called GAAP. It is the main U.S. accounting rule book and is currently created and governed by the FASB. Investors and lenders must have information that is relevant and has faithful representation in order to make decisions and GAAP provides the framework for this financial reporting.

7. Describe the similarities and differences among the four different types of business entities discussed in the chapter.

A sole proprietorship has a single owner, terminates upon the owner's death or choice, the owner has personal liability for the business's debts, and it is not a separate tax entity. A partnership has two or more owners, terminates at partner's choice or death, the partners have personal liability, and it is not a separate tax entity. A corporation is a separate legal entity, has one or more owners, has indefinite life, the stockholders are not personally liable for the business's debts, and it is a separate tax entity. A limited-liability company has one or more members and each is only liable for his or her own actions, has an indefinite life, and is not a separate tax entity.

8. A business purchases an acre of land for \$5,000. The current market value is \$5,550, and the land was assessed for property tax purposes at \$5,250. What value should the land be recorded at, and which accounting principle supports your answer?

The land should be recorded at \$5,000. The cost principle states that assets should be recorded at their historical cost.

9. What does the going concern assumption mean for a business?

The going concern assumption assumes that the entity will remain in business for the foreseeable future and long enough to use existing resources for their intended purpose.

10. Which concept states that accounting information should be complete, neutral, and free from material error?

The faithful representation concept states that accounting information should be complete, neutral, and free from material error.

11. Financial statements in the United States are reported in U.S. dollars. What assumption supports this statement?

The monetary unit assumption states that items on the financial statements should be measured in terms of a monetary unit.

12. Explain the role of the International Accounting Standards Board (IASB) in relation to International Financial Reporting Standards (IFRS).

The IASB is the organization that develops and creates IFRS which are a set of global accounting standards that would be used around the world.

13. What is the accounting equation? Briefly explain each of the three parts.

Assets = Liabilities + Equity. Assets are economic resources that are expected to benefit the business in the future. They are things of value that a business owns or has control of. Liabilities are debts that are owed to creditors. They are one source of claims against assets. Equity is the other source of claims against assets. Equity is the stockholders' claims against assets and is the amount of assets that is left over after the company has paid its liabilities. It represents the net worth of the corporation.

14. How does retained earnings increase? What are the two ways that retained earnings decreases?

Retained earnings increases with revenues. Retained earnings decreases with expenses and dividends.

15. How is net income calculated? Define *revenues* and *expenses*.

Revenues – Expenses = Net Income. Revenues are earnings resulting from delivering goods or services to customers. Expenses are the cost of selling goods or service.

16. What are the steps used when analyzing a business transaction?

Step 1: Identify the accounts and the account type. Step 2: Decide if each account increases or decreases. Step 3: Determine if the accounting equation is in balance.

17. List the financial statements discussed in the chapter and briefly describe each statement.

Income Statement – Shows the difference between an entity's revenues and expenses and reports the net income or net loss for a specific period.

Statement of Retained Earnings – Shows the changes in retained earnings for a specific period including net income (loss) and dividends. For public companies, the statement of retained earnings is often included in a statement of stockholders' equity.

Balance Sheet – Shows the assets, liabilities, and stockholders' equity of the business as of a specific date.

Statement of Cash Flows – Shows a business's cash receipts and cash payments for a specific period.

18. What is the calculation for ROA? Explain what ROA measures.

Return on Assets = Net income / Average total assets. ROA measures how profitably a company uses its assets.

Short Exercises

S-F:1-1

Identifying users of accounting information

For each user of accounting information, identify if the user would use financial accounting or managerial accounting.

- a. investor
- b. banker
- c. IRS
- d. manager of the business
- e. controller
- f. stockholder
- g. human resources director
- h. creditor

- | | |
|-------|-------|
| a. FA | e. MA |
| b. FA | f. FA |
| c. FA | g. MA |
| d. MA | h. FA |

S-F:1-2

Determining organizations that govern accounting

Suppose you are starting a business, Wholly Shirts, to imprint logos on T-shirts. In organizing the business and setting up its accounting records, you take your information to a CPA to prepare financial statements for the bank. Name the organization that governs the majority of the guidelines that the CPA will use to prepare financial statements for Wholly Shirts. What are those guidelines called?

The Financial Accounting Standards Board governs the majority of guidelines, called Generally Accepted Accounting Principles (GAAP), that the CPA will use to prepare financial statements for Wholly Shirts.

S-F:1-3

Identifying types of business organizations

Diana Rahat, the owner, plans on opening Diana Rahat Floral Designs. The owner is considering the various types of business organizations and wishes to organize the business with unlimited life and wants the owner of the business to not be held personally liable for the business' debts. Additionally, Rahat wants the business to be a separate taxable entity. Which type of business organization will meet Rahat's needs best?

Rahat's needs will best be met by organizing a corporation since a corporation has an unlimited life and is a separate tax entity. In addition, the owners (stockholders) have limited liability. Rahat could also consider a limited liability company (LLC) as an option. An LLC meets two of the three criteria. It has an unlimited life and limited liability for the owner. However, an LLC is not a separate tax entity.

S-F:1-4**Identifying types of business organizations**

You would like to start a cellular telephone equipment service business. You are considering organizing the business as a sole proprietorship. Identify the advantages and disadvantages of owning a sole proprietorship.

Advantages:

1. Easy to organize.
2. Unification of ownership and management.
3. Less government regulation.
4. Owner has more control over business.

Disadvantages:

1. The owner pays taxes on the entity's earnings since it is not a separate tax entity.
2. No continuous life or transferability of ownership.
3. Unlimited liability of owner for business's debts.

S-F:1-5**Applying accounting assumptions and principles**

Swaran Frei is the proprietor of a property management company, Apartment Exchange, near the campus of Pensacola State College. The business has cash of \$8,000 and furniture that cost \$9,000 and has a fair value of \$13,000. The business debts include accounts payable of \$6,000. Frei has a personal home valued at \$400,000 and a personal bank account with a balance of \$1,200. Consider the accounting principles and assumptions discussed in the chapter, and identify the principle or assumption that best matches the situation:

- a. Frei's personal assets are not recorded on the Apartment Exchange's balance sheet.
 - b. Apartment Exchange records furniture at its cost of \$9,000, not its fair value of \$13,000.
 - c. Apartment Exchange reports its financial statements in U.S. dollars.
 - d. Frei expects Apartment Exchange to remain in operation for the foreseeable future.
-
- a. The economic entity assumption
 - b. The cost principle.
 - c. The monetary unit assumption.
 - d. The going concern assumption.

S-F:1-6**Using the accounting equation**

Bennett Handyman Services has total assets of \$12,500 and total liabilities of \$8,240.

Requirements

1. Use the accounting equation to solve for equity.
2. If assets increase by \$3,200 and equity decrease by \$1,890 during the next year, what would be the amount of total liabilities for Bennett Handyman Services?

Requirement 1

Bennett Handyman Services has equity of \$4,260.

Assets	=	Liabilities	+	Equity
\$12,500	=	\$8,240	+	?
\$12,500	=	\$8,240	+	\$4,260

Requirement 2

Bennett Handyman Services has liabilities of \$13,330.

Assets	=	Liabilities	+	Equity
\$12,500 + \$3,200	=	?	+	\$4,260 – \$1,890
\$15,700	=	\$13,330	+	\$2,370

S-F:1-7**Using the accounting equation**

Hilda's Overhead Doors reports the following financial information:

Assets	\$ 45,800
Liabilities	15,230
Common Stock	28,700
Dividends	7,000
Revenues	10,890
Expenses	?

Requirements

1. Use the accounting equation to solve for the missing information.
2. Did Hilda's Overhead Doors report net income or net loss?

Requirement 1

ASSETS = LIABILITIES +			EQUITY						
			Contributed Capital	+	Retained Earnings				
			Common Stock	–	Dividends	+	Revenues	–	Expenses
\$45,800	=	\$15,230	+	\$28,700	–	\$7,000	+	\$10,890	– ?
\$45,800	=	\$15,230	+	\$28,700	–	\$7,000	+	\$10,890	– \$2,020

Requirement 2

Hilda's Overhead Doors reported net income of \$8,870.

Net Income = Revenues – Expenses

Net Income = \$10,890 – \$2,202

Net Income = \$8,870

S-F:1-8

Identifying accounts

- Accounts Payable
- Cash
- Common Stock
- Accounts Receivable
- Rent Expense
- Service Revenue
- Supplies
- Dividends
- Land
- Salaries Expense

Identify each account as Asset, Liability, or Equity.

- | | |
|------|------|
| a. L | f. E |
| b. A | g. A |
| c. E | h. E |
| d. A | i. A |
| e. E | j. E |

S-F:1-9**Using the accounting equation to analyze transactions**

Large City Kennel earns service revenue by caring for the pets of customers. Large City Kennel is organized as a corporation. During the past month, Large City Kennel has the following transactions:

- a. Received \$520 cash for service revenue earned.
- b. Paid \$325 cash for salaries expense.
- c. Received a \$1,000 contribution in exchange for common stock.
- d. Earned \$640 for service revenue, but the customer has not paid Large City Kennel yet.
- e. Received utility bill of \$85, which will be paid next month.
- f. Cash dividends of \$100 were paid to stockholders.

Indicate the effects of the business transactions on the accounting equation for Large City Kennel. Transaction (a) is answered as a guide. Use the following accounts: Cash, Accounts Receivable, Accounts Payable, Common Stock, Dividends, Service Revenue, Salaries Expense, and Utilities Expense.

a. Increase asset (Cash); Increase equity (Service Revenue)

- a. Increase asset (Cash); Increase equity (Service Revenue)
- b. Decrease asset (Cash); Decrease equity (Salaries Expense)
- c. Increase asset (Cash); Increase Equity (Common Stock)
- d. Increase asset (Accounts Receivable); Increase equity (Service Revenue)
- e. Increase liability (Accounts Payable); Decrease equity (Utility Expense)
- f. Decrease asset (Cash); Decrease equity (Dividends)

S-F:1-10**Using the accounting equation to analyze transactions**

Mireya's Inflatables earns service revenue by providing party planning services and inflatable playscapes. Mireya's Inflatables is organized as a corporation. During the past month, Mireya's Inflatables had the following transactions:

- a. Received contributions of \$10,000 in exchange for common stock.
- b. Purchased equipment for \$5,000 on account.
- c. Paid \$400 for supplies.
- d. Earned and received \$2,500 cash for service revenue.
- e. Paid \$400 for wages to employees.
- f. Cash dividends of \$1,000 were paid to stockholders.
- g. Earned \$1,000 for services provided. Customer has not yet paid.
- h. Paid \$1,000 for rent.
- i. Received a bill for \$250 for the monthly utilities. The bill has not yet been paid.

Indicate the effects of the business transactions on the accounting equation for Mireya's Inflatables. Transaction (a) is answered as a guide. Use the following accounts: Cash, Accounts Receivable, Supplies, Equipment, Accounts Payable, Common Stock, Dividends, Service Revenue, Wages Expense, Rent Expense, and Utilities Expense.

a. Increase asset (Cash); Increase equity (Common Stock)

- a. Increase asset (Cash); Increase equity (Common Stock)
- b. Increase asset (Equipment); Increase liability (Accounts Payable)
- c. Increase asset (Supplies); Decrease asset (Cash)
- d. Increase asset (Cash); Increase equity (Service Revenue)

- e. Decrease asset (Cash); Decrease equity (Wages Expense)
- f. Decrease asset (Cash); Decrease equity (Dividends)
- g. Increase asset (Accounts Receivable); Increase equity (Service Revenue)
- h. Decrease asset (Cash); Decrease equity (Rent Expense)
- i. Increase liability (Accounts Payable); Decrease equity (Utilities Expense)

S-F:1-11

Identifying accounts on the financial statements

Consider the following accounts:

- a. Accounts Payable
- b. Cash
- c. Common Stock
- d. Accounts Receivable
- e. Rent Expense
- f. Service Revenue
- g. Supplies
- h. Dividends
- i. Land
- j. Salaries Expense

Identify the financial statement (or statements) that each account would appear on. Use I for Income Statement, RE for Statement of Retained Earnings, B for Balance Sheet, and C for Statement of Cash Flows.

Use the following information to answer Short Exercises S-F:1-12 through S-F:1-15.

Boardwalk Web Design has just completed operations for the year ended December 31, 2025. This is the third year of operations for the company. The following data have been assembled for the business:

Insurance Expense	\$ 4,000	Salaries Expense	\$ 42,000
Service Revenue	74,000	Accounts Payable	6,800
Utilities Expense	1,100	Supplies	2,100
Rent Expense	13,000	Dividends	3,900
Common Stock	6,000	Accounts Receivable	5,500
Cash	4,700	Equipment	15,000
Retained Earnings, January 1, 2025	4,500		

- a. B
- b. B, C
- c. B
- d. B
- e. I
- f. I
- g. B
- h. RE
- i. B
- j. I

S-F:1-12**Preparing the income statement**

Prepare the income statement of Boardwalk Web Design for the year ended December 31, 2025.

BOARDWALK WEB DESIGN		
Income Statement		
Year Ended December 31, 2025		
Revenue:		
Service Revenue		\$ 74,000
Expenses:		
Salaries Expense	\$ 42,000	
Rent Expense	13,000	
Insurance Expense	4,000	
Utilities Expense	1,100	
Total Expenses		<u>60,100</u>
Net Income		<u>\$ 13,900</u>

S-F:1-13**Preparing the statement of retained earnings**

Prepare the statement of retained earnings of Boardwalk Web Design for the year ended December 31, 2025.

BOARDWALK WEB DESIGN	
Statement of Retained Earnings	
Year Ended December 31, 2025	
Retained Earnings, January 1, 2025	\$ 4,500
Net income for the year	<u>13,900</u>
	18,400
Dividends	<u>(3,900)</u>
Retained Earnings, December 31, 2025	<u>\$ 14,500</u>

S-F:1-14**Preparing the statement of stockholders' equity**

Prepare the statement of stockholders' equity of Boardwalk Web Design for the year ended December 31, 2025. No common stock was issued during 2025.

BOARDWALK WEB DESIGN Statement of Stockholders' Equity Year Ended December 31, 2025			
	<u>Contributed Capital</u> Common Stock	Retained Earnings	Total Stockholders' Equity
Balance, January 1, 2025	\$ 6,000	\$ 4,500	\$ 10,500
Issuance of common stock			0
Net income for the year		13,900	13,900
Less: Dividends		(3,900)	(3,900)
Balance, December 31, 2025	<u>\$ 6,000</u>	<u>\$ 14,500</u>	<u>\$ 20,500</u>

S-F:1-15**Preparing the balance sheet**

Prepare the balance sheet of Boardwalk Web Design as of December 31, 2025.

BOARDWALK WEB DESIGN Balance Sheet December 31, 2025			
Assets		Liabilities	
Cash	\$ 4,700	Accounts Payable	\$ 6,800
Accounts Receivable	5,500		
Supplies	2,100	Stockholders' Equity	
Equipment	15,000	Common Stock	6,000
		Retained Earnings	14,500
		Total Stockholders' Equity	<u>20,500</u>
Total Assets	<u>\$ 27,300</u>	Total Liabilities and Stockholders' Equity	<u>\$ 27,300</u>

S-F:1-16**Preparing the statement of cash flows**

Gage Street Homes had the following cash transactions for the month ended July 31, 2025.

Cash receipts:	
Collections from customers	\$ 20,000
Issued common stock	8,000
Cash payments:	
Rent	3,000
Utilities	1,500
Salaries	2,100
Purchase of equipment	10,750
Payment of cash dividends	5,250
Cash balance, July 1, 2025	12,500
Cash balance, July 31, 2025	17,900

Prepare the statement of cash flows for Gage Street Homes for the month ended July 31, 2025.

GAGE STREET HOMES		
Statement of Cash Flows		
Month Ended July 31, 2025		
Cash flows from operating activities:		
Receipts:		
Collections from customers		\$ 20,000
Payments:		
To employees	\$ (2,100)	
To suppliers (\$3,000 + \$1,500)	(4,500)	(6,600)
Net cash provided by operating activities		13,400
Cash flows from investing activities:		
Purchase of equipment	(10,750)	
Net cash used by investing activities		(10,750)
Cash flows from financing activities:		
Issued common stock	8,000	
Payment of cash dividend	(5,250)	
Net cash provided by financing activities		2,750
Net increase in cash		5,400
Cash balance, July 1, 2025		12,500
Cash balance, July 31, 2025		\$ 17,900

S-F:1-17**Calculating ROA**

Annett Irrigation Company had net income for the month of October of \$30,000. Assets as of the beginning and end of the month totaled \$355,000, and \$345,000, respectively. Calculate Annett Irrigation Company's ROA for the month of October. Round percentage to two decimal places.

$$\begin{aligned}\text{Return on assets} &= \text{Net income} / \text{Average total assets} \\ &= \$30,000 / ((\$355,000 + \$345,000) / 2) \\ &= \$30,000 / \$350,000 \\ &= 8.57\%\end{aligned}$$

Exercises

E-F:1-18

Identifying users of accounting information

For each of the users of accounting information, identify whether the user is an external decision maker (E) or an internal decision maker (I):

- a. customer
- b. company manager
- c. Internal Revenue Service
- d. lender
- e. investor
- f. controller
- g. cost accountant
- h. SEC

- | | |
|------|------|
| a. E | e. E |
| b. I | f. I |
| c. E | g. I |
| d. E | h. E |

E-F:1-19

Using accounting vocabulary

Consider the following accounting terms and definitions and match each term to the definition:

- | | |
|----------------------------|---|
| 1. Sole proprietorship | a. Set of global accounting guidelines, formulated by the IASB |
| 2. Faithful representation | b. Holds that fair value should not be used over actual costs |
| 3. Partnership | c. Stands for Financial Accounting Standards Board |
| 4. IFRS | d. Owner is referred to as a proprietor |
| 5. Corporation | e. Asserts that accounting information should be complete, neutral, and free from material error |
| 6. Audit | f. An examination of a company's financial statements and records |
| 7. Cost principle | g. Has two or more owners (called partners) |
| 8. FASB | h. U.S. governmental agency that oversees the U.S. financial markets |
| 9. Creditors | i. Type of entity that is designed to limit personal liability exposure of owners to the entity's debts |
| 10. SEC | j. Person or business lending money |

- | | |
|------|------|
| 1. d | 6. f |
| 2. e | 7. b |
| 3. g | 8. c |

- | | |
|------|-------|
| 4. a | 9. j |
| 5. i | 10. h |

E-F:1-20

Using accounting vocabulary

Consider the following accounting terms and definitions and match each term to the definition:

- | | |
|------------------------------------|--|
| 1. Accounting equation | a. An economic resource that is expected to be of benefit in the future |
| 2. Asset | b. Debts that are owed to creditors |
| 3. Balance sheet | c. Excess of total expenses over total revenues |
| 4. Expense | d. Excess of total revenues over total expenses |
| 5. Income statement | e. The basic tool of accounting, stated as $\text{Assets} = \text{Liabilities} + \text{Equity}$ |
| 6. Liability | f. Decreases in equity that occur in the course of selling goods or services |
| 7. Net income | g. Increases in equity that occur in the course of selling goods or services |
| 8. Net loss | h. Reports on a business' cash receipts and cash payments during a period |
| 9. Revenue | i. Reports on an entity's assets, liabilities, and stockholders' equity as of a specific date |
| 10. Statement of cash flows | j. Reports on an entity's revenues, expenses, and net income or loss for the period |
| 11. Statement of retained earnings | k. Reports how the company's retained earnings balance changed from the beginning to the end of the period |

- | | |
|------|-------|
| 1. e | 7. d |
| 2. a | 8. c |
| 3. i | 9. g |
| 4. f | 10. h |
| 5. j | 11. k |
| 6. b | |

E-F:1-21**Using the accounting equation**

Compute the missing amount in the accounting equation for each entity from the financial information presented:

	Assets	Liabilities	Equity
Corner Grocery	\$?	\$ 24,000	\$ 50,000
Everything Hair	75,000	?	32,000
Zippy Gas	100,000	53,000	?

	Assets	Liabilities	Equity
Corner Grocery	\$ 74,000	\$ 24,000	\$ 50,000
Everything Hair	75,000	43,000	32,000
Zippy Gas	100,000	53,000	47,000

E-F:1-22**Using the accounting equation**

Zion Builders' balance sheet data at May 31, 2025, and June 30, 2025, follow:

	May 31, 2025	June 30, 2025
Total Assets	\$ 177,000	\$ 213,000
Total Liabilities	122,000	144,000

For each of the following situations that occurred in June 2025 with regard to common stock and dividends of a corporation, compute the amount of net income or net loss during June 2025.

- The company issued \$6,000 of common stock and paid no dividends.
- The company issued no common stock. It paid cash dividends of \$10,000.
- The company issued \$18,000 of common stock and paid cash dividends of \$20,000.

	a.	b.	c.
Stockholders' equity, May 31, 2025 (\$177,000 – \$122,000)	\$ 55,000	\$ 55,000	\$ 55,000

Issuance of common stock	6,000	0	18,000
Net income for the month	8,000	24,000	16,000
	69,000	79,000	89,000
Dividends	0	(10,000)	(20,000)
Stockholders' equity, June 30, 2025 (\$213,000 – \$144,000)	\$ 69,000	\$ 69,000	\$ 69,000

E-F:1-23**Using the accounting equation**

Collision Auto Shop started 2025 with total assets of \$19,000 and total liabilities of \$9,000. At the end of 2025, Collision Auto Shop's total assets stood at \$27,000 and total liabilities were \$13,000.

Requirements

1. Did the stockholders' equity of Collision Auto Shop increase or decrease during 2025? By how much?
2. Identify the four possible reasons that stockholders' equity can change.

Requirement 1

	Assets	=	Liabilities	+	Equity
Beginning of 2025	\$19,000	=	\$9,000	+	?
	\$19,000	=	\$9,000	+	\$10,000
End of 2025	\$27,000	=	\$13,000	+	?
	\$27,000	=	\$13,000	+	\$14,000

Stockholders' equity increased in 2025 by \$4,000 (\$14,000 – \$10,000).

Requirement 2

- a. Increase through issuance of common stock.
- b. Increase through net income.
- c. Decrease through dividend payment.
- d. Decrease through net loss.

E-F:1-24**Using the accounting equation**

During 2025, Bigfoot Spa reported revenue of \$21,000. Total expenses for the year were \$14,000. Bigfoot Spa ended the year with total assets of \$30,000, and it owed debts totaling \$14,000. At year-end 2024, the business reported total assets of \$23,000 and total liabilities of \$14,000.

Requirements

1. Compute Bigfoot Spa's net income for 2025.
2. Did Bigfoot Spa's stockholders' equity increase or decrease during 2025? By how much?

Requirement 1

$$\text{Revenues} - \text{Expenses} = \text{Net Income}$$

$$\$21,000 - \$14,000 = \$7,000$$

Requirement 2

Bigfoot Spa's equity increased by \$7,000 (\$16,000 – \$9,000) or the amount of the net income.

	Assets	=	Liabilities	+	Equity
Beginning of 2025	\$23,000	=	\$14,000	+	?
	\$23,000	=	\$14,000	+	\$9,000
Ending of 2025	\$30,000	=	\$14,000	+	?
	\$30,000	=	\$14,000	+	\$16,000

E-F:1-25**Using the accounting equation**

The records of Sylvia Company show the following at December 31, 2025:

Assets & Liabilities:		Equity:	
Beginning:		Common Stock	\$ 10,000
Assets	\$ 45,000	Dividends	19,000
Liabilities	29,000	Revenues	242,000
Ending:		Expenses	?
Assets	\$ 55,000	Retained Earnings, January 1, 2025	6,000
Liabilities	38,000		

Requirements

1. Compute the missing amount for Sylvia Company. You will need to determine Retained Earnings, December 31, 2025, and total stockholders' equity, December 31, 2025.
2. Did Sylvia Company earn a net income or suffer a net loss for the year? Compute the amount.

Requirement 1

	Assets	—	Liabilities	=	Equity
Beginning of 2025	\$45,000	—	\$29,000	=	\$16,000
Ending of 2025	\$55,000	—	\$38,000	=	\$17,000

Retained Earnings:

Retained Earnings, Jan. 1, 2025	\$ 6,000
Plus: Revenues	242,000
Less: Expenses	(222,000)
Less: Dividends	(19,000)
Retained Earnings, Dec. 31, 2025	<u>\$ 7,000</u>

Stockholders' Equity:

Common Stock	\$ 10,000
Retained Earnings	7,000
Total Stockholders' Equity	<u>\$ 17,000</u>

Requirement 2

Sylvia Company earned net income of \$20,000.

Revenue	—	Expenses	=	Net Income (Loss)
\$242,000	—	\$222,000	=	\$20,000

E-F:1-26**Using the accounting equation to analyze business transactions**

As the manager of a Mama Bodhi's restaurant, you must deal with a variety of business transactions. Give an example of a transaction that has each of the following effects on the accounting equation:

- a. Increase one asset and decrease another asset.
- b. Decrease an asset and decrease equity.
- c. Decrease an asset and decrease a liability.
- d. Increase an asset and increase equity.
- e. Increase an asset and increase a liability.

Student responses will vary. Examples include:

- a. Cash purchase of supplies.
- b. Cash dividends paid to stockholders.
- c. Paid cash on accounts payable.
- d. Received cash for services provided.
- e. Borrowed cash from the bank.

E-F:1-27

Using the accounting equation to analyze business transactions

Indicate the effects of the following business transactions on the accounting equation of Premiere Online Video store. Use the following accounts: Cash, Accounts Receivable, Supplies, Office Furniture, Accounts Payable, Common Stock, Dividends, Rental Revenue, and Rent Expense. Transaction (a) is answered as a guide.

- a. Received cash of \$10,000 from issuance of common stock.

Answer: Increase asset (Cash); Increase equity (Common Stock)

- b. Earned video rental revenue on account, \$1,800.
- c. Purchased office furniture on account, \$400.
- d. Received cash on account, \$600.
- e. Paid cash on account, \$100.
- f. Rented videos and received cash of \$300.
- g. Paid monthly office rent of \$2,500.
- h. Paid \$200 cash to purchase supplies.

- a. Increase asset (Cash); Increase equity (Common Stock)
- b. Increase asset (Accounts Receivable); Increase equity (Rental Revenue)
- c. Increase asset (Office Furniture); Increase liability (Accounts Payable)
- d. Increase asset (Cash); Decrease asset (Accounts Receivable)
- e. Decrease asset (Cash); Decrease liability (Accounts Payable)
- f. Increase asset (Cash); Increase equity (Rental Revenue)
- g. Decrease asset (Cash); Decrease equity (Rent Expense)
- h. Decrease asset (Cash); Increase asset (Supplies).

E-F:1-28

Using the accounting equation to analyze business transactions

Indicate the effects of the following business transactions on the accounting equation for Yummy Snack Foods, a supplier of snack foods. Transaction (a) is answered as a guide.

- a. Yummy Snack Foods received cash from issuance of common stock to stockholders.

Answer: Increase asset (Cash); Increase equity (Common Stock)

- b. Cash purchase of land for a building site.
- c. Paid cash on accounts payable.
- d. Purchased equipment; signed a note payable.
- e. Performed service for a customer on account.
- f. Employees worked for the week but will be paid next Tuesday.
- g. Received cash from a customer on accounts receivable.
- h. Borrowed money from the bank.
- i. Cash dividends paid to stockholders.
- j. Incurred utilities expense on account.

- a. Increase asset (Cash); Increase equity (Common Stock)
- b. Increase asset (Land); Decrease asset (Cash)
- c. Decrease asset (Cash); Decrease liability (Accounts Payable)
- d. Increase asset (Equipment); Increase liability (Notes Payable)
- e. Increase asset (Accounts Receivable); Increase equity (Service Revenue)
- f. Increase liability (Salaries Payable); Decrease equity (Salaries Expense)
- g. Increase asset (Cash); Decrease asset (Accounts Receivable)
- h. Increase asset (Cash); Increase liability (Notes Payable)
- i. Decrease asset (Cash); Decrease equity (Dividends)
- j. Increase liability (Accounts Payable); Decrease equity (Utility Expense)

E-F:1-29

Using the accounting equation to analyze business transactions

The analysis of the first eight transactions of Rapid Accounting Service follows. Describe each transaction.

ASSETS				LIABILITIES + EQUITY				
	Cash	+ Accounts Receivable	+ Equipment	Accounts Payable	+ Contributed Capital Common Stock	+ Retained Earnings Dividends + Service Revenue - Salaries Expense		
1	+31,000				+31,000			
2		+3,800				+3,800		
Bal.	\$31,000	+ \$3,800			\$31,000	+ \$3,800		
3			+13,400	+13,400				
Bal.	\$31,000	+ \$3,800	+ \$13,400	\$13,400	+ \$31,000	+ \$3,800		
4	+190	-190						
Bal.	\$31,190	+ \$3,610	+ \$13,400	\$13,400	+ \$31,000	+ \$3,800		
5	-410		+410					
Bal.	\$30,780	+ \$3,610	+ \$13,810	\$13,400	+ \$31,000	+ \$3,800		
6	-8,000			-8,000				
Bal.	\$22,780	+ \$3,610	+ \$13,810	\$5,400	+ \$31,000	+ \$3,800		
7	+790					+790		
Bal.	\$23,570	+ \$3,610	+ \$13,810	\$5,400	+ \$31,000	+ \$4,590		
8	-1,500						-1,500	
Bal.	\$22,070	+ \$3,610	+ \$13,810	\$5,400	+ \$31,000	+ \$4,590	- \$1,500	

Transaction Descriptions:

1. Issuance of common stock to stockholders
2. Earned revenue on account
3. Purchased equipment on account
4. Collected cash on account
5. Cash purchase of equipment
6. Paid cash on account
7. Earned revenue and received cash
8. Paid cash for salaries

E-F:1-30**Using the accounting equation to analyze business transactions**

Józefina Floros opened a medical practice. During July, the first month of operation, the business, titled J. Floros, MD, experienced the following events:

-
- | | |
|--------|--|
| Jul. 6 | Received a contribution of \$55,000 from Floros and opened a bank account in the name of J. Floros, MD. The corporation issued common stock to Floros. |
| 9 | Paid \$46,000 cash for land. |
| 12 | Purchased medical supplies for \$1,800 on account. |
| 15 | Officially opened for business. |
| 20 | Paid cash expenses: employees' salaries, \$1,600; office rent, \$1,900; utilities, \$100. |
| 31 | Earned service revenue for the month, \$8,000, receiving cash. |
| 31 | Paid \$1,100 on account. |
-

Analyze the effects of these events on the accounting equation of the medical practice of J. Floros, MD, using the following format:

ASSETS			}	=	{	LIABILITIES +		EQUITY					
Cash	Medical Supplies	Land				Accounts Payable	Contributed Capital	Common Stock	Dividends	Service Revenue	Salaries Expense	Rent Expense	Utilities Expense

ASSETS				= LIABILITIES +		EQUITY							
						Contributed Capital		Retained Earnings					
Date	Cash	Medical Supplies	Land	=	Accounts Payable	Common Stock		Dividends	+ Service Revenue	– Salaries Expense	– Rent Expense	– Utilities Expense	
July 6	+55,000					+55,000							
Bal.	\$55,000			=		\$55,000							
9	–46,000		+46,000	=									
Bal.	\$ 9,000		\$46,000	=		\$55,000							
12		+1,800		=	+1,800								
Bal.	\$ 9,000	\$1,800	\$46,000	=	\$1,800	\$55,000							
15													
Bal.	\$ 9,000	\$1,800	\$46,000	=	\$1,800	\$55,000							
20	–3,600			=						–1,600	–1,900	–100	
Bal.	\$ 5,400	\$1,800	\$46,000	=	\$1,800	\$55,000				\$1,600	\$1,900	\$100	
31	+8,000			=					+8,000				
Bal.	\$13,400	\$1,800	\$46,000	=	\$1,800	\$55,000			\$8,000	\$1,600	\$1,900	\$100	
31	–1,100			=	–1,100								
Bal.	\$12,300	\$1,800	\$46,000	=	\$ 700	\$55,000			\$8,000	\$1,600	\$1,900	\$100	

E-F:1-31

Preparing the financial statements

Alfred Hansen publishes an online travel blog. In need of cash, the business applies for a loan with National Bank. The bank requires borrowers to submit an income statement, statement of retained earnings, balance sheet, and statement of cash flows. With little knowledge of accounting, Alfred Hansen, a stockholder, does not know how to proceed.

Requirements

1. Is there a specific order in which the financial statements must be prepared?
2. Explain how to prepare each statement.

Use the following information to answer Exercises E-F:1-32 through E-F:1-35.

The account balances of Strong Arms Coaching at June 30, 2025, follow:

Equipment	\$ 13,600	Service Revenue	\$ 12,200
Supplies	900	Accounts Receivable	6,200
Notes Payable	6,900	Accounts Payable	3,000
Rent Expense	1,550	Retained Earnings, June 1, 2025	950
Cash	1,900	Salaries Expense	1,900
Dividends	1,000	Common Stock	4,000

Requirement 1

Yes, the financial statements should be prepared in the following order:

- a. Income statement
- b. Statement of retained earnings (or statement of stockholders' equity)
- c. Balance sheet
- d. Statement of cash flows

Requirement 2

Income Statement:

- a. The header includes the name of the business, the title of the statement, and the time period. An income statement always represents a period of time, for example, a month or a year.
- b. The revenue accounts are always listed first and then subtotaled if necessary.
- c. Each expense account is listed separately from largest to smallest and then subtotaled if necessary.
- d. Net income is calculated as total revenues minus total expenses.

Statement of Retained Earnings:

- a. The header includes the name of the business, the title of the statement, and the time period. A statement of retained earnings always represents a period of time, for example, a month or a year.
- b. The beginning retained earnings is listed first and will always be the ending retained earnings from the previous time period.
- c. The net income is added to the beginning retained earnings.
- d. The dividends are subtracted from retained earnings. If there had been a net loss, this would also be subtracted.

Balance Sheet:

- The header includes the name of the business and the title of the statement but the date is different. The balance sheet shows the date as a specific date and not a period of time.
- Each asset account is listed separately and then totaled. Cash is always listed first.
- Liabilities are listed separately and then totaled. Liabilities that are to be paid first are listed first.
- The stockholders' equity section includes common stock and ending retained earnings from the statement of retained earnings.
- The balance sheet must always balance: $\text{Assets} = \text{Liabilities} + \text{Equity}$.

Statement of Cash Flows:

- The header includes the name of the business, the title of the statement, and the time period. A statement of cash flows always represents a period of time, for example, a month or a year.
- Each dollar amount is calculated by evaluating the cash column on the transaction detail.
- Operating activities involve cash receipts for services provided and cash payments for expenses paid.
- Investing activities include the purchase and sale of land and equipment for cash.
- Financing activities include cash from the issuance of common stock and payment of cash dividends.
- The ending cash balance must match the cash balance on the balance sheet.

E-F:1-32

Preparing the income statement

Requirements

Net Income \$8,750

- Prepare the income statement for Strong Arms Coaching for the month ending June 30, 2025.
- What does the income statement report?

Requirement 1

STRONG ARMS COACHING		
Income Statement		
Month Ended June 30, 2025		
Revenue:		
Service Revenue		\$ 12,200
Expenses:		
Salaries Expense	\$ 1,900	
Rent Expense	1,550	
Total Expenses		3,450
Net Income		<u>\$ 8,750</u>

Requirement 2

The income statement reports revenues and expenses for a period of time.

E-F:1-33

Preparing the statement of retained earnings

Ending Retained Earnings \$8,700

Requirements

1. Prepare the statement of retained earnings for Strong Arms Coaching for the month ending June 30, 2025.
2. What does the statement of retained earnings report?

Requirement 1

STRONG ARMS COACHING	
Statement of Retained Earnings	
Month Ended June 30, 2025	
Retained Earnings, June 1, 2025	\$ 950
Net income for the month	<u>8,750</u>
	9,700
Dividends	<u>(1,000)</u>
Retained Earnings, June 30, 2025	<u>\$ 8,700</u>

Requirement 2

The statement of retained earnings reports the changes in retained earnings for a corporation during a time period. The statement of retained earnings reports a corporation's net income or net loss and dividends declared.

E-F:1-34**Preparing the statement of stockholders' equity**

Ending Total Stockholders' Equity \$12,700

Requirements

1. Prepare the statement of stockholders' equity for Strong Arms Coaching for the month ending June 30, 2025. No common stock was issued during the month.
2. What does the statement of stockholders' equity report?

Requirement 1

STRONG ARMS COACHING Statement of Stockholders' Equity Month Ended June 30, 2025			
	Contributed Capital Common Stock	Retained Earnings	Total Stockholders' Equity
Balance, June 1, 2025	\$ 4,000	\$ 950	\$ 4,950
Issuance of common stock			0
Net income for the month		8,750	8,750
Less: Dividends		(1,000)	(1,000)
Balance, June 30, 2025	\$ 4,000	\$ 8,700	\$ 12,700

Requirement 2

The statement of stockholders' equity reports the changes in equity of the business for a specific period of time. It shows both the change in contributed capital (common stock) and retained earnings.

E-F:1-35**Preparing the balance sheet**

Total Assets \$22,600

Requirements

1. Prepare the balance sheet for Strong Arms Coaching as of June 30, 2025.
2. What does the balance sheet report?

Use the following information to answer Exercises E-F:1-36 through E-F:1-38.

The assets, liabilities, and equities of Rapid Design Studio have the following balances at December 31, 2025. The Retained Earnings was \$33,300 at the beginning of the year. At year end, Common Stock was \$15,000 and Dividends were \$54,400.

Notes Payable	\$ 10,900	Office Furniture	\$ 49,000
Rent Expense	23,000	Utilities Expense	6,900
Cash	3,600	Accounts Payable	3,200
Supplies	4,500	Service Revenue	158,300
Salaries Expense	65,000	Accounts Receivable	8,600
Property Tax Expense	1,500	Miscellaneous Expense	4,200

Requirement 1

STRONG ARMS COACHING Balance Sheet June 30, 2025

Assets		Liabilities	
Cash	\$ 1,900	Accounts Payable	\$ 3,000
Accounts Receivable	6,200	Notes Payable	6,900
Supplies	900	Total Liabilities	<u>9,900</u>
Equipment	13,600	Stockholders' Equity	
		Common Stock	4,000
		Retained Earnings	<u>8,700</u>
		Total Stockholders' Equity	<u>12,700</u>
		Total Liabilities and Stockholders' Equity	<u>\$ 22,600</u>
Total Assets	<u>\$ 22,600</u>		

Requirement 2

The balance sheet reports an entity's assets, liabilities, and stockholders' equity as of a specific date.

E-F:1-36**Preparing the income statement**

Net Income \$57,700

Prepare the income statement for Rapid Design Studio for the year ending December 31, 2025.

RAPID DESIGN STUDIO		
Income Statement		
Year Ended December 31, 2025		
Revenue:		
Service Revenue		\$ 158,300
Expenses:		
Salaries Expense	\$ 65,000	
Rent Expense	23,000	
Utilities Expense	6,900	
Miscellaneous Expense	4,200	
Property Tax Expense	1,500	
Total Expenses		<u>100,600</u>
Net Income		<u>\$ 57,700</u>

E-F:1-37**Preparing the statement of retained earnings**

Ending Retained Earnings \$36,600

Prepare the statement of retained earnings for Rapid Design Studio for the year ending December 31, 2025.

RAPID DESIGN STUDIO		
Statement of Retained Earnings		
Year Ended December 31, 2025		
Retained Earnings, January 1, 2025		\$ 33,300
Net income for the year		<u>57,700</u>
		91,000
Dividends		<u>(54,400)</u>
Retained Earnings, December 31, 2025		<u>\$ 36,600</u>

E-F:1-38**Preparing the balance sheet**

Total Assets \$65,700

Prepare the balance sheet for Rapid Design Studio as of December 31, 2025.

RAPID DESIGN STUDIO
Balance Sheet
December 31, 2025

Assets		Liabilities	
Cash	\$ 3,600	Accounts Payable	\$ 3,200
Accounts Receivable	8,600	Notes Payable	10,900
Supplies	4,500	Total Liabilities	14,100
Office Furniture	49,000	Stockholders' Equity	
		Common Stock	15,000
		Retained Earnings	36,600
		Total Stockholders' Equity	51,600
		Total Liabilities and Stockholders' Equity	\$ 65,700
Total Assets	<u>\$ 65,700</u>		

E-F:1-39

Preparing the statement of cash flows

For each transaction, identify the appropriate section on the statement of cash flows to report the transaction. Choose from: Cash flows from operating activities (O), Cash flows from investing activities (I), Cash flows from financing activities (F), or Is not reported on the statement of cash flows (X). If reported on the statement, decide whether the transaction should be shown as a positive cash flow (+) or a negative cash flow (–)

- a. The business received cash from the issuance of common stock.
- b. Paid cash on accounts payable for supplies purchased.
- c. Performed services for a customer on account.
- d. Cash dividends were paid to stockholders.
- e. Received cash from a customer for services performed.
- f. Purchased equipment with cash.
- g. Paid rent for the month.
- h. Purchased land; signed a note payable.
- i. Paid employees wages for the week.
- j. Incurred utility expense on account.

- | | |
|--------|--------|
| a. F + | f. I – |
| b. O – | g. O – |
| c. X | h. X |
| d. F – | i. O – |
| e. O + | j. X |

E-F:1-40**Preparing the statement of cash flows**

Decrease in cash \$5,050

Early Morning Company had the following transactions for the month ending January 31, 2025. Early Morning Company's cash balance on January 1, 2025, was \$13,750.

Jan. 1	Common stock was issued to stockholders for \$10,000 cash.
7	Purchased equipment for \$2,600 on account.
14	Paid \$15,000 cash for land.
17	Paid cash expenses: employees' salaries, \$800; office rent, \$1,000; utilities, \$250.
23	Paid cash dividends of \$2,000.
26	Earned service revenue for the month, \$4,000, receiving cash.

Prepare the statement of cash flows of Early Morning Company for the month ended January 31, 2025.

EARLY MORNING COMPANY
Statement of Cash Flows
Month Ended January 31, 2025

Cash flows from operating activities:

Receipts:

Collections from customers	\$ 4,000
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Payments:

To employees	\$ (800)	
To suppliers (\$1,000 + \$250)	(1,250)	(2,050)
		1,950

Net cash provided by operating activities

Cash flows from investing activities:

Purchase of land	(15,000)	
		(15,000)

Net cash used by investing activities

Cash flows from financing activities:

Issuance of common stock	10,000	
Payment of cash dividends	(2,000)	
		8,000

Net cash provided by financing activities

Net decrease in cash	(5,050)	
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Cash balance, January 1, 2025		13,750
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Cash balance, January 31, 2025		\$ 8,700
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E-F:1-41**Calculating return on assets**

Adile Services had net income for the year of \$35,000. In addition, the balance sheet reports the following balances:

	Jan. 1, 2025	Dec. 31, 2025
Notes Payable	\$ 50,000	\$ 71,500
Cash	35,000	55,000
Office Furniture	28,000	50,000
Building	150,000	150,000
Accounts Payable	10,000	8,500
Total Stockholders' Equity	180,000	240,000
Accounts Receivable	2,600	18,800
Equipment	20,000	45,000
Supplies	4,400	1,200

Calculate the return on assets for Adile Services for the year ending December 31, 2025.

Average total assets = (Beginning total assets + ending total assets) / 2

Assets: Cash, Office Furniture, Building, Accounts Receivable, Equipment, Supplies

Beginning total assets = \$35,000 + \$28,000 + \$150,000 + \$2,600 + \$20,000 + \$4,400 = \$240,000

Ending total assets = \$55,000 + \$50,000 + \$150,000 + \$18,800 + \$45,000 + \$1,200 = \$320,000

Average total assets = (\$240,000 + \$320,000) / 2 = \$280,000

ROA = Net income / Average total assets

ROA = \$35,000 / \$280,000 = 0.125 = 12.5%

E-F:1-42**Using the accounting equation for transaction analysis and calculating return on assets**

Healthy Nutrition Coaching currently has a return on assets of 10%. Indicate the effects of the following business transactions on Healthy Nutrition Coaching's return on assets. Consider each transaction independently of the others. Identify if the return on assets increases, decreases, or does not change. Explain your answer. Transaction (a) is answered as a guide.

- a. Purchased office furniture on account, \$300.

Answer: Decreases. The increase in assets (office furniture) increases the denominator in the equation and therefore decreases the ratio.

- b. Earned service revenue on account, \$2,800.
c. Paid \$100 cash to purchase supplies.
d. Received cash of \$10,000 from issuance of common stock.
e. Paid cash on account, \$100.
f. Received cash on account, \$400.

- a. Decreases. The increase in assets (office furniture) increases the denominator in the equation and therefore decreases the ratio.
b. Increases. The increase in rental revenue increases net income in the numerator of the equation, therefore increases the ratio.
c. Does not change. The decrease in assets (cash) and increase in assets (supplies) in the denominator of the equation causes no change.
d. Decreases. The increase in assets (cash) increases the denominator in the equation and therefore decreases the ratio.
e. Increases. The decrease in assets (cash) decreases the denominator in the equation and therefore increases the ratio.
f. Does not change. The increase in assets (cash) and decrease in assets (accounts receivable) in the denominator of the equation causes no change.

P-F:1-43A

Cash \$7,100

Brantley Shumaker opened a public relations firm called Gold Star Services on August 1, 2025. The following amounts summarize the business on August 31, 2025:

<u>ASSETS</u>				=	<u>LIABILITIES +</u>	<u>EQUITY</u>
Cash	+ Accounts Receivable	+ Supplies	+ Land		Accounts Payable	Contributed Capital Common Stock
Bal.	\$2,300	+ \$3,000	+ \$0		\$8,000	+ \$8,300
						+ Retained Earnings Dividends Service Revenue Rent Expense Advertising Expense
						+ \$3,000

During September 2025, the business completed the following transactions:

- a. Received contribution of \$13,000 cash from Shumaker in exchange for common stock.
- b. Performed service for a client and received cash of \$900.
- c. Paid off the beginning balance of accounts payable.
- d. Purchased supplies from OfficeCo. on account, \$600.
- e. Collected cash from a customer on account, \$2,300.
- f. Cash dividends of \$1,600 were paid to stockholders.
- g. Consulted for a new band and billed the client for services rendered, \$5,500.
- h. Recorded the following business expenses for the month:

Paid office rent: \$1,200.

Paid advertising: \$600.

Analyze the effects of the transactions on the accounting equation of Gold Star Services using the format presented in Exhibit F:1-6.

ASSETS							=	LIABILITIES			+	EQUITY							
	Cash	+	Accounts Receivable	+	Supplies	+	Land	=	Accounts Payable	+	Contributed Capital	+	Retained Earnings						
											Common Stock	–	Dividends	+	Service Revenue	–	Rent Expense	–	Advertising Expense
Bal.	\$2,300	+	\$3,000			+	\$14,000	=	\$8,000	+	\$8,300			+	\$3,000				
(a)	+13,000										+13,000								
Bal.	\$15,300	+	\$3,000			+	\$14,000	=	\$8,000	+	\$21,300								
(b)	+900														+900				
Bal.	\$16,200	+	\$3,000			+	\$14,000	=	\$8,000	+	\$21,300				\$3,900				
(c)	–8,000								–8,000										
Bal.	\$8,200	+	\$3,000			+	\$14,000	=	\$0	+	\$21,300			+	\$3,900				
(d)					+600				+600										
Bal.	\$8,200	+	\$3,000	+	\$600	+	\$14,000	=	\$600	+	\$21,300			+	\$3,900				
(e)	+2,300		–2,300																
Bal.	\$10,500	+	\$700	+	\$600	+	\$14,000	=	\$600	+	\$21,300			+	\$3,900				
(f)	–1,600												–1,600						
Bal.	\$8,900	+	\$700	+	\$600	+	\$14,000	=	\$600	+	\$21,300	–	\$1,600	+	\$3,900				
(g)			+5,500												+5,500				
Bal.	\$8,900	+	\$6,200	+	\$600	+	\$14,000	=	\$600	+	\$21,300	–	\$1,600	+	\$9,400				
(h)	–1,800																–1,200		–600
Bal.	\$7,100	+	\$6,200	+	\$600	+	\$14,000	=	\$600	+	\$21,300	–	\$1,600	+	\$9,400	–	\$1,200	–	\$600

P-F:1-44A

Using the accounting equation for transaction analysis

Cash \$17,225

Julio Du started a new business, Quick Media Services, and completed the following transactions during December:

-
- | | |
|--------|---|
| Dec. 1 | Received \$21,000 cash from Du in exchange for common stock. |
| 2 | Received \$3,500 cash from customers for services performed. |
| 5 | Paid \$200 cash for supplies. |
| 9 | Performed services for a customer and billed the customer for services rendered, \$2,000. |
| 10 | Received \$300 invoice for utilities due in two weeks. |
| 15 | Paid for advertising on social media, \$325. |
| 20 | Paid utility invoice received on December 10. |
| 25 | Collected cash in full from customer billed on December 9. |
| 28 | Paid rent for the month, \$4,000. |
| 28 | Paid \$1,250 to assistant for wages. |
| 30 | Received \$1,800 cash from customers for services performed. |
| 31 | Cash dividends of \$5,000 were paid to stockholders. |
-

Analyze the effects of the transactions on the accounting equation of Quick Media Services using a format similar to Exhibit F:1-6. Use the following accounts: Cash, Accounts Receivable, Supplies, Accounts Payable, Common Stock, Dividends, Service Revenue, Rent Expense, Utilities Expense, Wages Expense, and Advertising Expense.

ASSETS					=	LIABILITIES			+	EQUITY											
										Contributed Capital		+	Retained Earnings								
	Cash	+	Accounts Receivable	+	Supplies	=	Accounts Payable	+	Common Stock	–	Dividends	+	Service Revenue	–	Rent Expense	–	Utilities Expense	–	Wages Expense	–	Advertising Expense
1	+21,000								+21,000												
2	+3,500												+3,500								
Bal.	\$24,500					=		+	\$21,000			+	\$3,500								

P-F:1-45A**Preparing financial statements**

1. Net Income \$86,900

Presented here are the accounts of West Company for the year ended December 31, 2025.

Land	\$ 8,000	Common Stock	\$ 28,000
Notes Payable	32,000	Accounts Payable	11,000
Property Tax Expense	2,600	Accounts Receivable	1,000
Dividends	30,000	Advertising Expense	15,000
Rent Expense	13,000	Building	145,200
Salaries Expense	65,000	Cash	3,000
Salaries Payable	1,300	Equipment	16,000
Service Revenue	192,000	Insurance Expense	2,500
Supplies	10,000	Interest Expense	7,000
Retained Earnings, Dec. 31, 2024	54,000		

Requirements

1. Prepare West Company's income statement for the year ended December 31, 2025.
2. Prepare the statement of retained earnings for the year ended December 31, 2025.
3. Prepare the balance sheet as of December 31, 2025.

Requirement 1

WEST COMPANY
Income Statement
Year Ended December 31, 2025

Revenue:		
Service Revenue		\$ 192,000
Expenses:		
Salaries Expense	\$ 65,000	
Advertising Expense	15,000	
Rent Expense	13,000	
Interest Expense	7,000	
Property Tax Expense	2,600	
Insurance Expense	2,500	
Total Expenses		105,100
Net Income		<u><u>\$ 86,900</u></u>

Requirement 2

WEST COMPANY
Statement of Retained Earnings
Year Ended December 31, 2025

Retained Earnings, December 31, 2024	\$ 54,000
Net income for the year	86,900
	140,900
Dividends	(30,000)
Retained Earnings, December 31, 2025	\$ 110,900

P-F:1-45A, cont.
Requirement 3

WEST COMPANY					
Balance Sheet					
December 31, 2025					
Assets			Liabilities		
Cash	\$	3,000	Accounts Payable	\$	11,000
Accounts Receivable		1,000	Notes Payable		32,000
Supplies		10,000	Salaries Payable		1,300
Land		8,000	Total Liabilities		44,300
Building		145,200			
Equipment		16,000	Stockholders' Equity		
			Common Stock		28,000
			Retained Earnings		110,900
			Total Stockholders' Equity		138,900
			Total Liabilities and Stockholders'		
Total Assets		<u>\$ 183,200</u>	Equity		<u>\$ 183,200</u>

P-F:1-46A**Preparing financial statements**

b. Ending Retained Earnings \$47,000

Superior Photography works weddings and parties. The balance of retained earnings was \$16,000 at December 31, 2024. At December 31, 2025, the business' accounting records show these balances:

Insurance Expense	\$ 6,000	Accounts Receivable	\$ 8,000
Cash	37,000	Notes Payable	12,000
Accounts Payable	7,000	Retained Earnings, Dec. 31, 2025	?
Advertising Expense	5,000	Salaries Expense	25,000
Service Revenue	80,000	Equipment	50,000
Dividends	13,000	Common Stock	29,000

Prepare the following financial statements for Superior Photography:

- Income statement for the year ended December 31, 2025.
- Statement of retained earnings for the year ended December 31, 2025.
- Balance sheet as of December 31, 2025.

Part a.**SUPERIOR PHOTOGRAPHY****Income Statement****Year Ended December 31, 2025**

Revenue:		
Service Revenue		\$ 80,000
Expenses:		
Salaries Expense	\$ 25,000	
Insurance Expense	6,000	
Advertising Expense	5,000	
Total Expenses		<u>36,000</u>
Net Income		<u>\$ 44,000</u>

Part b.**SUPERIOR PHOTOGRAPHY****Statement of Retained Earnings****Year Ended December 31, 2025**

Retained Earnings, December 31, 2024	\$ 16,000
Net income for the year	<u>44,000</u>
	60,000
Dividends	<u>(13,000)</u>

Retained Earnings, December 31, 2025

\$ 47,000

Part c.

SUPERIOR PHOTOGRAPHY

Balance Sheet

December 31, 2025

Assets		Liabilities	
Cash	\$ 37,000	Accounts Payable	\$ 7,000
Accounts Receivable	8,000	Notes Payable	<u>12,000</u>
Equipment	50,000	Total Liabilities	19,000
		Stockholders' Equity	
		Common Stock	29,000
		Retained Earnings	<u>47,000</u>
		Total Stockholders' Equity	<u>76,000</u>
Total Assets	<u>\$ 95,000</u>	Total Liabilities and Stockholders' Equity	<u>\$ 95,000</u>

P-F:1-47A**Preparing financial statements**

Total Assets \$48,000

The bookkeeper of Sunshine Landscaping prepared the company's balance sheet while the accountant was ill. The balance sheet, shown on the next page, contains numerous errors. In particular, the bookkeeper knew that the balance sheet should balance and therefore plugged in the retained earnings amount needed to achieve this balance. The retained earnings balance is incorrect. All other amounts are correct, but some are out of place or should not be included in this statement. Prepare a corrected balance sheet.

SUNSHINE LANDSCAPING Balance Sheet Month Ended November 30, 2025			
Assets		Liabilities	
Cash	\$ 4,900	Accounts Receivable	\$ 2,200
Supplies	600	Dividends	10,000
Land	34,200	Service Revenue	39,000
Salaries Expense	2,800	Property Tax Expense	2,600
Office Furniture	6,100	Accounts Payable	2,700
Notes Payable	24,200	Retained Earnings	11,600
Rent Expense	300	Stockholders' Equity	
		Common Stock	5,000
Total Assets	<u>\$ 73,100</u>	Total Liabilities	<u>\$ 73,100</u>

SUNSHINE LANDSCAPING
Balance Sheet
November 30, 2025

Assets		Liabilities	
Cash	\$ 4,900	Accounts Payable	\$ 2,700
Accounts Receivable	2,200	Notes Payable	24,200
Supplies	600	Total Liabilities	<u>26,900</u>
Land	34,200	Stockholders' Equity	
Office Furniture	6,100	Common Stock	5,000
		Retained Earnings	<u>16,100</u>
		Total Stockholders' Equity	<u>21,100</u>
		Total Liabilities and Stockholders' Equity	<u>\$ 48,000</u>
Total Assets	<u>\$ 48,000</u>		

P-F:1-48A**Using the accounting equation for transaction analysis and preparing financial statements**

2b. Ending Retained Earnings \$16,300

Ariella Pfister recently opened an accounting firm on April 1, which operates as a corporation. The name of the new entity is Ariella Pfister, CPA. Pfister experienced the following events during the organizing phase of the new business and its first month of operations in 2025:

-
- | | |
|--------|---|
| Apr. 5 | Pfister deposited \$50,000 in a new business bank account titled Ariella Pfister, CPA. The business issued common stock to Pfister. |
| 6 | Paid \$100 cash for supplies for new office. |
| 7 | Purchased office furniture for the office on account, \$9,700. |
| 10 | Consulted with tax client and received \$2,000 for services rendered. |
| 11 | Paid utilities, \$200. |
| 12 | Finished tax hearings on behalf of a client and submitted a bill for accounting services, \$17,000. |
| 18 | Paid office rent, \$1,500. |
| 25 | Received amount due from client that was billed on April 12. |
| 27 | Paid full amount of accounts payable created on April 7. |
| 30 | Cash dividends of \$1,000 were paid to the stockholder. |
-

Requirements

1. Analyze the effects of the events on the accounting equation of Ariella Pfister, CPA. Use a format similar to Exhibit F:1-6. Use the following accounts: Cash, Accounts Receivable, Supplies, Furniture, Accounts Payable, Common Stock, Dividends, Service Revenue, Rent Expense, and Utilities Expense.
2. Prepare the following financial statements:
 - a. Income statement for the month ended April 30, 2025.
 - b. Statement of retained earnings for the month ended April 30, 2025.
 - c. Balance sheet as of April 30, 2025.

Requirement 1

ASSETS						=	LIABILITIES	+	EQUITY										
	Cash	+	Accounts Receivable	+	Supplies	+	Furniture	=	Accounts Payable	+	Contributed Capital Common Stock	+	Retained Earnings						
												–	Dividends	+	Service Revenue	–	Rent Expense	–	Utilities Expense
5	+50,000										+50,000								
6	<u>–100</u>				<u>+100</u>														
Bal.	\$49,900			+	\$100			=		+	\$50,000								
7							<u>+9,700</u>		<u>+9,700</u>										
Bal.	\$49,900			+	\$100	+	\$9,700	=	\$9,700	+	\$50,000								
10	<u>+2,000</u>														<u>+2,000</u>				
Bal.	\$51,900			+	\$100	+	\$9,700	=	\$9,700	+	\$50,000			+	\$2,000				
11	<u>–200</u>																		<u>–200</u>
Bal.	\$51,700			+	\$100	+	\$9,700	=	\$9,700	+	\$50,000			+	\$2,000			–	\$200
12			<u>+17,000</u>												<u>+17,000</u>				
Bal.	\$51,700	+	\$17,000	+	\$100	+	\$9,700	=	\$9,700	+	\$50,000			+	\$19,000			–	\$200
18	<u>–1,500</u>																<u>–1,500</u>		
Bal.	\$50,200	+	\$17,000	+	\$100	+	\$9,700	=	\$9,700	+	\$50,000			+	\$19,000	–	\$1,500	–	\$200
25	<u>+17,000</u>		<u>–17,000</u>																
Bal.	\$67,200		\$ 0	+	\$100	+	\$9,700	=	\$9,700	+	\$50,000			+	\$19,000	–	\$1,500	–	\$200
27	<u>–9,700</u>								<u>–9,700</u>										
Bal.	\$57,500			+	\$100	+	\$9,700	=	\$ 0	+	\$50,000			+	\$19,000	–	\$1,500	–	\$200
30	<u>–1,000</u>														<u>–1,000</u>				
Bal.	\$56,500	+	\$ 0	+	\$100	+	\$9,700	=	\$ 0	+	\$50,000	–	<u>\$1,000</u>	+	\$19,000	–	\$1,500	–	\$200

P-F:1-48A, cont.
Requirement 2a

ARIELLA PFISTER, CPA
Income Statement
Month Ended April 30, 2025

Revenue:		
Service Revenue		\$ 19,000
Expenses:		
Rent Expense	\$ 1,500	
Utilities Expense	200	
Total Expenses		1,700
Net Income		<u><u>\$ 17,300</u></u>

Requirement 2b

ARIELLA PFISTER, CPA
Statement of Retained Earnings
Month Ended April 30, 2025

Retained Earnings, April 1, 2025	\$ 0
Net income for the month	17,300
	17,300
Dividends	(1,000)
Retained Earnings, April 30, 2025	<u><u>\$ 16,300</u></u>

Requirement 2c

ARIELLA PFISTER, CPA
Balance Sheet
April 30, 2025

Assets		Liabilities	
Cash	\$ 56,500		
Supplies	100		
Furniture	9,700	Stockholders' Equity	
		Common Stock	\$ 50,000
		Retained Earnings	16,300
		Total Stockholders' Equity	66,300
		Total Liabilities and Stockholders'	
Total Assets	<u><u>\$ 66,300</u></u>	Equity	<u><u>\$ 66,300</u></u>

P-F:1-49A**Using the accounting equation for transaction analysis, preparing financial statements, and calculating return on assets**

2c. Total Assets \$110,480

Bruce Bajaj recently opened a law office on March 1, which operates as a corporation. The name of the new entity is Bruce Bajaj, Attorney. Bajaj experienced the following events during the organizing phase of the new business and its first month of operation, March 2025. Some of the events were personal and did not affect the law practice. Others were business transactions and should be accounted for by the business.

-
- | | |
|--------|---|
| Mar. 1 | Bajaj sold a personal investment in Amazon.com (NASDAQ: AMZN) stock, receiving \$31,000 cash. |
| 2 | Deposited the \$31,000 cash from the sale of the Amazon.com stock in a personal bank account. |
| 3 | Deposited \$89,000 cash in a new business bank account titled Bruce Bajaj, Attorney. The business issued common stock to Bajaj. |
| 5 | Paid \$400 cash for supplies. |
| 7 | Purchased computer for the law office, agreeing to pay the account, \$9,300, within three months. |
| 9 | Received \$2,000 cash from customers for services rendered. |
| 15 | Received bill from <i>The Lawyer</i> for magazine subscription, \$120. (Use Miscellaneous Expense account.) |
| 23 | Finished court hearings on behalf of a client and submitted a bill for legal services, \$13,500, on account. |
| 28 | Paid bill from <i>The Lawyer</i> . |
| 30 | Paid utilities, \$1,200. |
| 31 | Received \$3,000 cash from clients billed on March 23. |
| 31 | Cash dividends of \$2,000 were paid to the stockholder. |
-

Requirements

1. Analyze the effects of the preceding events on the accounting equation of Bruce Bajaj, Attorney. Use a format similar to Exhibit F:1-6.
2. Prepare the following financial statements:
 - a. Income statement for the month ended March 31, 2025.
 - b. Statement of retained earnings for the month ended March 31, 2025.

- c. Balance sheet as of March 31, 2025.
d. Statement of cash flows for the month ended March 31, 2025.
3. Calculate Bruce Bajaj, Attorney's return on assets. Round to the nearest whole percent.

Requirement 1

ASSETS					=	LIABILITIES	+	EQUITY											
	Cash	+	Accounts Receivable	+	Supplies	+	Computer	=	Accounts Payable	+	Contributed Capital	+	Retained Earnings						
											Common Stock	-	Dividends	+	Service Revenue	-	Utilities Expense	-	Miscellaneous Expense
3	+89,000										+89,000								
5	-400				+400														
Bal.	\$88,600			+	\$400			=		+	\$89,000								
7							+9,300		+9,300										
Bal.	\$88,600			+	\$400	+	\$9,300	=	\$9,300	+	\$89,000								
9	+2,000														+2,000				
Bal.	\$90,600			+	\$400	+	\$9,300	=	\$9,300	+	\$89,000			+	\$2,000				
15									+120										-120
Bal.	\$90,600			+	\$400	+	\$9,300	=	\$9,420	+	\$89,000			+	\$2,000	-	\$0	-	\$120
23			+13,500												+13,500				
Bal.	\$90,600	+	\$13,500	+	\$400	+	\$9,300	=	\$9,420	+	\$89,000			+	\$15,500	-	\$0	-	\$120
28	-120								-120										
Bal.	\$90,480	+	\$13,500	+	\$400	+	\$9,300	=	\$9,300	+	\$89,000			+	\$15,500	-	\$0	-	\$120
30	-1,200																-1,200		
Bal.	\$89,280	+	\$13,500	+	\$400	+	\$9,300	=	\$9,300	+	\$89,000			+	\$15,500	-	\$1,200	-	\$120
31	+3,000		-3,000																
Bal.	\$92,280	+	\$10,500	+	\$400	+	\$9,300	=	\$9,300	+	\$89,000			+	\$15,500	-	\$1,200	-	\$120
31	-2,000												-2,000						
Bal.	\$90,280	+	\$10,500	+	\$400	+	\$9,300	=	\$9,300	+	\$89,000	-	\$2,000	+	\$15,500	-	\$1,200	-	\$120

P-F:1-49A, cont.
Requirement 2a

BRUCE BAJAJ, ATTORNEY
Income Statement
Month Ended March 31, 2025

Revenue:		
Service Revenue		\$ 15,500
Expenses:		
Utilities Expense	\$ 1,200	
Miscellaneous Expense	120	
Total Expenses		<u>1,320</u>
Net Income		<u><u>\$ 14,180</u></u>

Requirement 2b

BRUCE BAJAJ, ATTORNEY
Statement of Retained Earnings
Month Ended March 31, 2025

Retained Earnings, March 1, 2025	\$ 0
Net income for the month	<u>14,180</u>
	14,180
Dividends	<u>(2,000)</u>
Retained Earnings, March 31, 2025	<u><u>\$ 12,180</u></u>

Requirement 2c

BRUCE BAJAJ, ATTORNEY
Balance Sheet
March 31, 2025

Assets		Liabilities	
Cash	\$ 90,280	Accounts Payable	\$ 9,300
Accounts Receivable	10,500		
Supplies	400	Stockholders' Equity	
Computer	9,300	Common Stock	89,000
		Retained Earnings	<u>12,180</u>
		Total Stockholders' Equity	<u>101,180</u>
		Total Liabilities and Stockholders'	
Total Assets	<u><u>\$ 110,480</u></u>	Equity	<u><u>\$ 110,480</u></u>

P-F:1-49A, cont.
Requirement 2d

BRUCE BAJAJ, ATTORNEY
Statement of Cash Flows
Month Ended March 31, 2025

Cash flows from operating activities:

Receipts:

 Collections from customers \$ 5,000

Payments:

 To suppliers (1,720)

 Net cash provided by operating activities 3,280

Cash flows from investing activities: 0

Cash flows from financing activities

 Issued common stock \$ 89,000

 Payment of cash dividends (2,000)

 Net cash provided by financing activities 87,000

Net increase in cash 90,280

Cash balance, March 1, 2025 0

Cash balance, March 31, 2025 **\$ 90,280**

Requirement 3

Average total assets = (Beginning total assets + ending total assets) / 2

Average total assets = (\$0 + \$110,480 / 2 = \$55,240

ROA = Net income / Average total assets

ROA = \$14,180 / \$55,240 = 0.26 = 26% (rounded)

P-F:1-50B

Cash \$4,400

ASSETS					=	LIABILITIES +		EQUITY			
							Contributed Capital	+	Retained Earnings		
Cash	+ Accounts Receivable	+ Supplies	+ Land		Accounts Payable	+ Common Stock	- Dividends	+ Service Revenue	- Rent Expense	- Advertising Expense	
Bal. \$2,100	+ \$2,000	+ \$0	+ \$10,000		\$6,000	+ \$6,100					+ \$2,000

- a. Received contribution of \$10,000 cash from Shepsle in exchange for common stock.
- b. Performed service for a client and received cash of \$1,000.
- c. Paid off the beginning balance of accounts payable.
- d. Purchased supplies from OfficeCo. on account, \$700.
- e. Collected cash from a customer on account, \$500.
- f. Cash dividends of \$1,900 were paid to the stockholder.
- g. Consulted for a new band and billed the client for services rendered, \$5,800.
- h. Recorded the following business expenses for the month:
Paid office rent: \$900.
Paid advertising: \$400.

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ASSETS						=	LIABILITIES		+	EQUITY									
	Cash	+	Accounts Receivable	+	Supplies	+	Land	=	Accounts Payable	+	Contributed Capital	+	Retained Earnings						
											Common Stock	–	Dividends	+	Service Revenue	–	Rent Expense	–	Advertising Expense
Bal.	\$2,100	+	\$2,000	+		+	\$10,000	=	\$6,000	+	\$6,100				+2,000				
(a)	<u>+10,000</u>										<u>+10,000</u>								
Bal.	\$12,100	+	\$2,000			+	\$10,000	=	\$6,000	+	\$16,100								
(b)	<u>+1,000</u>															+1,000			
Bal.	\$13,100	+	\$2,000			+	\$10,000	=	\$6,000	+	\$16,100			+	\$3,000				
(c)	<u>–6,000</u>								<u>–6,000</u>										
Bal.	\$7,100	+	\$2,000			+	\$10,000	=	\$0	+	\$16,100			+	\$3,000				
(d)					<u>+700</u>				<u>+700</u>										
Bal.	\$7,100	+	\$2,000	+	\$700	+	\$10,000	=	\$700	+	\$16,100			+	\$3,000				
(e)	<u>+500</u>		<u>–500</u>																
Bal.	\$7,600	+	\$1,500	+	\$700	+	\$10,000	=	\$700	+	\$16,100			+	\$3,000				
(f)	<u>–1,900</u>												<u>–1,900</u>						
Bal.	\$5,700	+	\$1,500	+	\$700	+	\$10,000	=	\$700	+	\$16,100	–	\$1,900	+	\$3,000				
(g)			<u>+5,800</u>												<u>+5,800</u>				
Bal.	\$5,700	+	\$7,300	+	\$700	+	\$10,000	=	\$700	+	\$16,100	–	\$1,900	+	\$8,800				
(h)	<u>–1,300</u>																<u>–900</u>		<u>–400</u>
Bal.	<u>\$4,400</u>	+	<u>\$7,300</u>	+	<u>\$700</u>	+	<u>\$10,000</u>	=	<u>\$700</u>	+	<u>\$16,100</u>	–	<u>\$1,900</u>	+	<u>\$8,800</u>	–	<u>\$900</u>	–	<u>\$400</u>

P-F:1-51B
Using the accounting equation for transaction analysis

Cash \$34,825

Zora Merz started a new business, Rapid Media Services, and completed the following transactions during December:

Dec. 1	Received \$30,000 cash from Merz in exchange for common stock.
2	Received \$4,000 cash from customers for services performed.
5	Paid \$100 cash for supplies.
9	Performed services for a customer and billed the customer for services rendered, \$3,000.
10	Received \$200 invoice for utilities due in two weeks.
15	Paid for advertising on social media, \$125.
20	Paid utility invoice received on Dec. 10.
25	Collected cash in full from customer billed on Dec. 9.
28	Paid rent for the month, \$1,500.
28	Paid \$1,050 to assistant for wages.
30	Received \$2,800 cash from customers for services performed.
31	Cash dividends of \$2,000 were paid to the stockholder.

Analyze the effects of the transactions on the accounting equation of Rapid Media Services using a format similar to Exhibit F:1-6. Use the following accounts: Cash, Accounts Receivable, Supplies, Accounts Payable, Common Stock, Dividends, Service Revenue, Rent Expense, Utilities Expense, Salaries Expense, and Advertising Expense.

ASSETS	=	LIABILITIES	+	EQUITY
				Contributed + Retained Earnings

	Cash	+	Accounts Receivable	+	Supplies	=	Accounts Payable	+	Capital Common Stock	–	Dividends	+	Service Revenue	–	Rent Expense	–	Utilities Expense	–	Wages Expense	–	Advertising Expense
1	+30,000								+30,000												
2	+4,000												+4,000								
Bal.	\$34,000					=		+	\$30,000			+	\$4,000								
5	–100				+100																
Bal.	\$33,900			+	\$100	=		+	\$30,000			+	\$4,000								
9			+3,000										+3,000								
Bal.	\$33,900	+	\$3,000	+	\$100	=		+	\$30,000			+	\$7,000								
10							+200									–200					
Bal.	\$33,900	+	\$3,000	+	\$100	=	\$200	+	\$30,000			+	\$7,000			–	\$200				
15	–125																			–125	
Bal.	\$33,775	+	\$3,000	+	\$100	=	\$200	+	\$30,000			+	\$7,000			–	\$200			–	\$125
20	–200						–200														
Bal.	\$33,575	+	\$3,000	+	\$100	=	\$ 0	+	\$30,000			+	\$7,000			–	\$200			–	\$125
25	+3,000		–3,000																		
Bal.	\$36,575	+	\$ 0	+	\$100	=		+	\$30,000			+	\$7,000			–	\$200			–	\$125
28	–1,500														–1,500						
Bal.	\$35,075			+	\$100	=		+	\$30,000			+	\$7,000	–	\$1,500	–	\$200			–	\$125
28	–1,050																	–1,050			
Bal.	\$34,025			+	\$100	=		+	\$30,000			+	\$7,000	–	\$1,500	–	\$200	–	\$1,050	–	\$125
30	+2,800												+2,800								
Bal.	\$36,825			+	\$100	=		+	\$30,000			+	\$9,800	–	\$1,500	–	\$200	–	\$1,050	–	\$125
31	–2,000									–2,000											
Bal.	\$34,825	+	\$ 0	+	\$100	=	\$ 0	+	\$30,000	–	\$2,000	+	\$9,800	–	\$1,500	–	\$200	–	\$1,050	–	\$125

P-F:1-52B**Preparing financial statements**

1. Net Income \$81,100

Presented here are the accounts of Segura Accounting Services for the year ended December 31, 2025:

Land	\$ 7,000	Common Stock	\$ 32,000
Notes Payable	30,000	Accounts Payable	14,000
Property Tax Expense	2,900	Accounts Receivable	1,700
Dividends	31,000	Advertising Expense	17,000
Rent Expense	14,000	Building	137,900
Salaries Expense	69,000	Cash	6,000
Salaries Payable	500	Equipment	17,000
Service Revenue	192,000	Insurance Expense	2,000
Supplies	8,000	Interest Expense	6,000
Retained Earnings, Dec. 31, 2024	51,000		

Requirements

1. Prepare Segura Accounting Services' income statement for the year ended December 31, 2025.
2. Prepare the statement of retained earnings for the year ended December 31, 2025.
3. Prepare the balance sheet as of December 31, 2025.

Requirement 1

SEGURA ACCOUNTING SERVICES
Income Statement
Year Ended December 31, 2025

Revenues:		
Service Revenue		\$ 192,000
Expenses:		
Salaries Expense	\$ 69,000	
Advertising Expense	17,000	
Rent Expense	14,000	
Interest Expense	6,000	
Property Tax Expense	2,900	
Insurance Expense	2,000	
Total Expenses		110,900
Net Income		<u><u>\$ 81,100</u></u>

Requirement 2

SEGURA ACCOUNTING SERVICES
Statement of Retained Earnings
Year Ended December 31, 2025

Retained Earnings, December 31, 2024	\$ 51,000
Net income for the year	81,100
	132,100
Dividends	(31,000)
Retained Earnings, December 31, 2025	\$ 101,100

P-F:1-52B, cont.
Requirement 3

SEGURA ACCOUNTING SERVICES
Balance Sheet
December 31, 2025

Assets		Liabilities	
Cash	\$ 6,000	Accounts Payable	\$ 14,000
Accounts Receivable	1,700	Notes Payable	30,000
Supplies	8,000	Salaries Payable	500
Land	7,000	Total Liabilities	44,500
Building	137,900	Stockholders' Equity	
Equipment	17,000	Common Stock	32,000
		Retained Earnings	101,100
		Total Stockholders' Equity	133,100
		Total Liabilities and Stockholders' Equity	177,600
Total Assets	<u>\$ 177,600</u>		<u>\$ 177,600</u>

P-F:1-53B
Preparing financial statements

b. Ending Retained Earnings \$49,000

Fabulous Photos works weddings and parties. The balance of Retained Earnings was \$17,000 at December 31, 2024. At December 31, 2025, the business' accounting records show these balances:

Insurance Expense	\$ 9,000	Accounts Receivable	\$ 6,000
Cash	26,000	Notes Payable	14,000
Accounts Payable	4,000	Retained Earnings, Dec. 31, 2025	?
Advertising Expense	3,000	Salaries Expense	21,000
Service Revenue	78,000	Equipment	70,000
Dividends	13,000	Common Stock	35,000

Prepare the following financial statements for Fabulous Photos:

- Income statement for the year ended December 31, 2025.
- Statement of retained earnings for the year ended December 31, 2025.
- Balance sheet as of December 31, 2025.

Requirement a

FABULOUS PHOTOS
Income Statement
Year Ended December 31, 2025

Revenues:			
Service Revenue			\$ 78,000
Expenses:			
Salaries Expense	\$ 21,000		
Insurance Expense	9,000		
Advertising Expense	3,000		
Total Expenses			33,000
Net Income			<u><u>\$ 45,000</u></u>

Requirement b

FABULOUS PHOTOS
Statement of Retained Earnings
Year Ended December 31, 2025

Retained Earnings, December 31, 2024	\$ 17,000
Net income for the year	<u>45,000</u>
	62,000
Dividends	<u>(13,000)</u>
Retained Earnings, December 31, 2025	<u>\$ 49,000</u>

Requirement c

FABULOUS PHOTOS			
Balance Sheet			
December 31, 2025			
Assets		Liabilities	
Cash	\$ 26,000	Accounts Payable	\$ 4,000
Accounts Receivable	6,000	Notes Payable	<u>14,000</u>
Equipment	70,000	Total Liabilities	18,000
		Stockholders' Equity	
		Common Stock	35,000
		Retained Earnings	<u>49,000</u>
		Total Stockholders' Equity	<u>84,000</u>
		Total Liabilities And Stockholders' Equity	<u>\$ 102,000</u>
Total Assets	<u>\$ 102,000</u>		

P-F:1-54B**Preparing financial statements**

Total Assets \$41,700

The bookkeeper of Saturn Landscaping prepared the company's balance sheet while the accountant was ill. The balance sheet, shown on the next page, contains numerous errors. In particular, the bookkeeper knew that the balance sheet should balance and therefore plugged in the retained earnings amount needed to achieve this balance. The retained earnings balance is incorrect. All other amounts are correct, but some are out of place or should not be included on this statement. Prepare a corrected balance sheet.

SATURN LANDSCAPING Balance Sheet Month Ended July 31, 2025			
Assets		Liabilities	
Cash	\$ 5,000	Accounts Receivable	\$ 2,300
Supplies	800	Dividends	8,000
Land	28,400	Service Revenue	39,200
Salaries Expense	3,500	Property Tax Expense	2,000
Office Furniture	5,200	Accounts Payable	2,800
Notes Payable	26,400	Retained Earnings	13,700
Rent Expense	700	Stockholders' Equity	
		Common Stock	2,000
Total Assets	<u>\$ 70,000</u>	Total Liabilities	<u>\$ 70,000</u>

SATURN LANDSCAPING
Balance Sheet
July 31, 2025

Assets		Liabilities	
Cash	\$ 5,000	Accounts Payable	\$ 2,800
Accounts Receivable	2,300	Notes Payable	26,400
Supplies	800	Total Liabilities	29,200
Land	28,400		
Office Furniture	5,200	Stockholders' Equity	
		Common Stock	2,000
		Retained Earnings	10,500
		Total Stockholders' Equity	12,500
		Total Liabilities and Stockholders' Equity	41,700
Total Assets	<u>\$ 41,700</u>		

P-F:1-55B**Using the accounting equation for transaction analysis and preparing financial statements**

2c. Total Assets \$37,950

Darrin Yanagisawa recently opened an accounting firm on October 1, which operates as a corporation. The name of the new entity is Darrin Yanagisawa, CPA. Yanagisawa experienced the following events during the organizing phase of the new business and its first month of operations in 2025:

Oct. 5	Yanagisawa deposited \$31,000 in a new business bank account titled Darrin Yanagisawa, CPA. The business issued common stock to Yanagisawa.
6	Paid \$200 cash for supplies for new office.
7	Purchased office furniture for the office on account, \$9,500.
10	Consulted with tax client and received \$3,000 for services rendered.
11	Paid utilities, \$150.
12	Finished tax hearings on behalf of a client and submitted a bill for accounting services, \$14,000.
18	Paid office rent, \$1,900.
25	Received amount due from client that was billed on October 12.
27	Paid full amount of Accounts Payable created on October 7.
31	Cash dividends of \$8,000 were paid to the stockholder.

Requirements

1. Analyze the effects of the events on the accounting equation of Darrin Yanagisawa, CPA. Use a format similar to Exhibit F:1-6. Use the following accounts: Cash, Accounts Receivable, Supplies, Furniture, Accounts Payable, Common Stock, Dividends, Service Revenue, Rent Expense, and Utilities Expense.
2. Prepare the following financial statements:
 - a. Income statement for the month ended October 31, 2025.
 - b. Statement of retained earnings for the month ended October 31, 2025.
 - c. Balance sheet as of October 31, 2025.

Requirement 1

ASSETS					=	LIABILITIES		+	EQUITY										
	Cash	+	Accounts Receivable	+	Supplies	+	Office Furniture	=	Accounts Payable	+	Contributed Capital	+	Retained Earnings						
											Common Stock		–	Dividends	+	Service Revenue	–	Rent Expense	–
5	+31,000										+31,000								
Bal.	\$31,000							=		+	\$31,000								
6	–200				+200														
Bal.	\$30,800				\$200			=		+	\$31,000								
7							+9,500		+9,500										
Bal.	\$30,800				\$200	+	\$9,500	=	\$9,500	+	\$31,000								
10	+3,000													+3,000					
Bal.	\$33,800				\$200	+	\$9,500	=	\$9,500	+	\$31,000			+	\$3,000				
11	–150																	–150	
Bal.	\$33,650				\$200	+	\$9,500	=	\$9,500	+	\$31,000			+	\$3,000			– \$150	
12			+14,000											+14,000					
Bal.	\$33,650	+	\$14,000	+	\$200	+	\$9,500	=	\$9,500	+	\$31,000			+	\$17,000			– \$150	
18	–1,900															–1,900			
Bal.	\$31,750	+	\$14,000	+	\$200	+	\$9,500	=	\$9,500	+	\$31,000			+	\$17,000	–	\$1,900	– \$150	
25	+14,000		–14,000																
Bal.	\$45,750		\$ 0	+	\$200	+	\$9,500	=	\$9,500	+	\$31,000			+	\$17,000	–	\$1,900	– \$150	
27	–9,500								–9,500										
Bal.	\$36,250				\$200	+	\$9,500	=	\$ 0	+	\$31,000			+	\$17,000	–	\$1,900	– \$150	
31	–8,000													–8,000					
Bal.	\$28,250	+	\$ 0	+	\$200	+	\$9,500	=	\$ 0	+	\$31,000	–		\$8,000	+	\$17,000	–	\$1,900	– \$150

P-F:1-55B, cont.
Requirement 2a

DARRIN YANAGISAWA, CPA
Income Statement
Month Ended October 31, 2025

Revenues:		
Service Revenue		\$ 17,000
Expenses:		
Rent Expense	\$ 1,900	
Utilities Expense	150	
Total Expenses		<u>2,050</u>
Net Income		<u><u>\$ 14,950</u></u>

Requirement 2b

DARRIN YANAGISAWA, CPA
Statement of Retained Earnings
Month Ended October 31, 2025

Retained Earnings, October 1, 2025	\$ 0
Net income for the month	<u>14,950</u>
	14,950
Dividends	<u>(8,000)</u>
Retained Earnings, October 31, 2025	<u><u>\$ 6,950</u></u>

Requirement 2c

DARRIN YANAGISAWA, CPA
Balance Sheet
October 31, 2025

Assets		Liabilities	
Cash	\$ 28,250		
Supplies	200		
Office Furniture	9,500	Stockholders' Equity	
		Common Stock	\$ 31,000
		Retained Earnings	<u>6,950</u>
		Total Stockholders' Equity	<u>37,950</u>
		Total Liabilities and Stockholders' Equity	<u><u>\$ 37,950</u></u>
Total Assets	<u><u>\$ 37,950</u></u>		

P-F:1-56B**Using the accounting equation for transaction analysis, preparing financial statements, and calculating return on assets**

2c. Total Assets \$131,220

Aleda Marek recently opened a law office on December 1, which operates as a corporation. The name of the new entity is Aleda Marek, Attorney. Marek experienced the following events during the organizing phase of the new business and its first month of operation, December 2025. Some of the events were personal and did not affect the law practice. Others were business transactions and should be accounted for by the business.

Dec. 1	Marek sold a personal investment in Nike, Inc. (NYSE: NKE) stock, receiving \$33,000 cash.
2	Deposited the \$33,000 cash from the sale of the Nike, Inc. stock in a personal bank account.
3	Deposited \$109,000 cash in a new business bank account titled Aleda Marek, Attorney. The business issued common stock to Marek.
5	Paid \$900 cash for supplies.
7	Purchased computer for the law office, agreeing to pay the account, \$9,200, within three months.
9	Received \$3,000 cash from customers for services rendered.
15	Received bill from <i>The Lawyer</i> for magazine subscription, \$80. (Use Miscellaneous Expense account.)
23	Finished court hearings on behalf of a client and submitted a bill for legal services, \$17,000, on account.
28	Paid bill from <i>The Lawyer</i> .
30	Paid utilities, \$1,900.
31	Received \$4,000 cash from clients billed on Dec. 23.
31	Cash dividends of \$5,000 were paid to the stockholder.

Requirements

1. Analyze the effects of the preceding events on the accounting equation of Aleda Marek, Attorney. Use a format similar to Exhibit F:1-6.
2. Prepare the following financial statements:

- a. Income statement for the month ended December 31, 2025.
 - b. Statement of retained earnings for the month ended December 31, 2025.
 - c. Balance sheet as of December 31, 2025.
 - d. Statement of cash flows for the month ended December 31, 2025.
3. Calculate Aleda Marek, Attorney's return on assets. Round to the nearest whole percent.

Requirement 1

ASSETS							=	LIABILITIES	+	EQUITY									
	Cash	+	Accounts Receivable	+	Supplies	+	Computer	=	Accounts Payable	+	Contributed Capital Common Stock	+	Retained Earnings Dividends	+	Service Revenue	–	Utility Expense	–	Misc. Expense
3	+109,000										+109,000								
5	–900				+900														
Bal.	\$108,100				\$900	+		=		+	\$109,000								
7							+9,200		+9,200										
Bal.	\$108,100			+	\$900	+	\$9,200	=	\$9,200	+	\$109,000								
9	+3,000														+3,000				
Bal.	\$111,100			+	\$900	+	\$9,200	=	\$9,200	+	\$109,000		+	\$3,000					
15									+80										–80
Bal.	\$111,100			+	\$900	+	\$9,200	=	\$9,280	+	\$109,000		+	\$3,000	–			–	\$80
23			+17,000												+17,000				
Bal.	\$111,100	+	\$17,000	+	\$900	+	\$9,200	=	\$9,280	+	\$109,000		+	\$20,000	–			–	\$80
28	–80								–80										
Bal.	\$111,020	+	\$17,000	+	\$900	+	\$9,200	=	\$9,200	+	\$109,000		+	\$20,000	–			–	\$80
30	–1,900																–1,900		
Bal.	\$109,120	+	\$17,000	+	\$900	+	\$9,200	=	\$9,200	+	\$109,000		+	\$20,000	–	\$1,900		–	\$80
31	+4,000		–4,000																
Bal.	\$113,120	+	\$13,000	+	\$900	+	\$9,200	=	\$9,200	+	\$109,000		+	\$20,000	–	\$1,900		–	\$80
31	–5,000												–5,000						
Bal.	\$108,120	+	\$13,000	+	\$900	+	\$9,200	=	\$9,200	+	\$109,000	–	\$5,000	+	\$20,000	–	\$1,900	–	\$80

P-F:1-56B, cont.
Requirement 2a

ALEDA MAREK, ATTORNEY
Income Statement
Month Ended December 31, 2025

Revenues:		
Service Revenue		\$ 20,000
Expenses:		
Utility Expense	\$ 1,900	
Miscellaneous Expense	80	
Total Expenses		1,980
Net Income		<u><u>\$ 18,020</u></u>

Requirement 2b

ALEDA MAREK, ATTORNEY
Statement of Retained Earnings
Month Ended December 31, 2025

Retained Earnings, December 1, 2025	\$ 0
Net income for the month	18,020
	18,020
Dividends	(5,000)
Retained Earnings, December 31, 2025	<u><u>\$ 13,020</u></u>

Requirement 2c

ALEDA MAREK, ATTORNEY
Balance Sheet
December 31, 2025

Assets		Liabilities	
Cash	\$ 108,120	Accounts Payable	\$ 9,200
Accounts Receivable	13,000		
Supplies	900	Stockholders' Equity	
Computer	9,200	Common Stock	109,000
		Retained Earnings	13,020
		Total Stockholders' Equity	122,020
		Total Liabilities and Stockholders'	
Total Assets	<u><u>\$ 131,220</u></u>	Equity	<u><u>\$ 131,220</u></u>

P-F:1-56B, cont.
Requirement 2d

ALEDA MAREK, ATTORNEY
Statement of Cash Flows
Month Ended December 31, 2025

Cash flows from operating activities:

Receipts:

Collections from customers \$ 7,000

Payments:

To suppliers (2,880)

Net cash provided by operating activities 4,120

Cash flows from investing activities: 0

Cash flows from financing activities

Issued common stock \$ 109,000

Payment of cash dividends (5,000)

Net cash provided by financing activities 104,000

Net increase in cash 108,120

Cash balance, December 1, 2025 0

Cash balance, December 31, 2025 **\$ 108,120**

Requirement 3

Average total assets = (Beginning total assets + ending total assets) / 2

Average total assets = (\$0 + \$131,220) / 2 = \$65,610

ROA = Net income / Average total assets

ROA = \$18,020 / \$65,610 = 0.28 = 28% (rounded)

Critical Thinking

Using Technology

Access and download the complete Using Technology problems (Using Excel and Using Data Visualizations) for this chapter online in MyLab Accounting.

The *Using Technology* problems and solutions (*Using Excel and Using Data Visualizations*) are available online in MyLab Accounting.

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Continuing Problem-F:1-1

Continuing Problem F:1-1 is the first problem in a continuing problem that will be used throughout the chapters to reinforce the concepts learned.

Using the accounting equation for transaction analysis, preparing financial statements, and calculating return on assets (ROA)

Canyon Canoe Company is a service-based company that rents canoes for use on local lakes and rivers. Amber and Zack Wilson graduated from college about 10 years ago. They both worked for one of the “Big Four” accounting firms and became CPAs. Because they both love the outdoors, they decided to begin a new business that will combine their love of outdoor activities with their business knowledge. Amber and Zack Wilson decide that they will create a new corporation, Canyon Canoe Company, or CCC for short. The business began operations on November 1, 2025.

Nov. 1	Received \$16,000 cash to begin the company and issued common stock to Amber and Zack.
2	Signed a lease for a building and paid \$1,200 for the first month’s rent.
3	Purchased canoes for \$4,800 on account.
4	Purchased supplies on account, \$750.
7	Earned \$1,400 cash for rental of canoes.
13	Paid \$1,500 cash for wages.
15	Paid \$50 in dividends to stockholders.
16	Received a bill for \$150 for utilities. (Use separate payable account.)
20	Received a bill for \$175 for cell phone expenses. (Use separate payable account.)
22	Rented canoes to Outdoor Adventure Club on account, \$3,000.
26	Paid \$1,000 on account related to the November 3 purchase.
28	Received \$750 from Outdoor Adventure Club for canoe rental on November 22.
30	Paid \$100 in dividends to stockholders.

Requirements

1. Analyze the effects of Canyon Canoe Company’s transactions on the accounting equation. Use the format of Exhibit F:1-6 and include these headings: Cash, Accounts Receivable, Supplies, Canoes, Accounts Payable, Utilities Payable, Telephone Payable, Common Stock, Dividends, Canoe Rental Revenue, Rent Expense, Utilities Expense,

Wages Expense, and Telephone Expense.

2. Prepare the income statement of Canyon Canoe Company for the month ended November 30, 2025.
3. Prepare the statement of retained earnings for the month ended November 30, 2025.
4. Prepare the balance sheet as of November 30, 2025.
5. Calculate the return on assets for Canyon Canoe Company for November 2025.

Requirement 1

ASSETS					=	LIABILITIES			+	EQUITY																		
	Cash	+	Accounts Receivable	+	Supplies	+	Canoes	=	Accounts Payable	+	Utilities Payable	+	Telephone Payable	+	Contributed Capital	+	Retained Earnings											
															Common Stock	–	Dividends	+	Canoe Rental Revenue	–	Rent Expense	–	Utilities Expense	–	Wages Expense	–	Telephone Expense	
1	+16,000														+16,000													
2	<u>–1,200</u>																				<u>–1,200</u>							
Bal.	\$14,800							=							+	\$16,000				–	\$1,200							
3	<u></u>						+4,800		+4,800																			
Bal.	\$14,800						+ \$4,800	=	\$4,800						+	\$16,000				–	\$1,200							
4	<u></u>				+750				+750																			
Bal.	\$14,800				\$750	+	\$4,800	=	\$5,550						+	\$16,000				–	\$1,200							
7	<u>+1,400</u>																		+1,400									
Bal.	\$16,200				+	\$750	+	\$4,800	=	\$5,550					+	\$16,000			+	\$1,400	–	\$1,200						
13	<u>–1,500</u>																									–1,500		
Bal.	\$14,700				+	\$750	+	\$4,800	=	\$5,550					+	\$16,000			+	\$1,400	–	\$1,200				–	\$1,500	
15	<u>–50</u>																											
Bal.	\$14,650				+	\$750	+	\$4,800	=	\$5,550					+	\$16,000	–	\$50	+	\$1,400	–	\$1,200				–	\$1,500	
16	<u></u>										+150													–150				
Bal.	\$14,650				+	\$750	+	\$4,800	=	\$5,550	+	\$150			+	\$16,000	–	\$50	+	\$1,400	–	\$1,200	–	\$150	–	\$1,500		
20	<u></u>											+175														–175		
Bal.	\$14,650				+	\$750	+	\$4,800	=	\$5,550	+	\$150	+	\$175	+	\$16,000	–	\$50	+	\$1,400	–	\$1,200	–	\$150	–	\$1,500	–	\$175
22	<u></u>		+3,000																+3,000									
Bal.	\$14,650	+	\$3,000	+	\$750	+	\$4,800	=	\$5,550	+	\$150	+	\$175	+	\$16,000	–	\$50	+	\$4,400	–	\$1,200	–	\$150	–	\$1,500	–	\$175	
26	<u>–1,000</u>								–1,000																			
Bal.	\$13,650	+	\$3,000	+	\$750	+	\$4,800	=	\$4,550	+	\$150	+	\$175	+	\$16,000	–	\$50	+	\$4,400	–	\$1,200	–	\$150	–	\$1,500	–	\$175	
28	<u>+750</u>		–750																									
Bal.	\$14,400	+	\$2,250	+	\$750	+	\$4,800	=	\$4,550	+	\$150	+	\$175	+	\$16,000	–	\$50	+	\$4,400	–	\$1,200	–	\$150	–	\$1,500	–	\$175	
30	<u>–100</u>																											
Bal.	\$14,300	+	\$2,250	+	\$750	+	\$4,800	=	\$4,550	+	\$150	+	\$175	+	\$16,000	–	\$150	+	\$4,400	–	\$1,200	–	\$150	–	\$1,500	–	\$175	

Continuing Problem-F:1-1, cont.
Requirement 2

CANYON CANOE COMPANY		
Income Statement		
Month Ended November 30, 2025		
Revenue:		
Canoe Rental Revenue		\$ 4,400
Expenses:		
Wages Expense	\$ 1,500	
Rent Expense	1,200	
Telephone Expense	175	
Utilities Expense	150	
Total Expense		3,025
Net Income		<u><u>\$ 1,375</u></u>

Requirement 3

CANYON CANOE COMPANY		
Statement of Retained Earnings		
Month Ended November 30, 2025		
Retained Earnings, November 1, 2025		\$ 0
Net income for the month		1,375
		<u>1,375</u>
Dividends		(150)
Retained Earnings, November 30, 2025		<u><u>\$ 1,225</u></u>

Continuing Problem-F:1-1, cont.
Requirement 4

CANYON CANOE COMPANY			
Balance Sheet			
November 30, 2025			
Assets		Liabilities	
Cash	\$ 14,300	Accounts Payable	\$ 4,550
Accounts Receivable	2,250	Utilities Payable	150
Supplies	750	Telephone Payable	175
Canoes	4,800	Total Liabilities	4,875
		Stockholders' Equity	
		Common Stock	16,000
		Retained Earnings	1,225
		Total Stockholder's Equity	17,225
Total Assets	<u>\$ 22,100</u>	Total Liabilities and Stockholders' Equity	<u>\$ 22,100</u>

Continuing Problem-F:1-1, cont. Requirement 5

Average total assets = $(\$0 + \$22,100) / 2 = \$11,050$

Return on assets = Net income / Average total assets = $\$1,375 / \$11,050 = 0.124 = 12.4\%$

Tying It All Together Case F:1-1

Before you begin this assignment, review the Tying It All Together feature in the chapter.

Starbucks Corporation (NASDAQ: SBUX) is the premier roaster, marketer, and retailer of specialty coffee in the world, operating in 84 countries. Starbucks Corporation generates revenues through company-operated stores, licensed stores, and consumer packaged goods. In fiscal year 2021, revenues from company-operated stores accounted for 85% of total revenues, while the other 15% of total revenues was earned from the company's licensed stores and the sale of its packaged coffee and tea outside company stores. Starbucks Corporation states that its retail objective is to be the leading retailer and brand of coffee and tea by selling the finest quality coffee, tea, and related products. In addition, the company strives to provide the Starbucks Experience by exemplifying superior customer service and providing clean and well-maintained stores. Part of this experience involves providing free Internet service to customers while they are enjoying their food and beverages. Visit <http://www.pearsonhighered.com/Horngren> for a link to Starbucks Corporation's annual report for the year ending October 3, 2021.

Requirements

1. How would the cost of Internet service be reported by Starbucks Corporation and on which financial statement?
2. Suppose Starbucks Corporation receives a bill from its Internet service provider but has not yet paid the bill. What would be the effect on assets, liabilities, and equity when Starbucks Corporation receives this bill?
3. What would be the effect on assets, liabilities, and equity when Starbucks Corporation pays its Internet service bill?
4. Suppose Starbucks Corporation expects that the cost of Internet service will increase by 4% in the coming year. What would be the impact on Starbucks Corporation's net income? How might Starbucks Corporation overcome this impact?

Requirement 1

Starbucks Corporation would report the cost of internet service as an expense on its income statement. Most likely, the expense would be included in Store Operating Expenses.

Requirement 2

When Starbucks Corporation receives a bill from its internet service provider, Starbucks Corporation would record the following:

Increase Accounts Payable

Increase Store Operating Expenses

This would cause liabilities to increase and equity to decrease.

Requirement 3

When Starbucks Corporation pays the bill, Starbucks would record the following:

Decrease Cash

Decrease Accounts Payable

This would cause assets to decrease and liabilities to decrease.

Requirement 4

An increase in the cost of internet service in the coming year would cause expenses to increase. If revenue did not change, this would cause net income to decrease. Starbucks Corporation might overcome this impact by charging customers for using the internet service, thereby offsetting the increase in expenses with additional revenue. This change, though, might discourage customers from visiting Starbucks Corporation when other competitors might offer free internet service. Another alternative would be to increase the sales prices of the products sold to cover the increased cost of internet service.

Decision Case F:1-1

Let's examine a case using Greg's Tunes and Sal's Songs. It is now the end of the first year of operations, and the stockholders want to know how well each business came out at the end of the year. Neither business kept complete accounting records, and no dividends were paid. The businesses throw together the following data at year-end:

Sal's Songs:	
Total Assets	\$ 23,000
Common Stock	8,000
Total Revenues	35,000
Total Expenses	22,000
Greg's Tunes:	
Total Liabilities	\$ 10,000
Common Stock	6,000
Total Expenses	44,000
Net Income	9,000

To gain information for evaluating the businesses, the stockholders ask you several questions. For each answer, you must show your work to convince the stockholders that you know what you are talking about.

Requirements

1. Which business has more assets?
2. Which business owes more to creditors?
3. Which business has more stockholders' equity at the end of the year?
4. Which business brought in more revenue?
5. Which business is more profitable?
6. Which of the foregoing questions do you think is most important for evaluating these two businesses? Why?
7. Which business looks better from a financial standpoint?

Requirement 1

Greg's Tunes has more assets.

Sal's Songs \$23,000, Greg's Tunes \$25,000 ($\$10,000 + \$6,000 + \$9,000$)

Requirement 2

Greg's Tunes owes more to creditors.

Sal's Songs \$2,000 ($\$23,000 - (\$8,000 + \$35,000 - \$22,000)$), Greg's Tunes \$10,000

Decision Case F:1-1, cont.

Requirement 3

Sal's Songs has more stockholders' equity.

Sal's Songs \$21,000 (\$8,000 + \$35,000 – \$22,000), Greg's Tunes \$15,000 (\$6,000 + \$9,000)

Requirement 4

Greg's Tunes earned more revenue.

Sal's Songs \$35,000, Greg's Tunes \$53,000 (\$9,000 + \$44,000)

Requirement 5

Sal's Songs is more profitable.

Sal's Songs \$13,000 (\$35,000 – \$22,000), Greg's Tunes \$9,000

Requirement 6

This question is opinion based. More profit is good, which means Sal's Songs has the advantage. Greg's Tunes also owes more to creditors which is risky. Sal's Songs has much more equity, which minimizes risk.

Requirement 7

Sal's Songs looks financially better, because Sal's Songs earned more net income on less total revenue. Sal's Songs also owes less to creditors and has more equity.

Ethical Issues F:1-1

Many companies have been affected during the COVID-19 global pandemic. In particular, **Starbucks Corporation** (NASDAQ: SBUX) noted in its annual report, "Our financial results have been and could continue to be adversely affected by the impact of COVID-19 pandemic, which has resulted in a disruption of customer routines, changes to employer "work-from-home" policies, reduced business and recreational travel, and changes in consumer behavior." Visit <http://www.pearsonhighered.com/Horngren> for a link to Starbucks Corporation's annual report for the year ending October 3, 2021.

Requirements

1. Suppose you are the chief financial officer (CFO) responsible for the financial statements of Starbucks Corporation. Why is it important to disclose the adverse impact COVID-19 has had on Starbucks Corporation's business and financial results?
2. What are some of the negative consequences to Starbucks Corporation for not telling the truth? What are some of the negative consequences to Starbucks Corporation for telling the truth?

Requirement 1

The chief financial officer (CFO) of Starbucks Corporation is responsible for reporting the risks related to economic conditions. Factors such as a global pandemic can adversely impact the business and financial

results. The ethical course of action for the CFO is to be open, honest and forthcoming about the risks related to economic conditions.

Requirement 2

Negative consequences of not telling the truth are as follows: If users of the financial statements feel they are only getting part of the truth, or that the reports are distorting the information, this will damage the credibility of the company, and damage the company's reputation. Additionally, the company could face regulatory penalties for not disclosing risk factors in its annual report.

Negative consequences of telling the truth could include an investor choosing not to purchase stock in the company or lenders choosing not to loan money to the corporation.

Fraud Case F:1-1

Exeter is a building contractor on the Gulf Coast. After losing a number of big lawsuits, it was facing its first annual net loss as the end of the year approached. The owner, Hank Snow, was under intense pressure from the company's creditors to report positive net income for the year. However, he knew that the controller, Alice Li, had arranged a short-term bank loan of \$10,000 to cover a temporary shortfall of cash. He told Li to record the incoming cash as "construction revenue" instead of a loan. That would nudge the company's income into positive territory for the year, and then, he said, the entry could be corrected in January when the loan was repaid.

Requirements

1. How would this action affect the year-end income statement? How would it affect the year-end balance sheet?
2. If you were one of the company's creditors, how would this fraudulent action affect you?

Requirement 1

The proposed action would increase net income by increasing revenues. It would distort the balance sheet by understating liabilities and overstating equity.

Requirement 2

By making the company's financial situation look better than it actually was, the company's creditors would likely be more willing to extend credit to the company, and offer the credit at a lower interest rate.

Financial Statement Case F1-1

This and similar cases in later chapters focus on the financial statements of a real company: **The Coca-Cola Company and Subsidiaries** (NYSE: KO), a total beverage company whose products are sold in more than 200 countries and territories. Coca-Cola Company sells sparkling soft drinks, water, enhanced water, sports drinks, tea, coffee, and energy drinks. The business owns and markets four of the world's top five nonalcoholic sparkling soft drink brands: Coca-Cola, Diet Coke, Fanta, and Sprite. As you work each case, you will gain confidence in your ability to use the financial statements of real companies.

Visit <http://www.pearsonhighered.com/Horngren> to view a link to Coca-Cola Company's December 31, 2021 Annual Report.

Requirements

1. How much in cash (including cash equivalents) did Coca-Cola Company have on December 31, 2021?
2. What were the company's total assets at December 31, 2021? At December 31, 2020?
3. Write the company's accounting equation at December 31, 2021, by filling in the dollar amounts:
$$\text{Assets} = \text{Liabilities} + \text{Equity}$$
4. Identify total sales (net operating revenues) for the year ended December 31, 2021. How much did total revenue increase or decrease from December 31, 2020, to December 31, 2021?
5. How much net income (net earnings) or net loss did Coca-Cola Company earn for 2021 and for 2020? Based on net income, was 2021 better or worse than 2020?
6. Calculate Coca-Cola Company's return on assets for the year ending December 31, 2021. Round to one decimal place.
7. How did Coca-Cola Company's return on assets compare to PepsiCo, Inc.'s return on assets?

Requirement 1

\$9,684 (in millions)

Requirement 2

\$94,354 (in millions) at December 31, 2021; \$87,296 (in millions) at December 31, 2020

Requirement 3

All amounts in millions.

Assets	=	Liabilities	+	Equity
\$94,354	=	(\$19,950 + \$38,116 + \$8,607 + \$2,821)		\$24,860
\$94,354	=	\$69,494	+	\$24,860

Requirement 4

\$38,655 (in millions) for year ended December 31, 2021. This is an increase of \$5,641 (in millions) from 2020. (\$38,655 – \$33,014)

Requirement 5

\$9,804 (in millions) in 2021

\$7,768 (in millions) in 2020

Coca-Cola Company's net income increased by \$2,036 (in millions) from 2021 (\$9,804 – \$7,768).

Requirement 7

All amounts in millions.

Average total assets = $(\$94,354 + \$87,296) / 2 = \$90,825$ (rounded)

Return on assets = $\$9,804 / \$90,825 = 0.108 = 10.8\%$ (rounded)

Requirement 8

Coca-Cola Company's return on assets (10.8%) was 2.6% points higher than PepsiCo, Inc. (8.2%).

Chapter M:1

Introduction to Managerial Accounting

Review Questions

1. What is the primary purpose of managerial accounting?

The primary purpose of managerial accounting is to provide information to help managers plan, direct, control, and make decisions.

2. List six differences between financial accounting and managerial accounting.

Financial accounting and managerial accounting differ on the following 6 dimensions: (1) primary users, (2) purpose of information, (3) focus and time dimension of the information, (4) rules and restrictions, (5) scope of information, and (6) behavioral.

3. Explain the difference between line positions and staff positions.

Line positions are directly involved in providing goods or services to customers. Staff positions support line positions.

4. Explain the differences between planning, directing, and controlling.

Planning means choosing goals and deciding how to achieve them. Directing involves running the day-to-day operations of a business. Controlling is the process of monitoring operations and keeping the company on track.

5. List the four IMA standards of ethical practice and briefly describe each.

The four IMA standards of ethical practice and a description of each follow.

I. Competence.

- Maintain an appropriate level of professional leadership and expertise by enhancing knowledge and skills.
- Perform professional duties in accordance with relevant laws, regulations, and technical standards.
- Provide decision support information and recommendations that are accurate, clear, concise, and timely.
- Recognise and help manage risk.

II. Confidentiality.

- Keep information confidential except when disclosure is authorized or legally required.
- Inform all relevant parties regarding appropriate use of confidential information. Monitor to ensure compliance.
- Refrain from using confidential information for unethical or illegal advantage.

III. Integrity.

- Mitigate actual conflicts of interest. Regularly communicate with business associates to avoid apparent conflicts of interest. Advise all parties of any potential conflicts.
- Refrain from engaging in any conduct that would prejudice carrying out duties ethically.
- Abstain from engaging in or supporting any activity that might discredit the profession.
- Contribute to a positive ethical culture and place integrity of the profession above personal interest.

5, cont.

IV. Credibility.

- Communicate information fairly and objectively.
- Provide all relevant information that could reasonably be expected to influence an intended user's understanding of the reports, analyses, or recommendations.
- Report any delays or deficiencies in information, timeliness, processing, or internal controls in conformance with organization policy and/or applicable law.
- Communicate any professional limitations or other constraints that would preclude responsible judgment or successful performance of an activity.

6. Describe a service company and give an example.

Service companies sell time, skills, and knowledge. Examples of service companies include phone service companies, banks, cleaning service companies, accounting firms, law firms, medical physicians, and online auction services.

7. Describe a merchandising company and give an example.

Merchandising companies resell products they buy from suppliers. Merchandisers keep an inventory of products, and managers are accountable for the purchasing, storage, and sale of the products. Examples of merchandising companies include toy stores, grocery stores, and clothing stores.

8. How do manufacturing companies differ from merchandising companies?

Merchandising companies resell products they previously bought from suppliers, whereas manufacturing companies use labor, equipment, supplies, and facilities to convert raw materials into new finished products. In contrast to merchandising companies, manufacturing companies have a broad range of production activities that require tracking costs on three kinds of inventory.

9. List the three inventory accounts used by manufacturing companies and describe each.

The three inventory accounts used by manufacturing companies are Raw Materials Inventory, Work-in-Process Inventory, and Finished Goods Inventory.

Raw Materials Inventory includes materials used to manufacture a product. Work-in-Process Inven-

tory includes goods that have been started in the manufacturing process but are not yet complete. Finished Goods Inventory includes completed goods that have not yet been sold.

10. Explain the difference between a direct cost and an indirect cost.

A direct cost is a cost that can be easily and cost-effectively traced to a cost object (which is anything for which managers want a separate measurement of cost). An indirect cost is a cost that cannot be easily or cost-effectively traced to a cost object.

11. What are the three manufacturing costs for a manufacturing company? Describe each.

The three manufacturing costs for a manufacturing company are direct materials, direct labor, and manufacturing overhead. Direct materials are materials that become a physical part of a finished product and whose costs are easily traceable to the finished product. Direct labor is the labor cost of the employees who convert materials into finished products. Manufacturing overhead includes all manufacturing costs except direct materials and direct labor, such as indirect materials, indirect labor, factory depreciation, factory rent, and factory property taxes.

12. Give five examples of manufacturing overhead.

Examples of manufacturing overhead include costs of indirect materials, indirect labor, repair and maintenance in factory, factory utilities, factory rent, factory insurance, factory property taxes, manufacturing plant managers' salaries, and depreciation on manufacturing buildings and equipment.

13. What are prime costs? Conversion costs?

Prime costs are direct materials plus direct labor. Conversion costs are direct labor plus manufacturing overhead. Note that direct labor is classified as both a prime cost and a conversion cost.

14. What are product costs for a manufacturing company?

Product costs are the cost of purchasing or making a product. These costs are recorded as an asset and not expensed until the product is sold. Product costs for a manufacturing company include direct materials, direct labor, and manufacturing overhead.

15. How do period costs differ from product costs for a manufacturing company?

Period costs for a manufacturing company are non-manufacturing costs that are expensed in the same accounting period in which they are incurred, whereas product costs are recorded as an asset and not expensed until the accounting period in which the product is sold.

16. How is cost of goods manufactured calculated?

Cost of Goods Manufactured is calculated as Beginning Work-in-Process Inventory + Total Manufacturing Costs Incurred during the Year – Ending Work-in-Process Inventory. Total Manufacturing Costs Incurred during the Year = Direct Materials Used + Direct Labor + Manufacturing Overhead.

- 17.** How does a manufacturing company calculate cost of goods sold? How is this different from a merchandising company?

For a manufacturing company, the activity in the Finished Goods Inventory account provides the information for determining Cost of Goods Sold. A manufacturing company calculates Cost of Goods Sold as Beginning Finished Goods Inventory + Cost of Goods Manufactured – Ending Finished Good Inventory. In addition, a manufacturing company must track costs from Raw Materials Inventory and Work-in-Process Inventory in order to compute Cost of Goods Manufactured used in the previous equation.

For a merchandising company, the activity in the Merchandise Inventory account provides the information for determining Cost of Goods Sold. A merchandising company calculates Cost of Goods Sold as Beginning Merchandise Inventory + Purchases and Freight In – Ending Merchandise Inventory.

- 18.** How does a manufacturing company calculate unit product cost?

A manufacturing company calculates unit product cost as Cost of Goods Manufactured / Total number of units produced.

- 19.** How does a service company calculate unit cost per service provided?

A service company calculates unit cost per service provided as Total operating costs / Total number of services provided.

- 20.** How does a merchandising company calculate unit cost per item sold?

A merchandising company calculates unit cost per item sold as Total cost of goods sold / Total number of items sold.

Short Exercises

S-M:1-1

Comparing managerial accounting and financial accounting

For each of the following, indicate whether the statement relates to managerial accounting (MA) or financial accounting (FA):

- a. Helps investors make investment decisions.
- b. Provides detailed reports on parts of the company.
- c. Helps in planning and controlling operations.
- d. Reports must follow Generally Accepted Accounting Principles (GAAP).
- e. Reports audited annually by independent certified public accountants.

- a. FA
- b. MA
- c. MA
- d. FA
- e. FA

S-M:1-2

Identifying ethical standards

The Institute of Management Accountants' Statement of Ethical Professional Practice requires managerial accountants to meet standards regarding competence, confidentiality, integrity, and credibility. Consider the following situations. Which standard(s) is(are) violated in each situation?

- a. You tell your brother that your company will report earnings significantly above financial analysts' estimates.
- b. You see others take home office supplies for personal use. As an intern, you do the same thing, assuming that this is a "perk."
- c. At a company-paid conference on e-commerce, you skip the afternoon session and go sightseeing.
- d. You failed to read the detailed specifications of a new accounting software package that you asked your company to purchase. After it is installed, you are surprised that it is incompatible with some of your company's older accounting software.
- e. You do not provide top management with the detailed job descriptions they requested because you fear they may use this information to cut a position in your department.

- a. Confidentiality
- b. Integrity

- c. Competence (skipping the session); Integrity (company-paid conference)
- d. Competence
- e. Credibility; Integrity

S-M:1-3

Distinguishing between direct and indirect costs

Blake Cards is a manufacturer of greeting cards. Classify its costs by matching the costs to the terms.

1. Direct materials	a. Artists' wages
2. Direct labor	b. Wages of materials warehouse workers
3. Indirect materials	c. Paper
4. Indirect labor	d. Depreciation on manufacturing equipment
5. Other manufacturing overhead	e. Manufacturing plant manager's salary
	f. Property taxes on manufacturing plant
	g. Glue for envelopes

- a. 2
- b. 4
- c. 1
- d. 5
- e. 4
- f. 5
- g. 3

S-M:1-4

Computing manufacturing overhead

No Glare Sunglasses Company manufactures sunglasses. Following is a list of costs the company incurred during May. Use the list to calculate the total manufacturing overhead costs for the month.

Glue for frames	\$ 350
Depreciation on company cars used by sales force	3,000
Plant depreciation	9,000
Interest Expense	1,500
Lenses	50,000
Company president's salary	24,500

Plant foreman's salary	5,000
Plant janitor's wages	1,000
Oil for manufacturing equipment	200

Glue for frames	\$ 350
Plant depreciation	9,000
Plant foreman's salary	5,000
Plant janitor's wages	1,000
Oil for manufacturing equipment	200
Total manufacturing overhead	<u>\$ 15,550</u>

S-M:1-5**Identifying product costs and period costs**

Classify each cost of a paper manufacturer as either a product cost or a period cost:

- a. Salaries of scientists studying ways to speed forest growth.
- b. Cost of computer software to track WIP Inventory.
- c. Cost of electricity at the paper mill.
- d. Salaries of the company's top executives.
- e. Cost of chemicals to treat the paper.
- f. Cost of TV ads.
- g. Depreciation on the manufacturing plant.
- h. Cost to purchase wood pulp.
- i. Life insurance on the CEO.

- a. Period cost
- b. Product cost
- c. Product cost
- d. Period cost
- e. Product cost
- f. Period cost
- g. Product cost
- h. Product cost
- i. Period cost

S-M:1-6**Computing cost of goods sold, merchandising company**

Use the following information for A Clear Outlook, a retail merchandiser of auto windshields, to compute the cost of goods sold:

Web Site Maintenance	\$ 7,100
Delivery Expense	900
Freight In	2,900
Purchases	39,000
Ending Merchandise Inventory	4,900
Revenues	57,000
Marketing Expenses	9,900

Beginning Inventory	Merchandise	7,900
---------------------	-------------	-------

Beginning merchandise inventory		\$ 7,900
Purchases	\$ 39,000	
Freight in	<u>2,900</u>	<u>41,900</u>
Cost of goods available for sale		49,800
Ending merchandise inventory		<u>(4,900)</u>
Cost of goods sold		<u><u>\$ 44,900</u></u>

S-M:1-7

Computing cost of goods sold and operating income, merchandising company

Consider the following partially completed income statements for merchandising companies and compute the missing amounts:

	Bullock, Inc.	Ferreria, Inc.
Net Sales Revenue	\$ 101,000	\$ = (d)
Cost of Goods Sold:		
Beginning Merchandise Inventory	(a)	29,000
Purchases and Freight In	<u>48,000</u>	<u>(e)</u>
Cost of Goods Available for Sale	(b)	<u>88,000</u>
Ending Merchandise Inventory	<u>(1,900)</u>	<u>(1,900)</u>
Cost of Goods Sold	<u>59,000</u>	(f)
Gross Profit	42,000	113,000
Selling and Administrative Expenses	<u>(c)</u>	<u>84,000</u>
Operating Income	<u>\$ 13,000</u>	<u>\$ (g)</u>

Solutions:

(a) \$12,900

Calculations:

\$60,900 [b, below] – \$48,000

(b)	\$60,900	$\$59,000 + \$1,900$
(c)	\$29,000	$\$42,000 - \$13,000$
(d)	\$199,100	$\$86,100 \text{ [f, below]} + \$113,000$
(e)	59,000	$\$88,000 - \$29,000$
(f)	\$86,100	$\$88,000 - \$1,900$
(g)	\$29,000	$\$113,000 - \$84,000$

Order of calculations:

Bullock, Inc.: (b), (a), (c)

Ferreria, Inc.: (e), (f), (d), and (g)

S-M:1-8**Computing direct materials used**

Tasneem, Inc. has compiled the following data:

Purchases of Direct Materials	\$ 6,400
Freight In	200
Property Taxes	900
Ending Direct Materials	1,500
Beginning Direct Materials	4,000

Compute the amount of direct materials used.

Beginning Direct Materials		\$ 4,000
Purchases of Direct Materials	\$ 6,400	
Freight In	200	6,600
Direct Materials Available for Use		10,600
Ending Direct Materials		(1,500)
Direct Materials Used		<u>\$ 9,100</u>

S-M:1-9**Computing cost of goods manufactured**

Use the following inventory data for The Golf Company to compute the cost of goods manufactured for the year:

Direct Materials Used	\$ 10,000
Manufacturing Overhead	21,000
Work-in-Process Inventory:	
Beginning Balance	5,000
Ending Balance	3,000
Direct Labor	7,000
Finished Goods Inventory:	
Beginning Balance	15,000
Ending Balance	13,000

Beginning Work-in-Process Inventory		\$ 5,000
Direct Materials Used	\$ 10,000	
Direct Labor	7,000	
Manufacturing Overhead	21,000	
Total Manufacturing Costs Incurred during the Year		<u>38,000</u>
Total Manufacturing Costs to Account For		43,000
Ending Work-in-Process Inventory		<u>(3,000)</u>
Cost of Goods Manufactured		<u><u>\$ 40,000</u></u>

S-M:1-10

Computing cost of goods sold, manufacturing company

Use the following information to calculate the cost of goods sold for The Shereen Company for the month of June:

Finished Goods Inventory:	
Beginning Balance	\$ 26,000
Ending Balance	18,000
Cost of Goods Manufactured	156,000

Beginning Finished Goods Inventory	\$ 26,000
Cost of Goods Manufactured	<u>156,000</u>
Cost of Goods Available for Sale	182,000
Ending Finished Goods Inventory	<u>(18,000)</u>
Cost of Goods Sold	<u><u>\$ 164,000</u></u>

S-M:1-11

Matching business trends terminology

Match the term with the correct definition.

1. A philosophy designed to integrate all organizational areas in order to provide customers with superior products and services while meeting organizational objectives. Requires improving quality and eliminating defects and waste.	a. ERP
2. Use of the Internet for business functions such as sales and customer service. Enables companies to reach customers around the world.	b. JIT
3. Evaluating a company's performance by its economic,	c. E-commerce
	d. TQM
	e. Triple bottom line

social, and environmental impact.	
4. Software system that integrates all of a company's functions, departments, and data into a single system.	
5. A system in which a company produces products just when they are needed to satisfy needs. Suppliers deliver materials when they are needed to begin production, and finished units are completed at the right time for delivery to customers.	

1. d.
2. c.
3. e.
4. a.
5. b.

S-M:1-12

Calculating unit cost per service provided

Zayne and Ashraf provides hair-cutting services in the local community. In February, the business cut the hair of 230 clients, earned \$5,200 in revenues, and incurred the following operating costs:

Hair Supplies Expense	\$ 805
Building Rent Expense	1,150
Utilities Expense	184
Depreciation Expense—Equipment	46

What was the cost of service to provide one haircut?

$$\begin{aligned}
 \text{Cost of one haircut} &= \text{Total operating costs} / \text{Total number of haircuts} \\
 &= [\$805 + \$1,150 + \$184 + \$46] / 230 \text{ haircuts} \\
 &= \$2,185 / 230 \text{ haircuts} \\
 &= \$9.50 \text{ per haircut}
 \end{aligned}$$

Exercises

E-M:1-13

Comparing managerial accounting and financial accounting

Match the following terms to the appropriate statement. Some terms may be used more than once, and some terms may not be used at all.

Directing	Managerial
Creditors	Managers
Controlling	Planning
Financial	Stockholders

- a. Accounting systems that must follow GAAP.
- b. External parties for whom financial accounting reports are prepared.
- c. The role managers play when they are monitoring day-to-day operations and keeping the company on track.
- d. Internal decision makers.
- e. Accounting system that provides information on a company's past performance.
- f. Accounting system not restricted by GAAP.
- g. The management function that involves choosing goals and deciding how to achieve them.

- a. Financial
- b. Creditors and Stockholders
- c. Controlling
- d. Managers
- e. Financial
- f. Managerial
- g. Planning

E-M:1-14

Making ethical decisions

Hadiqa Weiss is the controller at Need for Speed, a car dealership. Daniel Salazar recently has been hired as the bookkeeper. Salazar wanted to attend a class in Excel spreadsheets, so Weiss temporarily took over Salazar's duties, including overseeing a fund used for gas purchases before test drives. Weiss found a shortage in the fund and confronted Salazar when he returned to work. Salazar admitted that he occasionally uses the fund to pay for his own gas. Weiss estimated the shortage at \$450.

Requirements

1. What should Hadiqa Weiss do?
2. Would you change your answer if Weiss was the one recently hired as controller and Daniel Salazar was a well-liked, longtime employee who indicated he always eventually repaid the fund?

Students' responses will vary. Illustrative answers follow.

Requirement 1

A new employee who has engaged in this behavior is unlikely to become a valued and trusted employee. This type of behavior is unethical, and Weiss should consider beginning the process to terminate the employee. Any company policies with respect to discipline and termination should be followed.

As controller, Weiss probably hired Salazar, and she is also responsible for the lack of controls that permitted a new employee to commit this theft. She will need to supervise Salazar and subsequent bookkeepers more carefully.

Requirement 2

Being a new employee, Weiss may want to discuss the situation with her immediate supervisor or the company's president if appropriate. Unless Weiss can obtain additional information, she may want to indicate to Salazar that this behavior will not be tolerated in the future. Weiss should establish better controls and closer supervision.

E-M:1-15**Classifying costs**

Round and Round, Inc. manufactures wheels for bicycles, tricycles, and scooters. For each cost given below, determine if the cost is a product cost or a period cost. If the cost is a product cost, further determine if the cost is direct materials (DM), direct labor (DL), or manufacturing overhead (MOH) and then determine if the product cost is a prime cost, conversion cost, or both. If the cost is a period cost, further determine if the cost is a selling expense or administrative expense (Admin). *Cost (a) is answered as a guide.*

Cost	Product					Period	
	DM	DL	MOH	Prime	Conversion	Selling	Admin.
a. Metal used for rims	X			X			
b. Sales salaries							
c. Rent on factory							
d. Wages of assembly workers							
e. Salary of production supervisor							
f. Depreciation on office equipment							
g. Salary of CEO							
h. Delivery expense							

Use the following data for Exercises E-M:1-16, E-M:1-17, and E-M:1-18.

Selected data for three companies are given below. All inventory amounts are ending balances and all amounts are in millions.

Company A		Company B		Company C	
Cash	\$ 8	Wages Expense	\$ 19	Administrative Expenses	\$ 5
Net Sales Revenue	37	Equipment	27	Cash	12
Finished Goods Inventory	6	Accounts Receivable	8	Net Sales Revenue	35
Cost of Goods Sold	22	Service Revenue	40	Selling Expenses	3
Selling Expenses	5	Cash	15	Merchandise Inventory	10
Equipment	56	Rent Expense	12	Equipment	45

Company A		Company B		Company C	
Work-in-Process Inventory	4			Accounts Receivable	15
Accounts Receivable	12			Cost of Goods Sold	20
Cost of Goods Manufactured	25				
Administrative Expenses	4				
Raw Materials Inventory	3				

Cost	Product					Period	
	DM	DL	MOH	Prime	Conversion	Selling	Admin
a. Metal used for rims	X			X			
b. Sales salaries						X	
c. Rent on factory			X		X		
d. Wages of assembly workers		X		X	X		
e. Salary of production supervisor			X		X		
f. Depreciation on office equipment							X
g. Salary of CEO							X
h. Delivery expense						X	

E-M:1-16**Identifying differences between service, merchandising, and manufacturing companies**

Using the above data, determine the company type. Identify each company as a service company, merchandising company, or manufacturing company.

Company A is a manufacturing company.

Company B is a service company.

Company C is a merchandising company.

E-M:1-17**Identifying differences between service, merchandising, and manufacturing companies**

Company B: \$9

Using the data on the previous page, calculate operating income for each company.

Company A (all amounts in millions):

Net Sales Revenue	\$ 37
Cost of Goods Sold	<u>22</u>
Gross Profit	15
Selling and Administrative Expenses:	
Selling Expenses	\$ 5
Administrative Expenses	<u>4</u>
Total Selling and Administrative Expenses	<u>9</u>
Operating Income	<u>\$ 6</u>

Company B (all amounts in millions):

Service Revenue	\$ 40
Expenses:	
Wages Expense	\$ 19
Rent Expense	<u>12</u>
Total Expenses	<u>31</u>
Operating Income	<u>\$ 9</u>

Company C (all amounts in millions):

Net Sales Revenue	\$ 35
Cost of Goods Sold	<u>20</u>
Gross Profit	15
Selling and Administrative Expenses:	

Selling Expenses	\$ 3	
Administrative Expenses	<u>5</u>	
Total Selling and Administrative Expenses		<u>8</u>
Operating Income		<u><u>\$ 7</u></u>

E-M:1-18**Identifying differences between service, merchandising, and manufacturing companies**

Company C: \$37

Using the data on the previous page, calculate total current assets for each company.

Company A (all amounts in millions):

Cash	\$ 8
Accounts Receivable	12
Raw Materials Inventory	3
Work-in-Process Inventory	4
Finished Goods Inventory	6
Total current assets	<u>\$ 33</u>

Company B (all amounts in millions):

Cash	\$ 15
Accounts Receivable	8
Total current assets	<u>\$ 23</u>

Company C (all amounts in millions):

Cash	\$ 12
Accounts Receivable	15
Merchandise Inventory	10
Total current assets	<u>\$ 37</u>

E-M:1-19**Computing cost of goods manufactured**

Consider the following partially completed schedules of cost of goods manufactured. Compute the missing amounts.

	Banner, Inc.	Hickman, Inc.	Brandt, Inc.
Beginning Work-in-Process Inventory	\$ (a)	\$ 40,500	\$ 2,200
Direct Materials Used	14,200	35,200	(g)
Direct Labor	10,800	20,700	1,400
Manufacturing Overhead	(b)	10,500	300
Total Manufacturing Costs Incurred during the Year	45,300	(d)	(h)
Total Manufacturing Costs to Account for	55,800	(e)	7,400
Ending Work-in-Process Inventory	(c)	(25,900)	(2,500)
Cost of Goods Manufactured	<u>\$ 51,200</u>	<u>\$ (f)</u>	<u>\$ (i)</u>

(a)

Total Manufacturing Costs to Account For	\$ 55,800
Total Manufacturing Costs Incurred during the Year	(45,300)
Beginning Work-in-Process Inventory	<u>\$ 10,500</u>

(b)

Total Manufacturing Costs Incurred during the Year	\$ 45,300
Direct Materials Used	(14,200)
Direct Labor	(10,800)
Manufacturing Overhead	<u>\$ 20,300</u>

(c)

Total Manufacturing Costs to Account For	\$ 55,800
Cost of Goods Manufactured	(51,200)
Ending Work-in-Process Inventory	<u>\$ 4,600</u>

(d)

Direct Materials Used	\$ 35,200
Direct Labor	20,700
Manufacturing Overhead	<u>10,500</u>

Total Manufacturing Costs Incurred during the Year	<u>\$ 66,400</u>
--	------------------

(e)

Beginning Work-in-Process Inventory	\$ 40,500
Total Manufacturing Costs Incurred during the Year [d, above]	<u>66,400</u>
Total Manufacturing Costs to Account For	<u><u>\$ 106,900</u></u>

(f)

Total Manufacturing Costs to Account For [e, above]	\$ 106,900
Ending Work-in-Process Inventory	<u>(25,900)</u>
Cost of Goods Manufactured	<u><u>\$ 81,000</u></u>

E-M:1-19, cont.

(g)

Total Manufacturing Costs Incurred during the Year [h, below]	\$ 5,200
Direct Labor	(1,400)
Manufacturing Overhead	<u>(300)</u>
Direct Materials Used	<u>\$ 3,500</u>

(h)

Total Manufacturing Costs to Account For	\$ 7,400
Beginning Work-in-Process Inventory	<u>(2,200)</u>
Total Manufacturing Costs Incurred During the Year	<u>\$ 5,200</u>

(i)

Total Manufacturing Costs to Account For	\$ 7,400
Ending Work-in-Process Inventory	<u>(2,500)</u>
Cost of Goods Manufactured	<u>\$ 4,900</u>

E-M:1-20**Preparing a schedule of cost of goods manufactured**

1. COGM: \$432,000

McIntyre Corp., a lamp manufacturer, provided the following information for the year ended December 31, 2025:

Balances:	Beginning	Ending
Direct Materials	\$ 56,000	\$ 23,000
Work-in-Process Inventory	103,000	63,000
Finished Goods Inventory	41,000	48,000
Other information:		
Depreciation, plant building and equipment		\$ 16,000
Direct materials purchases		159,000
Insurance on plant		22,000
Sales salaries		46,000
Repairs and maintenance—plant		8,000
Indirect labor		32,000
Direct labor		122,000
Administrative expenses		59,000

Requirements

1. Use the information to prepare a schedule of cost of goods manufactured.
2. What is the unit product cost if McIntyre Corp. manufactured 2,160 lamps for the year?

Requirement 1

MCINTYRE CORP.		
Schedule of Cost of Goods Manufactured		
Year Ended December 31, 2025		
Beginning Work-in-Process Inventory		\$ 103,000
Direct Materials Used:		
Beginning Direct Materials	\$ 56,000	
Purchases of Direct Materials	159,000	
Direct Materials Available for Use	215,000	
Ending Direct Materials	(23,000)	
Direct Materials Used		\$ 192,000
Direct Labor		122,000

Manufacturing Overhead:		
Depreciation, plant building and equipment	16,000	
Insurance on plant	22,000	
Repairs and maintenance—plant	8,000	
Indirect labor	<u>32,000</u>	
Total Manufacturing Overhead		<u>78,000</u>
Total Manufacturing Costs Incurred During the Year		<u>392,000</u>
Total Manufacturing Costs to Account For		<u>495,000</u>
Ending Work-in-Process Inventory		<u>(63,000)</u>
Cost of Goods Manufactured		<u><u>\$ 432,000</u></u>

Requirement 2

$$\begin{aligned}
 \text{Unit product cost} &= \text{Cost of goods manufactured} / \text{Total units produced} \\
 &= \$432,000 / 2,160 \text{ lamps} \\
 &= \$200 \text{ per lamp}
 \end{aligned}$$

E-M:1-21**Computing cost of goods manufactured and cost of goods sold**

COGM: \$213,000

Use the following information for a manufacturer to compute cost of goods manufactured and cost of goods sold:

Balances:	Beginning	Ending
Direct Materials	\$ 29,000	\$ 32,000
Work-in-Process Inventory	44,000	37,000
Finished Goods Inventory	19,000	24,000
Other information:		
Purchases of direct materials		\$ 77,000
Direct labor		87,000
Manufacturing overhead		45,000

Beginning Work-in-Process Inventory		\$ 44,000
Direct Materials Used:		
Beginning Direct Materials	\$ 29,000	
Purchases of Direct Materials	77,000	
Direct Materials Available for Use	106,000	
Ending Direct Materials	(32,000)	
Direct Materials Used		\$ 74,000
Direct Labor		87,000
Manufacturing Overhead		45,000
Total Manufacturing Costs Incurred During the Year		<u>206,000</u>
Total Manufacturing Costs to Account For		250,000
Ending Work-in-Process Inventory		(37,000)
Cost of Goods Manufactured		<u><u>\$ 213,000</u></u>

Beginning Finished Goods Inventory	\$ 19,000	
Cost of Goods Manufactured	<u>213,000</u>	[above]
Cost of Goods Available for Sale	232,000	
Ending Finished Goods Inventory	(24,000)	
Cost of Goods Sold	<u><u>\$ 208,000</u></u>	

E-M:1-22**Understanding today's business environment**

Match the following terms to the appropriate statement. Some terms may be used more than once, and some terms may not be used at all.

E-commerce	Just-in-time management (JIT)
Enterprise resource planning (ERP)	Total quality management (TQM)

- a. A management system that focuses on maintaining lean inventories while producing products as needed by the customer.
- b. A philosophy designed to integrate all organizational areas in order to provide customers with superior products and services while meeting organizational objectives.
- c. Integrates all of a company's functions, departments, and data into a single system.
- d. Adopted by firms to conduct business on the Internet.

- a. JIT
- b. TQM
- c. ERP
- d. E-Commerce

E-M:1-23**Understanding today's business environment**

Winnebago Industries, Inc. (NYSE: WGO) reports the following items in its 2021 annual report and/or Web site. Match each item to the appropriate triple bottom line component: Profits (economic), People (social), or Planet (environmental). Some components may be used more than once, and some components may not be used at all.

- a. Winnebago Industries, Inc. employees have contributed more than 10,000 volunteer hours in their communities since 2019.
- b. Advanced materials, engine technology, and aerodynamic designs make Winnebago Industries, Inc. motorhomes more energy efficient.
- c. Winnebago Industries, Inc. has established priorities of waste reduction, GHG emissions reduction, water reduction, and product sustainability and has committed to meeting specific goals in each category by 2030.
- d. Winnebago Industries, Inc.'s operating income for the year was \$407 million.

a.	People
b.	Planet
c.	Planet
d.	Profit

E-M:1–24**Calculating income and cost per service provided for a service company**

1. \$9,020

Pet Grooming provides grooming services for pets. In April, the company earned \$16,300 in revenues and incurred the following operating costs to groom 650 dogs:

Wages Expense	\$ 3,900
Grooming Supplies Expense	1,625
Building Rent Expense	1,300
Utilities Expense	325
Depreciation Expense—Equipment	130

Requirements

1. What is Pet Grooming's operating income for April?
2. What is the cost of service to groom one dog?

Requirement 1

Grooming Revenue		\$ 16,300
Expenses:		
Wages Expense	\$ 3,900	
Grooming Supplies Expense	1,625	
Building Rent Expense	1,300	
Utilities Expense	325	
Depreciation Expense—Equipment	130	
Total Expenses		<u>7,280</u>
Operating Income		<u>9,020</u>

Requirement 2

$$\begin{aligned}
 \text{Cost of Service to Groom One Dog} &= \text{Total operating expenses} / \text{Total number of dogs groomed} \\
 &= \$7,280 / 650 \text{ dogs} \\
 &= \$11.20 \text{ per dog}
 \end{aligned}$$

E-M:1-25**Calculating income and cost per unit sold for a merchandising company**

2. \$12.19

Ricardo Brush Company sells standard hair brushes. The following information summarizes Ricardo Brush Company's operating activities for 2025:

Selling and Administrative Expenses	\$ 49,680
Purchases	78,000
Net Sales Revenue	138,000
Merchandise Inventory, January 1, 2025	7,500
Merchandise Inventory, December 31, 2025	12,360

Requirements

1. Calculate the operating income for 2025.
2. Ricardo Brush Company sold 6,000 brushes in 2025. Compute the unit cost for one brush sold.

Requirement 1

Net Sales Revenue		\$ 138,000
Cost of Goods Sold:		
Beginning Merchandise Inventory	\$ 7,500	
Purchases	78,000	
Cost of Goods Available for Sale	85,500	
Ending Merchandise Inventory	(12,360)	
Cost of Goods Sold		73,140
Gross Profit		64,860
Selling and Administrative Expenses		49,680
Operating Income		\$ 15,180

Requirement 2

$$\begin{aligned}
 \text{Unit cost for one brush} &= \text{Cost of goods sold} / \text{Total units sold} \\
 &= \$73,140 / 6,000 \text{ brushes} \\
 &= \$12.19 \text{ per brush}
 \end{aligned}$$

Problems (Group A)

P-M:1-26A

Applying ethical standards

Mercedes Adkins is the new controller for Smart Software, Inc. which develops and sells education software. Shortly before the December 31 fiscal year-end, Sammy Hogan, the company president, asks Adkins how things look for the year-end numbers. He is not happy to learn that earnings growth may be below 13% for the first time in the company's five-year history. Hogan explains that financial analysts have again predicted a 13% earnings growth for the company and that he does not intend to disappoint them. He suggests that Adkins talk to the assistant controller, who can explain how the previous controller dealt with such situations. The assistant controller suggests the following strategies:

- a. Persuade suppliers to postpone billing \$13,000 in invoices until January 1.
- b. Record as sales \$115,000 in certain software awaiting sale that is held in a public warehouse.
- c. Delay the year-end closing a few days into January of the next year so that some of the next year's sales are included in this year's sales.
- d. Reduce the estimated Bad Debts Expense from 5% of Sales Revenue to 3%, given the company's continued strong performance.
- e. Postpone routine monthly maintenance expenditures from December to January.

Requirements

- 1. Which of these suggested strategies are inconsistent with IMA standards?
- 2. How might these inconsistencies affect the company's creditors and stockholders?
- 3. What should Adkins do if Hogan insists that she follow all of these suggestions?

Students' responses will vary. Illustrative answers follow.

Requirement 1

- a. If the goods have been received, postponing recording of the purchases understates liabilities. This is unethical and inconsistent with the IMA standards even if the suppliers agree to delay billing.
- b. The software has not been sold. Therefore, it would be inconsistent with the IMA standards to record it as sales.
- c. Delaying year-end closing incorrectly records next year's sales in this year's sales. This is unethical and inconsistent with the IMA standards.

- d. The appropriate allowance for bad debts is a difficult judgment. The decision should not be driven by the desire to meet a profit goal. It should be based on the likelihood that the company will not collect the debts. We cannot determine this without more information. However, since the company emphasizes earnings growth, which can lead to sales to customers with weaker credit records, reducing the allowance seems questionable. It is not clear whether this strategy is inconsistent with the IMA standards.
- e. If the maintenance is postponed, there is no transaction to record. This strategy is beyond the responsibility of the controller, so it does not violate IMA standards.

Requirement 2

The inconsistencies noted for Smart Software, Inc. particularly impact the financial statement information provided by financial accounting to external users, such as creditors and stockholders. They will be led to believe the operating performance (profitability) of the company is better than it really is. This misrepresentation may result in the investors holding the stock when they may have sold it with the correct information. Similarly, creditors may grant credit to the company with the false income information when they may not grant credit with the correct income information.

Requirement 3

The controller should resist attempts to implement a, b, and c and should gather more information about d. If the President ignores Adkins, then Adkins needs to consider if she wants to work for a company that engages in unethical behavior. Accountants should not be associated with any unethical behavior, and Adkins should resign.

P-M:1-27A

Classifying period costs and product costs

Dahlia, Inc. is the manufacturer of lawn care equipment. The company incurs the following costs while manufacturing weed trimmers:

- Shaft and handle of weed trimmer
- Motor of weed trimmer
- Factory labor for workers assembling weed trimmers
- Nylon thread used by the weed trimmer (not traced to the product)
- Glue to hold the housing together
- Plant janitorial wages
- Depreciation on factory equipment
- Rent on plant
- Sales commissions
- Administrative salaries
- Plant utilities
- Shipping costs to deliver finished weed trimmers to customers

Requirements

1. Describe the difference between period costs and product costs.
2. Classify Dahlia, Inc.’s costs as period costs or product costs. If the costs are product costs, further classify them as direct materials, direct labor, or manufacturing overhead.

Requirement 1

Period costs are non-manufacturing costs that are expensed in the accounting period in which they are incurred.

Product costs are all costs of purchasing or making a product. These costs are recorded as an asset (inventory) on the balance sheet until the asset is sold. The cost is then transferred to an expense account (Cost of Goods Sold) on the income statement. Product costs for a manufacturing company include direct materials, direct labor, and manufacturing overhead.

On the income statement, Cost of Goods Sold (product cost) is subtracted from Net Sales Revenue to determine gross profit. The period costs are then subtracted to determine operating income.

Requirement 2

	Period Cost	Product Cost		
		Direct Materials	Direct Labor	Manufacturing Overhead
Cost:				

Shaft and handle of weed trimmer		X		
Motor of weed trimmer		X		
Factory labor for workers assembling weed trimmers			X	
Nylon thread used by the weed trimmer (not traced to the product)				X
Glue to hold housing together				X
Plant janitorial wages				X
Depreciation on factory equipment				X
Rent on plant				X
Sales commissions	X			
Administrative salaries	X			
Plant utilities				X
Shipping costs to deliver finished weed trimmers to customers	X			

P-M:1-28A**Calculating cost of goods sold for merchandising and manufacturing companies**

3. Company B: \$216,250

Below are data for two companies:

	Company A	Company B
Beginning balances:		
Merchandise Inventory	\$ 10,000	
Finished Goods Inventory		\$ 15,500
Ending balances:		
Merchandise Inventory	12,500	
Finished Goods Inventory		11,750
Net Purchases	156,000	
Cost of Goods Manufactured		212,500

Requirements

1. Define the three business types: service, merchandising, and manufacturing.
2. Based on the data given for the two companies, determine the business type of each one.
3. Calculate the cost of goods sold for each company.

Requirement 1

Service companies sell services rather than products. They sell time, skills, and knowledge. Merchandising companies resell products previously bought from suppliers. Manufacturing companies use labor, equipment, supplies, and facilities to convert raw materials into new finished products.

Requirement 2

Company A is a merchandising company.

Company B is a manufacturing company.

The company types can be determined by the account names in the ledger.

Requirement 3

Company A:

Beginning Merchandise Inventory	\$ 10,000
Purchases (net)	<u>156,000</u>

Cost of Goods Available for Sale	<u>166,000</u>
Ending Merchandise Inventory	<u>(12,500)</u>
Cost of Goods Sold	<u>\$ 153,500</u>

Company B:

Beginning Finished Goods Inventory	\$ 15,500
Cost of Goods Manufactured	<u>212,500</u>
Cost of Goods Available for Sale	<u>228,000</u>
Ending Finished Goods Inventory	<u>(11,750)</u>
Cost of Goods Sold	<u>\$ 216,250</u>

P-M:1-29A**Preparing a schedule of cost of goods manufactured and an income statement for a manufacturing company**

2. Operating income: \$33,900

Baked Bones manufactures its own brand of pet chew bones. At the end of December 2025, the accounting records showed the following:

Balances:	Beginning	Ending
Direct Materials	\$ 13,400	\$ 9,500
Work-in-Process Inventory	0	2,000
Finished Goods Inventory	0	5,300
Other information:		
Direct materials purchases		\$ 33,000
Plant janitorial services		800
Sales salaries		5,000
Delivery costs		1,700
Net sales revenue		109,000
Utilities for plant		2,600
Rent on plant		12,000
Customer service hotline costs		1,400
Direct labor		22,000

Requirements

1. Prepare a schedule of cost of goods manufactured for Baked Bones for the year ended December 31, 2025.
2. Prepare an income statement for Baked Bones for the year ended December 31, 2025.
3. How does the format of the income statement for Baked Bones differ from the income statement of a merchandiser?
4. Baked Bones manufactured 18,075 units of its product in 2025. Compute the company's unit product cost for the year, rounded to the nearest cent.

Requirement 1

BAKED BONES

Schedule of Cost of Goods Manufactured
Year Ended December 31, 2025

Beginning Work-in-Process Inventory		\$ 0
Direct Materials Used:		
Beginning Direct Materials	\$ 13,400	
Purchases of Direct Materials	33,000	
Direct Materials Available for Use	46,400	
Ending Direct Materials	(9,500)	
Direct Materials Used		\$ 36,900
Direct Labor		22,000
Manufacturing Overhead:		
Plant janitorial services	800	
Utilities for plant	2,600	
Rent on plant	12,000	
Total Manufacturing Overhead		15,400
Total Manufacturing Costs Incurred during the Year		74,300
Total Manufacturing Costs to Account For		
		74,300
Ending Work-in-Process Inventory		(2,000)
Cost of Goods Manufactured		<u><u>\$ 72,300</u></u>

P-M:1-29A, cont.
Requirement 2

BAKED BONES
Income Statement
Year Ended December 31, 2025

Net Sales Revenue		\$ 109,000
Cost of Goods Sold:		
Beginning Finished Goods Inventory	\$ 0	
Cost of Goods Manufactured*	72,300	
Cost of Goods Available for Sale	72,300	
Ending Finished Goods Inventory	(5,300)	
Cost of Goods Sold		67,000
Gross Profit		42,000
Selling and Administrative Expenses:		
Sales Salaries Expense	5,000	
Delivery Expense	1,700	
Customer Service Hotline Expense	1,400	
Total Selling and Administrative Expenses		8,100
Operating Income (Loss)		\$ 33,900

* From the Schedule of Cost of Goods Manufactured in Requirement 1.

Requirement 3

For a manufacturing company, cost of goods sold on the income statement is based on cost of goods manufactured and the change in Finished Goods Inventory. For a merchandising company, cost of goods sold on the income statement is based on cost of merchandise purchased (including freight in) and the change in Merchandise Inventory.

Requirement 4

$$\begin{aligned}\text{Unit product cost} &= \text{Cost of goods manufactured} / \text{Total units produced} \\ &= \$72,300 / 18,075 \text{ units} \\ &= \$4.00 \text{ per unit}\end{aligned}$$

P-M:1-30A**Preparing a schedule of cost of goods manufactured and an income statement for a manufacturing company**

COGM: \$168,000

Certain item descriptions and amounts are missing from the monthly schedule of cost of goods manufactured and income statement of Santos Manufacturing Company. Fill in the blanks with the missing words and replace the Xs with the correct amounts.

SANTOS MANUFACTURING COMPANY			
June 30, 2025			
Beginning _____			\$ 22,000
Direct _____			
Beginning Direct Materials	\$	X	
Purchases of Direct Materials		54,000	
_____		80,000	
Ending Direct Materials		(23,000)	
Direct _____	\$	X	
Direct _____		X	
Manufacturing Overhead		43,000	
Total _____ Costs _____			175,000
Total _____ Costs _____			X
Ending _____			(29,000)
_____			\$ X

SANTOS MANUFACTURING COMPANY		
June 30, 2025		
Net Sales Revenue		\$ X
Cost of Goods Sold:		
Beginning	\$ 112,000	
	X	
Cost of Goods	X	
Ending	X	
Cost of Goods Sold		217,000
Gross Profit		283,000
Expenses:		
Selling Expenses	84,000	
Administrative Expenses	X	
Total		159,000
Income		\$ X

SANTOS MANUFACTURING COMPANY
Schedule of Cost of Goods Manufactured
Month Ended June 30, 2025

Beginning <u>Work-in-Process Inventory</u>		\$ 22,000
Direct <u>Materials Used</u> :		
Beginning Direct Materials	\$ 26,000	
Purchases of Direct Materials	54,000	
<u>Direct Materials Available for Use</u>	80,000	
Ending Direct Materials	(23,000)	
Direct <u>Materials Used</u>		57,000
Direct <u>Labor</u>		75,000
Manufacturing Overhead		43,000
Total <u>Manufacturing Costs Incurred During the Month</u>		175,000
Total <u>Manufacturing Costs to Account For</u>		197,000
Ending <u>Work-in-Process Inventory</u>		(29,000)
<u>Cost of Goods Manufactured</u>		<u>\$ 168,000</u>

Missing Amounts:

Beginning Direct Materials

Direct Materials Available for Use	\$ 82,000
Purchases of Direct Materials	<u>(54,000)</u>
Beginning Direct Materials	<u>\$ 26,000</u>

Direct Materials Used:

Direct Materials Available for Use	\$ 80,000
Ending Direct Materials	<u>(23,000)</u>
Direct Materials Used	<u>\$ 57,000</u>

Direct Labor:

Total Manufacturing Costs Incurred During the Month	\$ 175,000
Manufacturing Overhead	(43,000)
Direct Materials Used [calculated above]	<u>(57,000)</u>
Direct Labor	<u>\$ 75,000</u>

P-M:1-30A, cont.

Total Manufacturing Costs to Account For:

Beginning Work-in-Process Inventory	\$ 22,000
Total Manufacturing Costs Incurred During the Month	<u>175,000</u>
Total Manufacturing Costs to Account For	<u><u>\$ 197,000</u></u>

Cost of Goods Manufactured:

Total Manufacturing Costs to Account For [calculated above]	\$ 197,000
Ending Work-in-Process Inventory	<u>(29,000)</u>
Cost of Goods Manufactured	<u><u>\$ 168,000</u></u>

SANTOS MANUFACTURING COMPANY

Income Statement

Month Ended June 30, 2025

Net Sales Revenue	\$ 500,000
Cost of Goods Sold:	
Beginning <u>Finished Goods Inventory</u>	\$ 112,000
<u>Cost of Goods Manufactured</u>	<u>168,000</u>
Cost of Goods <u>Available for Sale</u>	<u>280,000</u>
Ending <u>Finished Goods Inventory</u>	<u>(63,000)</u>
Cost of Goods Sold	<u>217,000</u>
Gross Profit	283,000
<u>Selling and Administrative Expenses:</u>	
Selling Expenses	84,000
Administrative Expenses	<u>75,000</u>
Total <u>Selling and Administrative Expenses</u>	<u>159,000</u>
<u>Operating Income</u>	<u><u>\$ 124,000</u></u>

Missing Amounts:

Net Sales Revenue:

Cost of Goods Sold	\$ 217,000
Gross Profit	<u>283,000</u>
Net Sales Revenue	<u><u>\$ 500,000</u></u>

P-M:1-30A, cont.

Cost of Goods Manufactured:

[From the Schedule of Cost of Goods Manufactured]

Cost of Goods Available for Sale:

Beginning Finished Goods Inventory	\$ 112,000
Cost of Goods Manufactured	<u>168,000</u>
Cost of Goods Available for Sale	<u>\$ 280,000</u>

Ending Finished Goods Inventory:

Cost of Goods Available for Sale [calculated above]	\$ 280,000
Cost of Goods Sold	<u>(217,000)</u>
Ending Finished Goods Inventory	<u>\$ 63,000</u>

Administrative Expenses:

Total Selling and Administrative Expenses	\$ 159,000
Selling Expenses	<u>(94,000)</u>
Administrative Expenses	<u>\$ 65,000</u>

Operating Income:

Gross Profit	\$ 283,000
Total Selling and Administrative Expenses	<u>(159,000)</u>
Operating Income	<u>\$ 124,000</u>

P-M:1-31A**Determining flow of costs through a manufacturer's inventory accounts**

3. \$25,510,000

The Shoe Company makes loafers. During the most recent year, The Shoe Company incurred total manufacturing costs of \$26,400,000. Of this amount, \$2,100,000 was direct materials used and \$19,800,000 was direct labor. Beginning balances for the year were Direct Materials, \$600,000; Work-in-Process Inventory, \$800,000; and Finished Goods Inventory, \$700,000. At the end of the year, balances were Direct Materials, \$900,000; Work-in-Process Inventory, \$1,400,000; and Finished Goods Inventory, \$990,000.

Requirements

Analyze the inventory accounts to determine:

1. Cost of direct materials purchased during the year.
2. Cost of goods manufactured for the year.
3. Cost of goods sold for the year.

Requirement 1

Cost of direct materials purchased:

$$\begin{array}{rcccl} \text{Direct} & & \text{Beginning} & & \text{Purchases of} & & \text{Ending} \\ \text{Materials Used} & = & \text{Direct Materials} & + & \text{Direct Materials} & - & \text{Direct Materials} \end{array}$$

Solving for cost of direct materials purchased:

Purchases of Direct Materials	=	Direct Materials Used	+	Ending Direct Materials	-	Beginning Direct Materials
	=	\$2,100,000	+	\$900,000	-	\$600,000
	=	\$2,400,000				

Requirement 2

Cost of goods manufactured for the year:

Cost of Goods Manufactured	=	Beginning Work-in-Process Inventory	+	Total Manufacturing Costs Incurred	-	Ending Work-in-Process Inventory
	=	\$800,000	+	\$26,400,000	-	\$1,400,000
	=	\$25,800,000				

Requirement 3

Cost of goods sold for the year:

Cost of Goods Sold	=	Beginning Finished Goods Inventory	+	Cost of Goods Manufactured [calculated in 2]	–	Ending Finished Goods Inventory
	=	\$700,000	+	\$25,800,000	–	\$990,000
	=	\$25,510,000				

P-M:1-32A**Preparing an income statement and calculating unit cost for a service company**

2. \$35.36

The Windshield Company repairs chips in car windshields. The company incurred the following operating costs for the month of March 2025:

Salaries and wages	\$ 9,000
Windshield repair materials	4,900
Depreciation on truck	250
Depreciation on building and equipment	800
Supplies used	600
Utilities	2,130

The Windshield Company earned \$26,000 in service revenues for the month of March by repairing 500 windshields. All costs shown are considered to be directly related to the repair service.

Requirements

1. Prepare an income statement for the month of March.
2. Compute the cost per unit of repairing one windshield.
3. The manager of The Windshield Company must keep the unit operating cost below \$50 per windshield in order to earn a bonus. Was the goal met?

Requirement 1

THE WINDSHIELD COMPANY
Income Statement
Month Ended March 31, 2025

Revenues:

Net Service Revenue \$ 26,000

Expenses:

Salaries and Wages Expense	\$ 9,000
Materials Expense	4,900
Depreciation Expense—Truck	250
Depreciation Expense—Building and Equipment	800
Supplies Expense	600
Utilities Expense	2,130

Total Expenses	17,680
Operating Income	<u>\$ 8,320</u>

Requirement 2

$$\begin{aligned}\text{Unit cost} &= \text{Total operating expenses} / \text{Total windshields repaired} \\ &= \$17,680 / 500 \text{ windshields} \\ &= \$35.36 \text{ per windshield}\end{aligned}$$

Requirement 3

Yes. The actual unit cost per windshield of \$35.36 is less than \$50.

P-M:1-33A**Preparing an income statement and calculating unit cost for a merchandising company**

1. Operating income: \$14,950

Kiran Kaiser owns Kiran's Pets, a small retail shop selling pet supplies. On December 31, 2025, the accounting records of Kiran's Pets showed the following:

Merchandise Inventory on December 31, 2025	\$ 10,200
Merchandise Inventory on January 1, 2025	15,100
Net Sales Revenue	57,000
Utilities Expense for the shop	3,900
Rent Expense for the shop	4,100
Sales Commissions	2,150
Purchases of Merchandise Inventory	27,000

Requirements

1. Prepare an income statement for Kiran's Pets for the year ended December 31, 2025.
2. Kiran's Pets sold 4,250 units. Determine the unit cost of the merchandise sold, rounded to the nearest cent.

Requirement 1

KIRAN'S PETS
Income Statement
Year Ended December 31, 2025

Net Sales Revenue		\$ 57,000
Cost of Goods Sold:		
Beginning Merchandise Inventory	\$ 15,100	
Purchases of Merchandise	27,000	
Cost of Goods Available for Sale	42,100	
Ending Merchandise Inventory	(10,200)	
Cost of Goods Sold		31,900
Gross Profit		25,100
Selling and Administrative Expenses:		
Utilities Expense	3,900	
Rent Expense	4,100	
Sales Commission Expense	2,150	
Total Selling and Administrative Expenses		10,150
Operating Income		\$ 14,950

Requirement 2

$$\begin{aligned}\text{Unit cost of items sold} &= \text{Cost of goods sold} / \text{Total units sold} \\ &= \$31,900 / 4,250 \text{ units} \\ &= \$7.51 \text{ per unit (rounded)}\end{aligned}$$

Problems (Group B)

P-M:1-34B

Kia Cooper is the new controller for Halo Software, Inc. which develops and sells education software. Shortly before the December 31 fiscal year-end, Izaak Yates, the company president, asks Cooper how things look for the year-end numbers. He is not happy to learn that earnings growth may be below 9% for the first time in the company's five-year history. Yates explains that financial analysts have again predicted a 9% earnings growth for the company and that he does not intend to disappoint them. He suggests that Cooper talk to the assistant controller, who can explain how the previous controller dealt with such situations. The assistant controller suggests the following strategies:

- a. Persuade suppliers to postpone billing \$18,000 in invoices until January 1.
- b. Record as sales \$120,000 in certain software awaiting sale that is held in a public warehouse.
- c. Delay the year-end closing a few days into January of the next year so that some of the next year's sales are included in this year's sales.
- d. Reduce the estimated Bad Debts Expense from 3% of Sales Revenue to 2%, given the company's continued strong performance.
- e. Postpone routine monthly maintenance expenditures from December to January.

Requirements

1. Which of these suggested strategies are inconsistent with IMA standards?
2. How might these inconsistencies affect the company's creditors and stockholders?
3. What should Cooper do if Yates insists that she follow all of these suggestions?

Students' responses will vary. Illustrative answers follow.

Requirement 1

- a. If the goods have been received, postponing recording of the purchases understates liabilities. This is unethical and inconsistent with the IMA standards even if the suppliers agree to delay billing.
- b. The software has not been sold. Therefore, it would be inconsistent with the IMA standards to record it as sales.
- c. Delaying year-end closing incorrectly records next year's sales in this year's sales. This is unethical and inconsistent with the IMA standards.
- d. The appropriate allowance for bad debts is a difficult judgment. The decision should not be driven by the desire to meet a profit goal. It should be based on the likelihood that the company will not collect the debts. We cannot determine this without more information. However, since the company emphasizes earnings growth, which can lead to sales to customers with weaker credit records, reducing the allowance seems questionable. It is not clear whether this strategy is inconsistent with the IMA standards.

- e. If the maintenance is postponed, there is no transaction to record. This strategy is beyond the responsibility of the controller, so it does not violate IMA standards.

Requirement 2

The inconsistencies noted for Halo Software, Inc. particularly impact the financial statement information provided by financial accounting to external users, such as creditors and stockholders. They will be led to believe the operating performance (profitability) of the company is better than it really is. This misrepresentation may result in the investors holding the stock when they may have sold it with the correct information. Similarly, creditors may grant credit to the company with the false income information when they may not grant credit with the correct income information.

Requirement 3

The controller should resist attempts to implement a, b, and c and should gather more information about d. If the President ignores Cooper, then Cooper needs to consider if she wants to work for a company that engages in unethical behavior. Cooper should not be associated with unethical behavior and should resign.

P-M:1-35B

Georga, Inc. is the manufacturer of lawn care equipment. The company incurs the following costs while manufacturing edgers:

- Handle and shaft of edger
- Motor of edger
- Factory labor for workers assembling edgers
- Lubricant used on bearings in the edger (not traced to the product)
- Glue to hold the housing together
- Plant janitorial wages
- Depreciation on factory equipment
- Rent on plant
- Sales commissions
- Administrative salaries
- Plant utilities
- Shipping costs to deliver finished edgers to customers

Requirements

1. Describe the difference between period costs and product costs.
2. Classify Georga, Inc.'s costs as period costs or product costs. If the costs are product costs, further classify them as direct materials, direct labor, or manufacturing overhead.

Requirement 1

Period costs are non-manufacturing costs that are expensed in the accounting period in which they are incurred.

Product costs are the costs of purchasing or making a product. These costs are recorded as an asset (inventory) on the balance sheet until the asset is sold. The cost is then transferred to an expense account (Cost of Goods Sold) on the income statement. Product costs include direct materials, direct labor, and manufacturing overhead.

On the income statement, Cost of Goods Sold (product cost) is subtracted from Net Sales Revenue to determine gross profit. The period costs are then subtracted from gross profit to determine operating income.

Requirement 2

Cost:	Period Cost	Product Cost		
		Direct Materials	Direct Labor	Manufacturing Overhead

Handle and shaft of edger		X		
Motor of edger		X		
Factory labor for workers assembling edgers			X	
Lubricant used on bearings in the edger (not traced to the product)				X
Glue to hold housing together				X
Plant janitorial wages				X
Depreciation on factory equipment				X
Rent on plant				X
Sales commissions	X			
Administrative salaries	X			
Plant utilities				X
Shipping costs to deliver finished edgers to customers	X			

P-M:1-36B**Calculating cost of goods sold for merchandising and manufacturing companies**

3. Company 2: \$169,500

Below are data for two companies:

	Company 1	Company 2
Beginning balances:		
Merchandise Inventory	\$ 8,000	
Finished Goods Inventory		\$ 12,250
Ending balances:		
Merchandise Inventory	13,000	
Finished Goods Inventory		15,000
Net Purchases	165,000	
Cost of Goods Manufactured		172,250

Requirements

1. Define the three business types: service, merchandising, and manufacturing.
2. Based on the data given for the two companies, determine the business type of each one.
3. Calculate the cost of goods sold for each company.

Requirement 1

Service companies sell services rather than products. They sell time, skills, and knowledge. Merchandising companies resell products previously bought from suppliers. Manufacturing companies use labor, equipment, supplies, and facilities to convert raw materials into new finished products.

Requirement 2

Company 1 is a merchandising company.

Company 2 is a manufacturing company.

The company type can be determined by the account names in the ledger.

Requirement 3

Company 1:

Beginning Merchandise Inventory	\$ 8,000
Purchases (net)	<u>165,000</u>

Cost of Goods Available for Sale	<u>173,000</u>
Ending Merchandise Inventory	<u>(13,000)</u>
Cost of Goods Sold	<u>\$ 160,000</u>

Company 2:

Beginning Finished Goods Inventory	\$ 12,250
Cost of Goods Manufactured	<u>172,250</u>
Cost of Goods Available for Sale	184,500
Ending Finished Goods Inventory	<u>(15,000)</u>
Cost of Goods Sold	<u>\$ 169,500</u>

P-M:1-37B**Preparing a schedule of cost of goods manufactured and an income statement for a manufacturing company**

2. Operating income: \$38,500

Roasted Bones manufactures its own brand of pet chew bones. At the end of December 2025, the accounting records showed the following:

Balances:	Beginning	Ending
Direct Materials	\$ 13,200	\$ 7,000
Work-in-Process Inventory	0	4,000
Finished Goods Inventory	0	5,800
Other information:		
Direct materials purchases		\$ 31,000
Plant janitorial services		200
Sales salaries		5,400
Delivery costs		1,400
Net sales revenue		110,000
Utilities for plant		1,900
Rent on plant		11,000
Customer service hotline costs		1,200
Direct labor		23,000

Requirements

1. Prepare a schedule of cost of goods manufactured for Roasted Bones for the year ended December 31, 2025.
2. Prepare an income statement for Roasted Bones for the year ended December 31, 2025.
3. How does the format of the income statement for Roasted Bones differ from the income statement of a merchandiser?
4. Roasted Bones manufactured 15,400 units of its product in 2025. Compute the company's unit product cost for the year, rounded to the nearest cent.

Requirement 1

ROASTED BONES
Schedule of Cost of Goods Manufactured
Year Ended December 31, 2025

Beginning Work-in-Process Inventory	\$	0
Direct Materials Used:		
Beginning Direct Materials	\$ 13,200	
Purchases of Direct Materials	31,000	
Direct Materials Available for Use	44,200	
Ending Direct Materials	(7,000)	

Direct Materials Used		\$ 37,200
Direct Labor		23,000
Manufacturing Overhead:		
Plant janitorial services	200	
Utilities for plant	1,900	
Rent on plant	<u>11,000</u>	
Total Manufacturing Overhead		<u>13,100</u>
Total Manufacturing Costs Incurred during the Year		<u>73,300</u>
Total Manufacturing Costs to Account For		73,300
Ending Work-in-Process Inventory		<u>(4,000)</u>
Cost of Goods Manufactured		<u><u>\$ 69,300</u></u>

P-M:1-37B, cont.
Requirement 2

ROASTED BONES
Income Statement
Year Ended December 31, 2025

Net Sales Revenue		\$ 110,000
Cost of Goods Sold:		
Beginning Finished Goods Inventory	\$ 0	
Cost of Goods Manufactured*	69,300	
Cost of Goods Available for Sale	69,300	
Ending Finished Goods Inventory	(5,800)	
Cost of Goods Sold		63,500
Gross Profit		46,500
Selling and Administrative Expenses:		
Sales Salaries Expense	5,400	
Delivery Expense	1,400	
Customer Service Hotline Expense	1,200	
Total Selling and Administrative Expenses		8,000
Operating Income (Loss)		\$ 38,500

* From the Schedule of Cost of Goods Manufactured in Requirement 1.

Requirement 3

For a manufacturing company, cost of goods sold on the income statement is based on cost of goods manufactured and the change in Finished Goods Inventory. For a merchandising company, cost of goods sold on the income statement is based on cost of merchandise purchased (including freight in) and the change in Merchandise Inventory.

Requirement 4

Unit product cost = Cost of goods manufactured / Total units produced
 = \$69,300 / 15,400 units
 = \$4.50 per unit (rounded to the nearest cent)

P-M:1-38B**Preparing a schedule of cost of goods manufactured and an income statement for a manufacturing company**

COGM: \$186,000

Certain item descriptions and amounts are missing from the monthly schedule of cost of goods manufactured and income statement of Ashton Manufacturing Company. Fill in the blanks with the missing words and replace the Xs with the correct amounts.

ASHTON MANUFACTURING COMPANY			
June 30, 2025			
Beginning _____			\$ 25,000
Direct _____			
Beginning Direct Materials	\$	X	
Purchases of Direct Materials		57,000	
_____		85,000	
Ending Direct Materials		(22,000)	
Direct _____		\$	X
Direct _____			X
Manufacturing Overhead		45,000	
Total _____ Costs _____			182,000
Total _____ Costs _____			X
Ending _____			(21,000)
_____			\$ X

Purchases of Direct Materials	(57,000)
Beginning Direct Materials	<u>\$ 28,000</u>

Direct Materials Used:

Direct Materials Available for Use	\$ 85,000
Ending Direct Materials	<u>(22,000)</u>
Direct Materials Used	<u>\$ 63,000</u>

Direct Labor:

Total Manufacturing Costs Incurred During the Month	\$ 182,000
Manufacturing Overhead	(45,000)
Direct Materials Used [calculated above]	<u>(63,000)</u>
Direct Labor	<u>\$ 74,000</u>

P-M:1-38B, cont.

Total Manufacturing Costs to Account For:

Beginning Work-in-Process Inventory	\$ 25,000
Total Manufacturing Costs Incurred During the Month	<u>182,000</u>
Total Manufacturing Costs to Account For	<u>\$ 207,000</u>

Cost of Goods Manufactured:

Total Manufacturing Costs to Account For [calculated above]	\$ 207,000
Ending Work-in-Process Inventory	<u>(21,000)</u>
Cost of Goods Manufactured	<u>\$ 186,000</u>

ASHTON MANUFACTURING COMPANY

Income Statement

Month Ended June 30, 2025

Net Sales Revenue		\$ 440,000
Cost of Goods Sold:		
Beginning <u>Finished Goods Inventory</u>	\$ 113,000	
<u>Cost of Goods Manufactured</u>	<u>186,000</u>	
Cost of Goods <u>Available for Sale</u>	<u>299,000</u>	
Ending <u>Finished Goods Inventory</u>	<u>(68,000)</u>	
Cost of Goods Sold		<u>231,000</u>
Gross Profit		209,000
<u>Selling and Administrative Expenses:</u>		
Selling Expenses	93,000	
Administrative Expenses	<u>61,000</u>	
Total <u>Selling and Administrative Expenses</u>		<u>154,000</u>
<u>Operating Income</u>		<u>\$ 55,000</u>

Missing Amounts:

Net Sales Revenue:

Cost of Goods Sold	\$ 231,000
Gross Profit	<u>209,000</u>
Net Sales Revenue	<u>\$ 440,000</u>

P-M:1-38B, cont.

Cost of Goods Manufactured:

[From the Schedule of Cost of Goods Manufactured]

Cost of Goods Available for Sale:

Beginning Finished Goods Inventory	\$ 113,000
Cost of Goods Manufactured	<u>186,000</u>
Cost of Goods Available for Sale	<u>\$ 299,000</u>

Ending Finished Goods Inventory:

Cost of Goods Available for Sale [calculated above]	\$ 299,000
Cost of Goods Sold	<u>(231,000)</u>
Ending Finished Goods Inventory	<u>\$ 68,000</u>

Administrative Expenses:

Total Selling and Administrative Expenses	\$ 154,000
Selling Expenses	<u>(93,000)</u>
Administrative Expenses	<u>\$ 61,000</u>

Operating Income:

Gross Profit	\$ 209,000
Total Selling and Administrative Expenses	<u>(154,000)</u>
Operating Income	<u>\$ 55,000</u>

P-M:1-39B

Determining the flow of costs through a manufacturer's inventory accounts

3. \$22,990,000

The Sneaker Company makes running shoes. During the most recent year, The Sneaker Company incurred total manufacturing costs of \$22,900,000. Of this amount, \$2,800,000 was direct materials used and \$15,800,000 was direct labor. Beginning balances for the year were Direct Materials, \$900,000; Work-in-Process Inventory, \$1,500,000; and Finished Goods Inventory, \$900,000. At the end of the year, balances were Direct Materials, \$800,000; Work-in-Process Inventory, \$1,500,000; and Finished Goods Inventory, \$810,000.

Requirements

Analyze the inventory accounts to determine:

1. Cost of direct materials purchased during the year.
2. Cost of goods manufactured for the year.
3. Cost of goods sold for the year.

Requirement 1

Cost of direct materials purchased during the year:

$$\begin{array}{ccccccc} \text{Direct} & & \text{Beginning} & & \text{Purchases of} & & \text{Ending} \\ \text{Materials Used} & = & \text{Direct Materials} & + & \text{Direct Materials} & - & \text{Direct Materials} \end{array}$$

Solving for cost of direct materials purchased:

Purchases of Direct Materials	=	Direct Materials Used	+	Ending Direct Materials	-	Beginning Direct Materials
	=	\$2,800,000	+	\$800,000	-	\$900,000
	=	\$2,700,000				

Requirement 2

Cost of goods manufactured for the year:

Cost of Goods Manufactured	=	Beginning Work-in-Process Inventory	+	Total Manufacturing Costs Incurred	-	Ending Work-in-Process Inventory
	=	\$1,500,000	+	\$22,900,000	-	\$1,500,000
	=	\$22,900,000				

Requirement 3

Cost of goods sold for the year:

Cost of Goods Sold	=	Beginning Finished Goods Inventory	+	Cost of Goods Manufactured [calculated in 2]	–	Ending Finished Goods Inventory
	=	\$900,000	+	\$22,900,000	–	\$810,000
	=	\$22,990,000				

P-M:1-40B**Preparing an income statement and calculating unit cost for a service company**

2. \$102.35

The Glass Company repairs chips in car windshields. The company incurred the following operating costs for the month of July 2025:

Salaries and wages	\$ 11,000
Windshield repair materials	4,800
Depreciation on truck	550
Depreciation on building and equipment	1,200
Supplies used	300
Utilities	2,620

The Glass Company earned \$23,000 in service revenues for the month of July by repairing 200 windshields. All costs shown are considered to be directly related to the repair service.

Requirements

1. Prepare an income statement for the month of July.
2. Compute the cost per unit of repairing one windshield, rounded to the nearest cent.
3. The manager of The Glass Company must keep the unit operating cost below \$80 per windshield in order to earn a bonus. Was the goal met?

Requirement 1

THE GLASS COMPANY
Income Statement
Month Ended July 31, 2025

Revenues:

Net Service Revenue \$ 23,000

Expenses:

Salaries and Wages Expense \$ 11,000

Materials Expense 4,800

Depreciation Expense—Truck 550

Depreciation Expense—Building and Equipment 1,200

Supplies Expense 300

Utilities Expense 2,620

Total Expenses 20,470

Operating Income \$ 2,530

Requirement 2

Unit cost = Total operating expenses / Total windshields repaired
 = \$20,470 / 200 windshields
 = \$102.35 per windshield

Requirement 3

No. The actual unit cost per windshield of \$102.35 is greater than \$80.

P-M:1-41B**Preparing an income statement and calculating unit cost for a merchandising company**

1. Operating income: \$16,050

Vincenzo Williams owns Vincenzo's Pets, a small retail shop selling pet supplies. On December 31, 2025, the accounting records for Vincenzo's Pets showed the following:

Merchandise Inventory on December 31, 2025	\$ 10,100
Merchandise Inventory on January 1, 2025	15,400
Net Sales Revenue	58,000
Utilities Expense for the shop	3,300
Rent Expense for the shop	4,500
Sales Commissions	2,850
Purchases of Merchandise Inventory	26,000

Requirements

1. Prepare an income statement for Vincenzo's Pets for the year ended December 31, 2025.
2. Vincenzo's Pets sold 3,900 units. Determine the unit cost of the merchandise sold, rounded to the nearest cent.

Requirement 1

VINCENZO'S PETS
Income Statement
Year Ended December 31, 2025

Net Sales Revenue		\$ 58,000
Cost of Goods Sold:		
Beginning Merchandise Inventory	\$ 15,400	
Purchases of Merchandise	26,000	
Cost of Goods Available for Sale	41,400	
Ending Merchandise Inventory	(10,100)	
Cost of Goods Sold		31,300
Gross Profit		26,700
Selling and Administrative Expenses:		
Utilities Expense	3,300	
Rent Expense	4,500	
Sales Commission Expense	2,850	
Total Selling and Administrative Expenses		10,650
Operating Income		<u>\$ 16,050</u>

Requirement 2

$$\begin{aligned}\text{Unit cost of items sold} &= \text{Cost of goods sold} / \text{Total units sold} \\ &= \$31,300 / 3,900 \text{ units} \\ &= \$8.03 \text{ per unit (rounded)}\end{aligned}$$

Critical Thinking

Using Technology

Access and download the complete Using Technology problems (Using Excel and Using Data Visualizations) for this chapter online in MyLab Accounting.

The Using Technology problems and solutions (Using Excel and Using Data Visualizations) are available online in MyLab Accounting.

Continuing Problem M:1-1

This is the first problem in a sequence of problems for Piedmont Computer Company, a manufacturer of personal computers and tablets. During its first month of manufacturing, Piedmont Computer Company incurred the following manufacturing costs:

Balances:	Beginning	Ending
Direct Materials	\$ 10,500	\$ 9,700
Work-in-Process Inventory	0	17,000
Finished Goods Inventory	0	31,000
Other information:		
Direct materials purchases		\$ 16,000
Plant janitorial services		500
Sales salaries expense		10,000
Delivery expense		1,600
Net sales revenue		1,100,000
Utilities for plant		16,000
Rent on plant		9,000
Customer service hotline costs		19,000
Direct labor		210,000

Prepare a schedule of cost of goods manufactured for Piedmont Computer Company for the month ended January 31, 2025.

PIEDMONT COMPUTER COMPANY

Schedule of Cost of Goods Manufactured

Month Ended January 31, 2025

Beginning Work-in-Process Inventory	\$	0
Direct Materials Used:		
Beginning Direct Materials	\$	10,500
Purchases of Direct Materials		16,000
Direct Materials Available for Use		<u>26,500</u>

Ending Direct Materials	<u>(9,700)</u>	
Direct Materials Used		\$ 16,800
Direct Labor		210,000
Manufacturing Overhead:		
Plant janitorial services	500	
Utilities for plant	16,000	
Rent on plant	<u>9,000</u>	
Total Manufacturing Overhead		<u>25,500</u>
Total Manufacturing Costs Incurred during the Month		<u>252,300</u>
Total Manufacturing Costs to Account For		252,300
Ending Work-in-Process Inventory		<u>(17,000)</u>
Cost of Goods Manufactured		<u>\$ 235,300</u>

Tying It All Together Case M:1–1

Before you begin this assignment, review the Tying It All Together feature in the chapter.

Winnebago Industries, Inc. (NYSE: WGO) is a leading manufacturer of recreational vehicles (RVs), including motorized and towable products. The company designs, develops, manufactures, and markets RVs as well as supporting products and services. The RVs are sold to consumers through a dealer network. On the August 28, 2021, balance sheet, Winnebago Industries, Inc. reported inventory of approximately \$341 million. Of this amount, approximately \$12.2 million, about 3.5%, was Finished Goods Inventory (Notes to Consolidated Financial Statements, Note 5 Inventories). Suppose Winnebago Industries, Inc. motor homes have an average sales price of \$140,000 and cost of goods sold is 82% of sales. Suppose a major competitor has an average cost of goods sold of 80% of sales. For year ending August 28, 2021, Winnebago Industries, Inc. sold 10,909 motor homes (Form 10-K, Item 7 Management's Discussion and Analysis of Financial Condition and Results of Operations, Reportable Segment Performance Summary).

Requirements

1. Why would the Finished Goods Inventory be such a relatively small portion of total inventory?
2. What is the average cost of goods sold (in dollars) for a Winnebago Industries, Inc. motor home? What is the average gross profit?
3. If Winnebago Industries, Inc. could reduce production costs so that the average cost of goods sold is equal to their competitor's average cost of goods sold, how much more profit would Winnebago Industries, Inc. earn on each motor home sold?
4. Based on 2021 sales, how much would operating income increase if the company reduced the average cost of goods sold to equal their competitor's average cost of goods sold?
5. How could managers at Winnebago Industries, Inc. use managerial accounting to reduce costs and increase profits?

Requirement 1

Winnebago Industries, Inc.'s finished goods inventory is such a relatively small portion of total inventory because Winnebago Industries, Inc. manufactures the RVs and then sells them to dealerships for resale to consumers. The company does not own or operate dealerships. Therefore, Winnebago Industries, Inc. has a relatively small portion of Finished Goods Inventory. As soon as RVs are complete, Winnebago Industries, Inc. will want to sell them to the dealerships. The majority of Winnebago Industries, Inc.'s inventory is in Raw Materials Inventory that will be used in the manufacturing process and Work-in-Process Inventory of the RVs started but not yet completed.

Requirement 2

Average cost of goods sold = Average sales price $\times$ Cost of goods sold % = $\$140,000 \times 82\% = \$114,800$. Average gross profit = Average sales price – Average cost of goods sold = $\$140,000 - \$114,800 = \$25,200$.

Requirement 3

Average cost of goods sold = Average sales price $\times$ Cost of goods sold % = $\$140,000 \times 80\% = \$112,000$. Average gross profit = Average sales price – Average cost of goods sold = $\$140,000 - \$112,000 = \$28,000$. Profits would increase by $\$2,800$ ($\$28,000 - \$25,200$) per motor home sold.

Requirement 4

Total increase in operating income = Average increase in profits per motor home $\times$ Number of motor homes = $\$2,800$ per motor home $\times 10,909$ motor homes = $\$30,545,200$.

Requirement 5

Managerial accounting provides detailed information on all costs incurred by the company. Managers can use the information provided to analyze different types of costs, such as product costs and period costs, to determine where actual costs exceeded expected costs, and then consider options to reduce those costs.

Decision Case M:1-1

Power Switch, Inc. designs and manufactures switches used in telecommunications. Serious flooding throughout North Carolina affected Power Switch, Inc.'s facilities. Inventory was completely ruined, and the company's computer system, including all accounting records, was destroyed.

Before the disaster recovery specialists clean the buildings, Stephen Plum, the company controller, is anxious to salvage whatever records he can to support an insurance claim for the destroyed inventory. He is standing in what is left of the accounting department with Paul Lopez, the cost accountant.

"I didn't know mud could smell so bad," Paul says. "What should I be looking for?"

"Don't worry about beginning inventory numbers," responds Stephen, "we'll get them from last year's annual report. We need first-quarter cost data."

"I was working on the first-quarter results just before the storm hit," Paul says. "Look, my report is still in my desk drawer. All I can make out is that for the first quarter, direct material purchases were \$476,000 and direct labor, manufacturing overhead, and total manufacturing costs to account for were \$505,000, \$245,000, and \$1,425,000, respectively. Wait! Cost of goods available for sale was \$1,340,000."

"Great," says Stephen. "I remember that sales for the period were approximately \$1,700,000. Given our gross profit of 30%, that's all you should need."

Paul is not sure about that but decides to see what he can do with this information. The beginning inventory numbers were as follows:

- Direct Materials, \$113,000
- Work-in-Process, \$229,000
- Finished Goods, \$154,000

Requirements

1. Prepare a schedule showing each inventory account and the increases and decreases to each account. Use it to determine the ending inventories of Direct Materials, Work-in-Process, and Finished Goods.
2. Itemize a list of the cost of inventory lost.

Requirement 1

Shown in the schedule, below, the ending inventories are: Direct Materials, \$143,000; Work-in-Process Inventory, \$239,000; and Finished Goods Inventory, \$150,000.

POWERSWITCH, INC. Flow of Costs Schedule For the 1st Quarter		
Raw Materials Inventory**	Work-in-Process Inventory	Finished Goods Inventory

Beginning DM	\$ 113,000 *	Beginning WIP Inventory	\$ 229,000 *	Beginning FG Inventory	\$ 154,000 *
+ Purchases of DM	476,000 *	+ Direct Materials Used	446,000 ^e	+ Cost of Goods Manufactured	1,186,000 ^c
		+ Direct Labor	505,000 *		
		+ Manufacturing Overhead	245,000 *		
= Direct Materials Available for Use	589,000	= Total Manufacturing Costs to Account For	1,425,000 *	= Cost of Goods Available for Sale	1,340,000 *
– Ending DM	143,000 ^f	– Ending WIP Inventory	239,000 ^d	– Ending FG Inventory	150,000 ^b
= Direct Materials Used	<u>\$ 446,000 ^e</u>	= Cost of Goods Manufactured	<u>\$ 1,186,000 ^c</u>	= Cost of Goods Sold	<u>\$ 1,190,000 ^a</u>

* Denotes amounts given in the case.

**Direct materials portion only

Calculations for amounts denoted with a superscript letters are provided on the next two pages.

Decision Case M:1-1, cont.Calculations:^a Cost of Goods Sold:

Sales	×	(1 – Gross Profit %)	=	Cost of Goods Sold
\$1,700,000	×	(1 – 30%)	=	\$1,190,000
\$1,700,000	×	70%	=	\$1,190,000

^b Ending Finished Goods Inventory:

Cost of Goods Available for Sale	–	Ending Finished Goods Inventory	=	Cost of Goods Sold
\$1,340,000	–	Ending Finished Goods Inventory	=	\$1,190,000
<i>Therefore:</i>		Ending Finished Goods Inventory	=	\$150,000

^c Cost of Goods Manufactured:

Beginning Finished Goods Inventory	+	Cost of Goods Manufactured	=	Cost of Goods Available for Sale
\$154,000	+	Cost of Goods Manufactured	=	\$1,340,000
<i>Therefore:</i>		Cost of Goods Manufactured	=	\$1,186,000

^d Ending Work-in-Process Inventory:

Total Manufacturing Costs to Account For	–	Ending Work-in-Process Inventory	=	Cost of Goods Manufactured
\$1,425,000	–	Ending Work-in-Process Inventory	=	\$1,186,000
<i>Therefore:</i>		Ending Work-in-Process Inventory	=	\$ 239,000

Decision Case M:1-1, cont.^e Direct Materials Used:

Beginning Work-in-Process Inventory	+	Direct Materials Used	+	Direct Labor	+	Manufacturing Overhead	=	Total Manufacturing Costs to Account For
\$229,000	+	Direct Materials Used	+	\$505,000	+	\$245,000	=	\$1,425,000
<i>Therefore:</i>		Direct Materials Used					=	\$ 446,000

^f Ending Direct Materials:

Direct Materials Available for Use	–	Ending Direct Materials	=	Direct Materials Used
\$589,000	–	Ending Direct Materials	=	\$446,000
<i>Therefore:</i>		Ending Direct Materials	=	\$143,000

Requirement 2

Inventory lost in the flood:

Direct Materials	\$ 143,000
Work-in-Process Inventory	239,000
Finished Goods Inventory	<u>150,000</u>
Total Inventory	<u>\$ 532,000</u>

Ethical Issue M:1-1

Becky Knauer recently resigned from her position as controller for Shamalay Automotive, a small, struggling foreign car dealer in Upper Saddle River, New Jersey. Knauer has just started a new job as controller for Mueller Imports, a much larger dealer for the same car manufacturer. Demand for this particular make of car is exploding, and the manufacturer cannot produce enough to satisfy demand. The manufacturer's regional sales managers are each given a certain number of cars. Each sales manager then decides how to divide the cars among the independently owned dealerships in the region. Because of high demand for these cars, dealerships all want to receive as many cars as they can from the regional sales manager.

Knauer's former employer, Shamalay Automotive, receives only about 25 cars each month. Consequently, Shamalay is not very profitable.

Knauer is surprised to learn that her new employer, Mueller Imports, receives more than 200 cars each month. Knauer soon gets another surprise. Every couple of months, a local jeweler bills the dealer \$5,000 for "miscellaneous services." Franz Mueller, the owner of the dealership, personally approves payment of these invoices, noting that each invoice is a "selling expense." From casual conversations with a salesperson, Knauer learns that Mueller frequently gives Rolex watches to the manufacturer's regional sales manager and other sales executives. Before talking to anyone about this, Knauer decides to work through her ethical dilemma. Put yourself in Knauer's place.

Requirements

1. What is the ethical issue?
2. What are your options?
3. What are the possible consequences?
4. What should you do?

Students' responses will vary. Illustrative answers follow.

- a. The ethical issue facing Knauer is deciding what to do about the owner's gifts to the regional sales managers. Although small "courtesy" gifts are accepted practice in the world of sales, the regular basis and the high value of these items (especially jewelry) suggest that the owner is bribing the sales managers and other sales executives to receive a large allocation of cars.
- b. The options include:
 - (1) Do nothing,
 - (2) Discuss the matter with the owner,
 - (3) Resign if the owner will not stop the practice, or
 - (4) Inform the manufacturer.
- c. The possible consequences include:
 1. If Knauer does nothing, her job and those of the other employees may remain secure for the time being. However, as controller she could be held accountable for laundering a bribe if the scheme became public. A lawsuit brought by other dealers who did not receive a fair share of available cars could name her as an involved party. If Knauer is a CPA, she could also lose her CPA license.

There are also potential tax consequences to consider. Since the jewelry expenditures are being recorded as selling expenses, it is likely that this amount is being deducted on the company's tax return. The IRS limits deductions of gifts to \$25 per person per year. Since a Rolex watch far exceeds the cost of \$25, Knauer's failure to disclose the true nature of the expense may make her liable for underreporting the company's tax liability.

2. If Knauer discusses the matter with the owner, she might find out that there is another side to the story and in fact there is no wrongdoing or ethical dilemma. However, this seems unlikely given the facts. It also seems unlikely that the owner will end this practice since it enhances the dealership's profits. However, Knauer may have some influence on Mueller if she explains the dangers of continuing the bribes. Mueller could be sued by other dealers, or the manufacturer could cancel his dealership. Such outcomes would affect all the dealership's employees, not just Mueller. If Mueller refuses to change his ways, then Knauer is in an even more difficult position because she now has direct knowledge of the bribery.

Ethical Issue M:1-1, cont.

3. By resigning, Knauer loses her job but protects her integrity and avoids being involved in a subsequent action against the dealership if the bribery becomes known.
 4. Perhaps an even more difficult question is whether Knauer should inform the manufacturer about the bribery. If Knauer has not already resigned, Mueller probably would fire her for taking this action.
- d. Accountants should never become party to, or appear to be involved in, an unethical (and possibly illegal) situation such as this. This is especially true for persons with fiduciary responsibilities like a controller. Knauer should discuss her concerns with the owner. If Mueller is indeed bribing the sales representatives and refuses to stop this practice, Knauer should inform the manufacturer, or she should resign.

Communication Activity M:1-1

In 100 words or fewer, explain the difference between product costs and period costs. In your explanation, explain the inventory accounts of a manufacturer.

Period costs are operating costs that are expensed in the same accounting period in which they are incurred, whereas product costs are recorded as an asset and not expensed until the accounting period in which the product is sold. Period costs are all costs not considered product costs.

Manufacturing companies track costs on three kinds of inventory. Raw Materials Inventory includes materials used to manufacture a product. Work-in-Process Inventory includes goods that have been started in the manufacturing process but are not yet complete. Finished Goods Inventory includes completed goods that have not yet been sold.