Solutions Manual for Horngrens Accounting 14th Miller-Nobles

Chapter F:1
Accounting and the Business Environment

Review Questions

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

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

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

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

12. 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. 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 owner's claim 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 business.

14. Equity increases with owner's contributions and revenues. Equity decreases with expenses and owner's withdrawals.

15. 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. 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. 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 Owner's Equity – Shows the changes in owner's capital for a specific period including owner contributions, net income (loss) and owner withdrawals.
Balance Sheet – Shows the assets, liabilities, and owner's 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. Return on Assets = Net income / Average total assets. ROA measures how profitably a company uses its assets.

Short Exercises

S-F:1-1

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

S-F:1-2

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

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

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

a**.** The economic entity assumption
b. The cost principle.
c. The monetary unit assumption.
d. The going concern assumption.

S-F:1-6
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
Requirement 1

ASSETS	=	LIABILITIES	+	EQUITY						
			+	Hilda, Capital	–	Hilda, Withdrawals	+	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

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

S-F:1-9

a. Increase asset (Cash); Increase equity (Service Revenue)
b. Decrease asset (Cash); Decrease equity (Salaries Expense)
c. Increase asset (Cash); Increase Equity (Minx, Capital)
d. Increase asset (Accounts Receivable); Increase equity (Service Revenue)
e. Increase liability (Accounts Payable); Decrease equity (Utility Expense)
f. Decrease asset (Cash); Decrease equity (Minx, Withdrawals)

S-F:1-10

a. Increase asset (Cash); Increase equity (Gomez, Capital)
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 (Gomez, Withdrawals)
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

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

S-F:1-12

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		60,100
Net Income		**$ 13,900**

S-F:1-13

BOARDWALK WEB DESIGN Statement of Owner's Equity Year Ended December 31, 2025	
Feigenbaum, Capital, January 1, 2025	$ 6,000
Owner contribution	4,500
Net income for the year	13,900
	24,400
Owner withdrawal	(3,900)
Feigenbaum, Capital, December 31, 2025	**$ 20,500**

S-F:1-14

BOARDWALK WEB DESIGN Balance Sheet December 31, 2025			
Assets		Liabilities	
Cash	$ 4,700	Accounts Payable	$ 6,800
Accounts Receivable	5,500		
Supplies	2,100	Owner's Equity	
Equipment	15,000	Feigenbaum, Capital	20,500
Total Assets	**$ 27,300**	Total Liabilities and Owner's Equity	**$ 27,300**

S-F:1-15

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 + $1,500)	(4,500)	(6,600)
Net cash provided by operating activities		13,400
Cash flows from investing activities:		
Purchase of equipment	(10,750)	
Net cash used by investing activities		(10,750)
Cash flows from financing activities:		
Owner contribution	8,000	
Owner withdrawal	(5,250)	
Net cash provided by financing activities		2,750
Net increase in cash		5,400
Cash balance, July 1, 2025		12,500
Cash balance, July 31, 2025		**$ 17,900**

S-F:1-16

Return on assets	=	Net income / Average total assets
	=	$30,000 / (($355,000 + $345,000) / 2)
	=	$30,000 / $350,000
	=	8.57%

Exercises

E-F:1-17

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

E-F:1-18

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

E-F:1-19

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

E-F:1-20

	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:1-21

	a.	b.	c.
Owner's equity, May 31, 2025 ($177,000 – $122,000)	$ 55,000	$ 55,000	$ 55,000
Owner contribution	6,000	0	18,000
Net income for the month	**8,000**	**24,000**	**16,000**
	69,000	79,000	89,000
Owner withdrawal	0	(10,000)	(20,000)
Owner's equity, June 30, 2025 ($213,000 – $144,000)	$ 69,000	$ 69,000	$ 69,000

E-F:1-22
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**

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

Requirement 2

a. Increase through owner's contributions
b. Increase through net income.
c. Decrease through owner's withdrawals.
d. Decrease through net loss.

E-F:1-23
Requirement 1

Revenues	–	Expenses	=	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:1-24
Requirement 1

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

Owner's Equity:	
Capital, Jan. 1, 2025	$ 16,000
Plus: Owner contribution	10,000
Plus/Less: Net Income or Net Loss	**20,000**
Less: Owner withdrawal	(29,000)
Capital, Dec. 31, 2025	$ 17,000

Net Income or Net Loss:	
Revenue	$ 242,000
Expenses	**(222,000)**
Net Income	$ 20,000

Requirement 2

Sylvia Company earned net income of $20,000.

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

E-F:1-25

Student responses will vary. Examples include:
a. Cash purchase of supplies.
b. Cash withdrawal by owner.
c. Paid cash on accounts payable.
d. Received cash for services provided.
e. Borrowed cash from the bank.

E-F:1-26

a. Increase asset (Cash); Increase equity (Wolland, Capital)
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:1-27

a. Increase asset (Cash); Increase equity (Yoshino, Capital)
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 (Yoshino, Withdrawals)
j. Increase liability (Accounts Payable); Decrease equity (Utility Expense)

E-F:1-28

Transaction Descriptions:

1. Cash contribution by owner
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:1-29

	ASSETS					=	LIABILITIES	+	EQUITY										
Date	Cash	+	Medical Supplies	+	Land	=	Accounts Payable	+	Floros, Capital	–	Floros, Withdrawals	+	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:1-30
Requirement 1

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

a. Income statement
b. Statement of owner's 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 Owner's Equity:

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

Balance Sheet:

a. 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.
b. Each asset account is listed separately and then totaled. Cash is always listed first.
c. Liabilities are listed separately and then totaled. Liabilities that are to be paid first are listed first.
d. The owner's equity section includes the ending capital from the statement of owner's equity.
e. The balance sheet must always balance: Assets = Liabilities + Equity.

Statement of Cash Flows:

a. 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.
b. Each dollar amount is calculated by evaluating the cash column on the transaction detail.
c. Operating activities involve cash receipts for services provided and cash payments for expenses paid.
d. Investing activities include the purchase and sale of land and equipment for cash.
e. Financing activities include cash from owner contributions and payment of cash for owner withdrawals.
f. The ending cash balance must match the cash balance on the balance sheet.

E-F:1-31
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		**$ 8,750**

Requirement 2

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

E-F:1-32
Requirement 1

STRONG ARMS COACHING Statement of Owner's Equity Month Ended June 30, 2025	
Scherbaum, Capital, June 1, 2025	$ 950
Owner contribution	4,000
Net income for the month	8,750
	13,700
Owner withdrawal	(1,000)
Scherbaum, Capital, June 30, 2025	**$ 12,700**

Requirement 2

The statement of owner's equity reports the changes in owner's capital during a time period.

E-F:1-33
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	9,900
Equipment	13,600	Owner's Equity	
		Scherbaum, Capital	12,700
Total Assets	**$ 22,600**	Total Liabilities and Owner's Equity	**$ 22,600**

Requirement 2

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

E-F:1-34

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		100,600
Net Income		**$ 57,700**

E-F:1-35

RAPID DESIGN STUDIO Statement of Owner's Equity Year Ended December 31, 2025	
Sharpe-Logue, Capital, January 1, 2025	$ 33,300
Owner contribution	15,000
Net income for the year	57,700
	106,000
Owner withdrawal	(54,400)
Sharpe-Logue, Capital, December 31, 2025	**$ 51,600**

E-F:1-36

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	Owner's Equity	
		Sharpe-Logue, Capital	51,600
Total Assets	**$ 65,700**	Total Liabilities and Owner's Equity	**$ 65,700**

E-F:1-37

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

E-F:1-38

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

Cash flows from operating activities:		
Receipts:		
Collections from customers		$ 4,000
Payments:		
To employees	$ (800)	
To suppliers ($1,000 + $250)	(1,250)	(2,050)
Net cash provided by operating activities		1,950
Cash flows from investing activities:		
Purchase of land	(15,000)	
Net cash used by investing activities		(15,000)
Cash flows from financing activities:		
Owner contribution	10,000	
Owner withdrawal	(2,000)	
Net cash provided by financing activities		8,000
Net decrease in cash		(5,050)
Cash balance, January 1, 2025		13,750
Cash balance, January 31, 2025		**$ 8,700**

E-F:1-39

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:1-40

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.

Problems (Group A)

P-F:1-41A

			ASSETS					=	LIABILITIES	+					EQUITY					
	Cash	+	Accounts Receivable	+	Supplies	+	Land	=	Accounts Payable	+	Shumaker, Capital	–	Shumaker, Withdrawals	+	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:1-42A

	ASSETS					=	LIABILITIES	+	EQUITY												
	Cash	+	Accounts Receivable	+	Supplies	=	Accounts Payable	+	Du, Capital	–	Du, Withdrawals	+	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								
5	–200				+200																
Bal.	$24,300			+	$200	=		+	$21,000			+	$3,500								
9			+2,000										+2,000								
Bal.	$24,300	+	$2,000	+	$200	=		+	$21,000			+	$5,500								
10							+300										–300				
Bal.	$24,300	+	$2,000	+	$200	=	$300	+	$21,000			+	$5,500			–	$300				
15	–325																				–325
Bal.	$23,975	+	$2,000	+	$200	=	$300	+	$21,000			+	$5,500			–	$300			–	$325
20	–300						–300														
Bal.	$23,675	+	$2,000	+	$200	=	$ 0	+	$21,000			+	$5,500			–	$300			–	$325
25	+2,000		–2,000																		
Bal.	$25,675	+	$ 0	+	$200	=		+	$21,000			+	$5,500			–	$300			–	$325
28	–4,000														–4,000						
Bal.	$21,675			+	$200	=		+	$21,000			+	$5,500	–	$4,000	–	$300			–	$325
28	–1,250																		–1,250		
Bal.	$20,425			+	$200	=		+	$21,000			+	$5,500	–	$4,000	–	$300	–	$1,250	–	$325
30	+1,800												+1,800								
Bal.	$22,225			+	$200	=		+	$21,000			+	$7,300	–	$4,000	–	$300	–	$1,250	–	$325
31	–5,000										–5,000										
Bal.	$17,225	+	$ 0	+	$200	=	$ 0	+	$21,000	–	$5,000	+	$7,300	–	$4,000	–	$300	–	$1,250	–	$325

P-F:1-43A
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		**$ 86,900**

Requirement 2

WEST COMPANY
Statement of Owner's Equity
Year Ended December 31, 2025

West, Capital, December 31, 2024	$ 54,000
Owner contribution	28,000
Net income for the year	86,900
	168,900
Owner withdrawal	(30,000)
West, Capital, December 31, 2025	**$ 138,900**

P-F:1-43A, 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	Owner's Equity	
		West, Capital	138,900
Total Assets	**$ 183,200**	Total Liabilities and Owner's Equity	**$ 183,200**

P-F:1-44A
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		36,000
Net Income		**$ 44,000**

Part b.

SUPERIOR PHOTOGRAPHY
Statement of Owner's Equity
Year Ended December 31, 2025

Viano, Capital, December 31, 2024	$ 16,000
Owner contribution	29,000
Net income for the year	44,000
	89,000
Owner withdrawal	(13,000)
Viano, Capital, December 31, 2025	**$ 76,000**

Part c.

SUPERIOR PHOTOGRAPHY
Balance Sheet
December 31, 2025

Assets		Liabilities	
Cash	$ 37,000	Accounts Payable	$ 7,000
Accounts Receivable	8,000	Notes Payable	12,000
Equipment	50,000	Total Liabilities	19,000
		Owner's Equity	
		Viano, Capital	76,000
Total Assets	**$ 95,000**	Total Liabilities and Owner's Equity	**$ 95,000**

P-F:1-45A

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	26,900
Land	34,200	Owner's Equity	
Office Furniture	6,100	McBride, Capital	21,100
Total Assets	**$ 48,000**	Total Liabilities and Owner's Equity	**$ 48,000**

P-F:1-46A
Requirement 1

	ASSETS							=	LIABILITIES	+	EQUITY								
	Cash	+	Accounts Receivable	+	Supplies	+	Furniture	=	Accounts Payable	+	Pfister, Capital	–	Pfister, Withdrawals	+	Service Revenue	–	Rent Expense	–	Utilities Expense
5	+50,000										+50,000								
6	–100				+100														
Bal.	$49,900			+	$100			=		+	$50,000								
7							+9,700		+9,700										
Bal.	$49,900			+	$100	+	$9,700	=	$9,700	+	$50,000								
10	+2,000														+2,000				
Bal.	$51,900			+	$100	+	$9,700	=	$9,700	+	$50,000			+	$2,000				
11	–200																		–200
Bal.	$51,700			+	$100	+	$9,700	=	$9,700	+	$50,000			+	$2,000			–	$200
12			+17,000												+17,000				
Bal.	$51,700	+	$17,000	+	$100	+	$9,700	=	$9,700	+	$50,000			+	$19,000			–	$200
18	–1,500																–1,500		
Bal.	$50,200	+	$17,000	+	$100	+	$9,700	=	$9,700	+	$50,000			+	$19,000	–	$1,500	–	$200
25	+17,000		–17,000																
Bal.	$67,200		$ 0	+	$100	+	$9,700	=	$9,700	+	$50,000			+	$19,000	–	$1,500	–	$200
27	–9,700								–9,700										
Bal.	$57,500			+	$100	+	$9,700	=	$ 0	+	$50,000			+	$19,000	–	$1,500	–	$200
30	–1,000												–1,000						
Bal.	$56,500	+	$ 0	+	$100	+	$9,700	=	$ 0	+	$50,000	–	$1,000	+	$19,000	–	$1,500	–	$200

P-F:1-46A, 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		**$ 17,300**

Requirement 2b

ARIELLA PFISTER, CPA
Statement of Owner's Equity
Month Ended April 30, 2025

Pfister, Capital, April 1, 2025	$ 0
Owner contribution	50,000
Net income for the month	17,300
	67,300
Owner withdrawal	(1,000)
Pfister, Capital, April 30, 2025	**$ 66,300**

Requirement 2c

ARIELLA PFISTER, CPA
Balance Sheet
April 30, 2025

Assets		Liabilities	
Cash	$ 56,500		
Supplies	100		
Furniture	9,700	Owner's Equity	
		Pfister, Capital	$ 66,300
Total Assets	**$ 66,300**	Total Liabilities and Owner's Equity	**$ 66,300**

P-F:1-47A
Requirement 1

	ASSETS							=	LIABILITIES	+	EQUITY								
	Cash	+	Accounts Receivable	+	Supplies	+	Computer	=	Accounts Payable	+	Bajaj, Capital	–	Bajaj, Withdrawals	+	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:1-47A, 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		1,320
Net Income		**$ 14,180**

Requirement 2b

BRUCE BAJAJ, ATTORNEY
Statement of Owner's Equity
Month Ended March 31, 2025

Bajaj, Capital, March 1, 2025	$ 0
Owner contribution	89,000
Net income for the month	14,180
	103,180
Owner withdrawal	(2,000)
Bajaj, Capital, March 31, 2025	**$ 101,180**

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	Owner's Equity	
Computer	9,300	Bajaj, Capital	101,180
Total Assets	**$ 110,480**	Total Liabilities and Owner's Equity	**$ 110,480**

P-F:1-47A, 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		
Owner contribution	$ 89,000	
Owner withdrawal	(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)

Problems Group B

P-F:1-48B

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

P-F:1-49B

	ASSETS					=	LIABILITIES	+	EQUITY												
	Cash	+	Accounts Receivable	+	Supplies	=	Accounts Payable	+	Merz, Capital	–	Merz, Withdrawals	+	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:1-50B
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		**$ 81,100**

Requirement 2

SEGURA ACCOUNTING SERVICES Statement of Owner's Equity Year Ended December 31, 2025	
Segura, Capital, December 31, 2024	$ 51,000
Owner contribution	32,000
Net income for the year	81,100
	164,100
Owner withdrawal	(31,000)
Segura, Capital, December 31, 2025	**$ 133,100**

P-F:1-50B, 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	Owner's Equity	
Equipment	17,000	Segura, Capital	133,100
Total Assets	**$ 177,600**	Total Liabilities and Owner's Equity	**$ 177,600**

P-F:1-51B
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		**$ 45,000**

Requirement b

FABULOUS PHOTOS	
Statement of Owner's Equity	
Year Ended December 31, 2025	
Omartian, Capital, December 31, 2024	$ 17,000
Owner contribution	35,000
Net income for the year	45,000
	97,000
Owner withdrawal	(13,000)
Omartian, Capital, December 31, 2025	**$ 84,000**

Requirement c

FABULOUS PHOTOS			
Balance Sheet			
December 31, 2025			
Assets		Liabilities	
Cash	$ 26,000	Accounts Payable	$ 4,000
Accounts Receivable	6,000	Notes Payable	14,000
Equipment	70,000	Total Liabilities	18,000
		Owner's Equity	
		Omartian, Capital	84,000
Total Assets	**$ 102,000**	Total Liabilities and Owner's Equity	**$ 102,000**

P-F:1-52B

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	Owner's Equity	
		Feeney, Capital	12,500
Total Assets	**$ 41,700**	Total Liabilities and Owner's Equity	**$ 41,700**

P-F:1-53B

Requirement 1

	ASSETS				= LIABILITIES +	EQUITY				
	Cash +	Accounts Receivable +	Supplies +	Office Furniture =	Accounts Payable +	Yanagisawa, Capital –	Yanagisawa, Withdrawals +	Service Revenue –	Rent Expense –	Utilities 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:1-53B, 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		2,050
Net Income		**$ 14,950**

Requirement 2b

DARRIN YANAGISAWA, CPA Statement of Owner's Equity Month Ended October 31, 2025	
Yanagisawa, Capital, October 1, 2025	$ 0
Owner contribution	31,000
Net income for the month	14,950
	45,950
Owner withdrawal	(8,000)
Yanagisawa, Capital, October 31, 2025	**$ 37,950**

Requirement 2c

DARRIN YANAGISAWA, CPA Balance Sheet October 31, 2025			
Assets		Liabilities	
Cash	$ 28,250		
Supplies	200		
Office Furniture	9,500	Owner's Equity	
		Yanagisawa, Capital	$ 37,950
Total Assets	**$ 37,950**	Total Liabilities and Owner's Equity	**$ 37,950**

P-F:1-54B
Requirement 1

	ASSETS				= LIABILITIES +	EQUITY				
	Cash	+ Accounts Receivable	+ Supplies	+ Computer	= Accounts Payable	+ Marek, Capital	– Marek, Withdrawals	+ 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:1-54B, 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		**$ 18,020**

Requirement 2b

ALEDA MAREK, ATTORNEY
Statement of Owner's Equity
Month Ended December 31, 2025

Marek, Capital, December 1, 2025	$ 0
Owner contribution	109,000
Net income for the month	18,020
	127,020
Owner withdrawal	(5,000)
Marek, Capital, December 31, 2025	**$ 122,020**

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	Owner's Equity	
		Marek, Capital	122,020
Total Assets	**$ 131,220**	Total Liabilities and Owner's Equity	**$ 131,220**

P-F:1-54B, 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		
Owner contribution	$ 109,000	
Owner withdrawal	(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

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

Continuing Problem-F:1-1
Requirement 1

	ASSETS							=	LIABILITIES					+	EQUITY												
	Cash	+	Accounts Receivable	+	Supplies	+	Canoes	=	Accounts Payable	+	Utilities Payable	+	Telephone Payable	+	Wilson, Capital	–	Wilson, Withdrawals	+	Canoe Rental Revenue	–	Rent Expense	–	Utilities Expense	–	Wages Expense	–	Telephone Expense
1	+16,000														+16,000												
2	–1,200																				–1,200						
Bal.	$14,800							=						+	$16,000					–	$1,200						
3							+4,800		+4,800																		
Bal.	$14,800					+	$4,800	=	$4,800					+	$16,000					–	$1,200						
4					+750				+750																		
Bal.	$14,800				$750	+	$4,800	=	$5,550					+	$16,000					–	$1,200						
7	+1,400																		+1,400								
Bal.	$16,200			+	$750	+	$4,800	=	$5,550					+	$16,000			+	$1,400	–	$1,200						
13	–1,500																								–1,500		
Bal.	$14,700			+	$750	+	$4,800	=	$5,550					+	$16,000			+	$1,400	–	$1,200			–	$1,500		
15	–50																–50										
Bal.	$14,650			+	$750	+	$4,800	=	$5,550					+	$16,000	–	$50	+	$1,400	–	$1,200			–	$1,500		
16											+150												–150				
Bal.	$14,650			+	$750	+	$4,800	=	$5,550	+	$150			+	$16,000	–	$50	+	$1,400	–	$1,200	–	$150	–	$1,500		
20													+175														–175
Bal.	$14,650			+	$750	+	$4,800	=	$5,550	+	$150	+	$175	+	$16,000	–	$50	+	$1,400	–	$1,200	–	$150	–	$1,500	–	$175
22			+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	–1,000								–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	+750		–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	–100																–100										
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		**$ 1,375**

Requirement 3

CANYON CANOE COMPANY
Statement of Owner's Equity
Month Ended November 30, 2025

Wilson, Capital, November 1, 2025	$ 0
Owner contribution	16,000
Net income for the month	1,375
	17,375
Owner withdrawal	(150)
Wilson, Capital, November 30, 2025	**$ 17,225**

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
		Owner's Equity	
		Wilson, Capital	17,225
Total Assets	**$ 22,100**	Total Liabilities and Owner's Equity	**$ 22,100**

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
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
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 owner's 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
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
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
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 mange 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 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.

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	$ 15,550

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 Merchandise Inventory	7,900

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

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	48,000	*(e)*
Cost of Goods Available for Sale	*(b)*	88,000
Ending Merchandise Inventory	(1,900)	(1,900)
Cost of Goods Sold	59,000	*(f)*
Gross Profit	42,000	113,000
Selling and Administrative Expenses	*(c)*	84,000
Operating Income	$ 13,000	$ *(g)*

	Solutions:	Calculations:
(a)	$12,900	$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 [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		$ 9,100

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		38,000
Total Manufacturing Costs to Account For		43,000
Ending Work-in-Process Inventory		(3,000)
Cost of Goods Manufactured		$ 40,000

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	156,000
Cost of Goods Available for Sale	182,000
Ending Finished Goods Inventory	(18,000)
Cost of Goods Sold	$ 164,000

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. **2.** Use of the Internet for business functions such as sales and customer service. Enables companies to reach customers around the world. **3.** Evaluating a company's performance by its economic,	**a.** ERP **b.** JIT **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?

Cost of one haircut = Total operating costs / Total number of haircuts

= [$805 + $1,150 + $184 + $46] / 230 haircuts

= $2,185 / 230 haircuts

= $9.50 per haircut

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		22
Gross Profit		15
Selling and Administrative Expenses:		
Selling Expenses	$ 5	
Administrative Expenses	4	
Total Selling and Administrative Expenses		9
Operating Income		$ 6

Company B (all amounts in millions):

Service Revenue		$ 40
Expenses:		
Wages Expense	$ 19	
Rent Expense	12	
Total Expenses		31
Operating Income		$ 9

Company C (all amounts in millions):

Net Sales Revenue		$ 35
Cost of Goods Sold		20
Gross Profit		15
Selling and Administrative Expenses:		

Selling Expenses	$ 3	
Administrative Expenses	5	
Total Selling and Administrative Expenses		8
Operating Income		$ 7

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	$ 33

Company B (all amounts in millions):

Cash	$ 15
Accounts Receivable	8
Total current assets	$ 23

Company C (all amounts in millions):

Cash	$ 12
Accounts Receivable	15
Merchandise Inventory	10
Total current assets	$ 37

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	$ 51,200	$ *(f)*	$ *(i)*

(a)

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

(b)

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

(c)

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

(d)

Direct Materials Used	$ 35,200
Direct Labor	20,700
Manufacturing Overhead	10,500

Total Manufacturing Costs Incurred during the Year	$ 66,400

(e)

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

(f)

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

E-M:1-19, cont.

(g)

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

(h)

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

(i)

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

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	32,000		
Total Manufacturing Overhead		78,000	
Total Manufacturing Costs Incurred During the Year			392,000
Total Manufacturing Costs to Account For			495,000
Ending Work-in-Process Inventory			(63,000)
Cost of Goods Manufactured			$ 432,000

Requirement 2

Unit product cost = Cost of goods manufactured / Total units produced

= $432,000 / 2,160 lamps

= $200 per lamp

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			206,000
Total Manufacturing Costs to Account For			250,000
Ending Work-in-Process Inventory			(37,000)
Cost of Goods Manufactured			$ 213,000

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

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		7,280
Operating Income		9,020

Requirement 2

Cost of Service to Groom One Dog = Total operating expenses / Total number of dogs groomed
= $7,280 / 650 dogs
= $11.20 per dog

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

Unit cost for one brush	=	Cost of goods sold / Total units sold
	=	$73,140 / 6,000 brushes
	=	$12.19 per brush

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		
Cost:		**Direct Materials**	**Direct Labor**	**Manufacturing Overhead**

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)	156,000

Cost of Goods Available for Sale	166,000
Ending Merchandise Inventory	(12,500)
Cost of Goods Sold	$ 153,500

Company B:

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

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			$ 72,300

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

Unit product cost	=	Cost of goods manufactured / Total units produced
	=	$72,300 / 18,075 units
	=	$4.00 per unit

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

Missing Amounts:

Beginning Direct Materials

Direct Materials Available for Use	$ 82,000
Purchases of Direct Materials	(54,000)
Beginning Direct Materials	$ 26,000

Direct Materials Used:

Direct Materials Available for Use	$ 80,000
Ending Direct Materials	(23,000)
Direct Materials Used	$ 57,000

Direct Labor:

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

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	175,000
Total Manufacturing Costs to Account For	$ 197,000

Cost of Goods Manufactured:

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

SANTOS MANUFACTURING COMPANY
Income Statement
Month Ended June 30, 2025

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

Missing Amounts:

Net Sales Revenue:

Cost of Goods Sold	$ 217,000
Gross Profit	283,000
Net Sales Revenue	$ 500,000

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	168,000
Cost of Goods Available for Sale	$ 280,000

Ending Finished Goods Inventory:

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

Administrative Expenses:

Total Selling and Administrative Expenses	$ 159,000
Selling Expenses	(94,000)
Administrative Expenses	$ 65,000

Operating Income:

Gross Profit	$ 283,000
Total Selling and Administrative Expenses	(159,000)
Operating Income	$ 124,000

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:

Direct Materials Used	=	Beginning Direct Materials	+	Purchases of Direct Materials	–	Ending Direct Materials

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		Ending Finished Goods Inventory
	=	$700,000	+	$25,800,000 [calculated in 2]	–	$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		$ 8,320

Requirement 2

Unit cost	=	Total operating expenses / Total windshields repaired
	=	$17,680 / 500 windshields
	=	$35.36 per windshield

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

Unit cost of items sold	=	Cost of goods sold / Total units sold
	=	$31,900 / 4,250 units
	=	$7.51 per unit (rounded)

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

		Product Cost		
Cost:	**Period 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)	165,000

Cost of Goods Available for Sale	173,000
Ending Merchandise Inventory	(13,000)
Cost of Goods Sold	$ 160,000

Company 2:

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

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	11,000		
Total Manufacturing Overhead		13,100	
Total Manufacturing Costs Incurred during the Year			73,300
Total Manufacturing Costs to Account For			73,300
Ending Work-in-Process Inventory			(4,000)
Cost of Goods Manufactured			$ 69,300

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

ASHTON MANUFACTURING COMPANY		
____________________		
____________ June 30, 2025		
Net Sales Revenue		$ X
Cost of Goods Sold:		
Beginning ____________	$ 113,000	
____________	X	
Cost of Goods ____________	X	
Ending ____________	X	
Cost of Goods Sold		231,000
Gross Profit		209,000
____________ Expenses:		
Selling Expenses	93,000	
Administrative Expenses	X	
Total ____________		154,000
____________ Income		$ X

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

Beginning Work-in-Process Inventory			$ 25,000
Direct Materials Used:			
Beginning Direct Materials	$ **28,000**		
Purchases of Direct Materials	57,000		
Direct Materials Available for Use	85,000		
Ending Direct Materials	(22,000)		
Direct Materials Used		$ **63,000**	
Direct Labor		**74,000**	
Manufacturing Overhead		45,000	
Total Manufacturing Costs Incurred During the Month			182,000
Total Manufacturing Costs to Account For			**207,000**
Ending Work-in-Process Inventory			(21,000)
Cost of Goods Manufactured			$ **186,000**

Missing Amounts:

Beginning Direct Materials:

Direct Materials Available for Use	$ 85,000

Purchases of Direct Materials	(57,000)
Beginning Direct Materials	$ 28,000

Direct Materials Used:

Direct Materials Available for Use	$ 85,000
Ending Direct Materials	(22,000)
Direct Materials Used	$ 63,000

Direct Labor:

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

Total Manufacturing Costs to Account For:

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

Cost of Goods Manufactured:

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

ASHTON MANUFACTURING COMPANY
Income Statement
Month Ended June 30, 2025

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

Missing Amounts:

Net Sales Revenue:

Cost of Goods Sold	$ 231,000
Gross Profit	209,000
Net Sales Revenue	$ 440,000

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	186,000
Cost of Goods Available for Sale	$ 299,000

Ending Finished Goods Inventory:

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

Administrative Expenses:

Total Selling and Administrative Expenses	$ 154,000
Selling Expenses	(93,000)
Administrative Expenses	$ 61,000

Operating Income:

Gross Profit	$ 209,000
Total Selling and Administrative Expenses	(154,000)
Operating Income	$ 55,000

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:

Direct Materials Used	=	Beginning Direct Materials	+	Purchases of Direct Materials	–	Ending Direct Materials

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		Ending Finished Goods Inventory
	=	$900,000	+	$22,900,000 [calculated in 2]	–	$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		$ 16,050

Requirement 2

Unit cost of items sold	=	Cost of goods sold / Total units sold
	=	$31,300 / 3,900 units
	=	$8.03 per unit (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.

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	26,500	

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

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 × Cost of goods sold % = $140,000 × 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 × Cost of goods sold % = $140,000 × 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 × Number of motor homes = $2,800 per motor home × 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	$ 446,000 [e]	= Cost of Goods Manufactured	$ 1,186,000 [c]	= Cost of Goods Sold	$ 1,190,000 [a]

* 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
Therefore:		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
Therefore:		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
Therefore:		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
Therefore:				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
Therefore:		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	150,000
Total Inventory	$ 532,000

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.

Chapter 1

Accounting and the Business Environment

Chapter 1: Overview

The chapter begins with an introduction to accounting and a brief discussion of why accounting is important. The differences between financial and managerial accounting are delineated. The text discusses how accounting information is needed by various users—individuals, businesses, investors, creditors, and taxing authorities. Reasons accounting is important to students not majoring in accounting and career paths available to accounting majors are briefly described, including a comparison of various accounting positions. The role of governing organizations such as the Financial Accounting Standards Board (FASB) and the Securities and Exchange Commission (SEC) as well as the FASB's relationships with both congressionally created and private accounting groups are explained. Generally Accepted Accounting Principles (GAAP) are introduced. The sole proprietorship, partnership, corporation, and limited liability company (LLC) forms of business are briefly described in the context of the economic entity assumption. In addition, the cost principle, going concern assumption, and monetary unit assumption are explained. The nature of International Financial Reporting Standards (IFRS) and the role of the International Accounting Standards Board (IASB) in their development are explained. The role of ethics in accounting and business is described. The U.S. government's passing of the Sarbanes-Oxley Act (SOX) and the creation of the Public Company Accounting Oversight Board (PCAOB) are presented. A Data Analytics in Accounting feature highlights the importance of data analytics skills for accountants.

The next section of the chapter introduces the accounting equation: Assets = Liabilities + Equity. Each element of the accounting equation is defined. Nine basic business transactions are analyzed, and their impact on the accounting equation is discussed. The financial statements—income statement, statement of owner's equity, balance sheet, and statement of cash flows—are illustrated. The interrelationship of the financial statements is emphasized.

A Tying It All Together feature poses four questions regarding a company's asset, liability, revenue, and expense accounts and the proper financial statement reporting for each. Financial statements and return on assets (ROA) are used to evaluate business performance. An additional question asks students to evaluate the impact COVID-19 has had on a corporation's recent financial statements. A Decisions feature helps students see how financial statements and ROA can be used to make real-world decisions. The Review section includes Things You Should Know which highlights the information students should have acquired from the chapter. A Check Your Understanding feature allows students to record the effects of transactions on the accounting equation, prepare financial statements, and calculate ROA. A list of Key Terms is provided. A Quick Check gives students a chance to assess their knowledge of the chapter learning objectives.

Chapter 1: Learning Objectives

LO 1. Explain why accounting is important and list the users of accounting information

LO 2. Describe the organizations and rules that govern accounting

LO 3. Describe the accounting equation and define assets, liabilities, and equity

LO 4. Use the accounting equation to analyze transactions

LO 5. Prepare financial statements

LO 6. Use financial statements and return on assets (ROA) to evaluate business performance

Chapter 1: Teaching Outline with Lecture Notes

LO 1. Explain why accounting is important and list the users of accounting information

a) Define the term *accounting* and explain what accountants do

b) Exhibit F:1-1: Pathways Vision Model

Lecture Notes: The model emphasizes that good decisions have an impact on accounting judgments and economic activity, thus creating a circular flow of cause and effect. Accounting is defined as the information system that measures business activities, processes the information into reports, and communicates the results to decision makers. However, accountants do not simply prepare various types of accounting reports and tax returns. They also review and interpret business information using critical thinking and judgment to partner with clients and managers to help them make better business decisions.

c) Differentiate between financial accounting and managerial accounting

d) Exhibit F:1-2: Decision Making: Financial Versus Managerial Accounting

Lecture Notes: Financial accounting provides historical information—the company reports on events that have already occurred—to external decision makers, including investors and creditors. Managerial accounting provides more future-oriented information—many companies prepare budgets, forecasts, and projections based on future events—for internal decision makers (company managers and executives).

e) Identify the users of accounting information:

i. Individuals

ii. Businesses

iii. Investors

iv. Creditors

v. Taxing authorities

Lecture Notes: The officers of a company may be (and probably are) owners as well. Not all investors are "outside" the company. The financial statements are the primary tools for providing information to outside investors; but officers may also use the statements, along with other financial information, to manage the company on a day-to-day basis.

f) Describe career options and certifications available in the accounting profession

Lecture Notes: Certified Public Accountants, or CPAs, are licensed professional accountants who serve the general public. Certified Management Accountants, or CMAs, are certified professionals who specialize in accounting and financial management knowledge. Not all accountants are licensed, and those who are may not necessarily be members of the AICPA and IMA, the professional associations described in the textbook. There are many other types of accounting-related associations and certifications in the United States and elsewhere around the world, including Certified Internal Auditor (CIA), Certified Government Financial Manager (CGFM), Certified Fraud Examiner (CFE), Certified Financial Manager (CFM), Enrolled Agent (EA), Certified Global Management Accountant (CGMA), Chartered Accountant (CA), Certified Financial Planner (CFP), and many more.

Accountants also need data analytics skills to be successful. An understanding of how technology is used to process financial information is critical in today's job market.

g) Exhibit F:1-3: Comparison of Accounting Positions

Suggested In-Class Exercise: E-F 1-17

LO 2. Describe the organizations and rules that govern accounting

a) Identify accounting governing organizations, including the Financial Accounting Standards Board (FASB), the Security Exchange Commission (SEC), and the International Accounting Standards Board (IASB)

b) Describe Generally Accepted Accounting Principles (GAAP) and introduce the primary objective of financial reporting

c) Explain the economic entity assumption

   i. Identify the different types of business organizations:

      - Sole proprietorship
      - Partnership
      - Corporation
      - Limited-liability company (LLC)

   ii. Exhibit F:1-4: Business Organizations

d) Explain the cost principle

e) Explain the going concern assumption

Lecture Note: Point out to students that if it is known that a company should not be considered a going concern, different accounting rules from those covered in this course apply to that company.

f) Explain the monetary unit assumption

Lecture Note: Point out to students that an implication of the monetary unit assumption is that business activities that cannot be expressed in monetary units are not represented within the financial statements. For example, a company with a well-trained workforce, talented managers, a good reputation with customers, and innovative research and development has important assets that are not represented on the balance sheet.

g) Describe International Financial Reporting Standards (IFRS)

h) Ethics in accounting and business

   i. Sarbanes-Oxley Act (SOX)

   ii. Public Company Accounting Oversight Board (PCAOB)

Lecture Notes: Not all accounting information and financial statements are publicly available; such information is disclosed by public companies only. Company size is not a determinant of public ownership; some large companies are still privately held. All companies, public and private, can follow GAAP. However, this may not be a requirement for private companies. Private companies can use other bases of accounting, such as the cash basis, unless GAAP is required due to an audit. There is also a difference between record keeping and financial statement preparation. Companies can keep their accounting records on another basis and convert the financial statements to GAAP. For example, small private companies may use the cash basis for record keeping and convert to the accrual basis for financial statement preparation.

The Sarbanes-Oxley Act and the PCAOB relate to public companies. As a rule, public companies are more regulated (in terms of accounting information) than private companies. Some companies are now going private; one reason for doing so may be to reduce the compliance cost associated with these additional regulations.

Although much has been written and discussed about the possibility of convergence of U.S. GAAP and IFRS, complete convergence appears to be increasingly unlikely. The SEC previously announced a policy dedicated to investigating endorsement of IFRS, but political winds now seem to be shifting. Furthermore, standard setting paths of FASB and IASB sometimes converge, as in recent development of unified revenue recognition standards, but sometimes fail to converge, as in recent issuance of very different guidance on leases. For now, U.S. GAAP continues to be different in many respects from IFRS, a condition which seems likely to continue for the foreseeable future, although efforts to increase similarities also continue to meet with some degree of success.

Suggested In-Class Exercise: E-F 1-18

LO 3. Describe the accounting equation and define assets, liabilities, and equity

a) The accounting equation: Assets = Liabilities + Equity

b) Define assets

c) Define liabilities

d) Define equity

Lecture Notes: The accounting equation must always balance. Demonstrate that the accounting equation always balances, not just at the beginning of the year (or any accounting period). During the year, the change in assets equals the change in liabilities plus the change in equity. At the end of the year, the new values of the accounting equation will balance.

Beginning of Year	Assets =	Liabilities +	Equity
During the Year	Δ Assets =	Δ Liabilities +	Δ Equity
End of Year	New Assets =	New Liabilities +	New Equity

Suggested In-Class Exercise: E-F 1-21

LO 4. Use the accounting equation to analyze transactions

a) Transaction analysis for Smart Touch Learning

i. Transaction 1—Owner contribution

ii. Transaction 2—Purchase of land for cash

iii. Transaction 3—Purchase of office supplies on account

iv. Transaction 4—Earning of service revenue for cash

v. Transaction 5—Earning of service revenue on account

vi. Transaction 6—Payment of expenses with cash

vii. Transaction 7—Payment on account (Accounts Payable)

viii. Transaction 8—Collection on account (Accounts Receivable)

ix. Transaction 9—Owner withdrawal of cash

b) Exhibit F:1-5: Analysis of Transactions, Smart Touch Learning

Lecture Notes: Every basic transaction always affects at least two accounts. Becoming familiar with each of the nine basic transactions and the two accounts affected by each will promote development of students' transaction analysis skills. Demonstrate the following transaction analysis process for each transaction:

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

When this process is applied correctly, the accounting equation will always balance. Thus, for all transactions that occur during the year:

During the Year	Δ Assets =	Δ Liabilities +	Δ Equity

Note that every transaction affects the balance sheet in some way—increasing or decreasing an asset, liability, or equity account—but may or may not affect another financial statement. Remind students that there are four kinds of equity accounts: owner's capital, owner's withdrawals, revenues, and expenses. Thus, there are four ways that equity can change during the year:

<table>
<tr><td rowspan="4">During the Year</td><td rowspan="4">Δ Assets =</td><td rowspan="4">Δ Liabilities</td><td>+ Owner's Capital</td></tr>
<tr><td>+ Revenues</td></tr>
<tr><td>− Expenses</td></tr>
<tr><td>−Owner's Withdrawals</td></tr>
</table>

Also, it may be helpful to point out that some transactions affect only one side of the accounting equation (left or right), yet the accounting equation still balances. For example, when a company purchases supplies with cash, one asset increases and another asset decreases—with no effect on liabilities and equity. Thus, the accounting equation balances.

Suggested In-Class Exercise: E-F 1-27

LO 5. Prepare financial statements

a) Exhibit F:1-6: Financial Statements

i. Exhibit F:1-7: Income Statement

ii. Exhibit F:1-8: Statement of Owner's Equity

iii. Exhibit F:1-9: Balance Sheet

iv. Exhibit F:1-10: Statement of Cash Flows

Lecture Notes: Each of the financial statements required by GAAP focuses on a different aspect of the company's financial position or financial activity. All four statements should be completed and analyzed in order to get a complete picture of a company. Emphasize the links between the statements.

The income statement shows the change in equity that results from the operation of the business during the year and is prepared first. The owner's equity statement shows the change in equity from profits earned less owner's withdrawals during the year and is prepared second. Balance sheets show the financial position of the company at specific points in time and is prepared third. The statement of cash flows explains the change in Cash in relation to everything else that changed during the year and is the final statement to be prepared.

Each financial statement should have a company name, a statement title, and some form of date. The income statement tracks profitability—revenues minus expenses. Remember that "profit" doesn't necessarily mean "money"; the profit may not have been collected in cash yet. The statement of owner’s equity shows the changes in capital for a business entity over a period of time. As profits increase, owner’s equity will increase; as withdrawals are paid, profits remaining in the business will decrease. The balance sheet shows the financial position of the company at a specific point in time, such as at the end of the year. The balance sheet will probably change the day after it is prepared. All the other financial statements describe what happened to the company *during* the year. The statement of cash flows describes how the balance of the Cash account changed in relation to changes in other assets, liabilities, and all the components of equity.

Financial position (the balance sheet) is different from profitability (the income statement). A company could be very profitable and do a terrible job of managing its profits or vice versa. Students probably know a person who is like this. Some people have high income levels and end up with very little net worth because they do not manage their finances effectively. On the other hand, some people have modest income levels and do a very good job of managing their finances.

The statement of cash flows shows how the company is generating and using its cash. Students may have heard the phrase “cash is king.” A company must have cash to pay its outstanding bills. Some recent accounting fraud cases involved companies that reported great profits but no corresponding cash flow—a possible red flag!

Net income and cash flow are separate concepts; neither is always positive. A company could have net income and negative cash flow in one year, and then the company could have a net loss and positive cash flow in another year. Many creditors will focus on cash flow in order to determine whether a company can generate cash in order to pay back any outstanding liabilities.

The owner’s equity balance does not represent the balance in the Cash account. Students sometimes think the owner can simply make withdrawals from profits earned at any given time. However, the income included in owner’s equity is based on accrual accounting and may not yet have been collected in cash. In addition, some items that have been paid in cash may not be included in net income until some future period.

Suggested In-Class Exercises: E-F 1-31, E-F 1-32, E-F 1-33

LO 6. Use financial statements and return on assets (ROA) to evaluate business performance

a) Review financial statements of Kohl’s Corporation.
(see http://www.pearsonhighered.com/Horngren)

b) Explain return on assets (ROA)

Lecture Notes: Information presented in the financial statements is largely based on historical cost—the cost principle. The balance sheet values of major assets such as land, buildings, and equipment are based on the historical cost of those assets and may not represent their fair market value. For example, land purchased 10 years ago is likely to be worth more than the original cost, but it would still be valued on the balance sheet at original cost. This difference between the fair market value and the balance sheet value is sometimes called “hidden assets.” How are the “true” values of a company’s assets determined? One could have them appraised, but even then, the current fair market value of assets does not represent the value of the company as a whole. Don’t forget about subtracting liabilities! But, of course, even then the resulting value of owner’s equity (fair market value of all the assets minus liabilities) does not necessarily represent the true market value of the company as a whole.

Return on assets measures how well a company uses its assets to generate profits. It is calculated by dividing net income by average total assets. Average total assets is calculated by adding the beginning and ending total assets for the time period and then dividing by two.

Suggested In-Class Exercise: E-F 1-27

Chapter 1: Handout for Student Notes

LO 1. Why is accounting important?

- Decision makers: The users of accounting information
  - Individuals
  - Businesses
  - Investors
  - Creditors
  - Taxing authorities
- Accounting matters

LO 2. What are the organizations and rules that govern accounting?

- Governing organizations
- Generally Accepted Accounting Principles (GAAP)
- The economic entity assumption
- The cost principle

- The going concern assumption
- The monetary unit assumption
- International Financial Reporting Standards
- Ethics in accounting and business

LO 3. What is the accounting equation?

- Assets
- Liabilities
- Equity

LO 4. How do you analyze a transaction?

- Transaction analysis for Smart Touch Learning
    - Transaction 1—Owner contribution
    - Transaction 2—Purchase of land for cash
    - Transaction 3—Purchase of office supplies on account

- Transaction 4—Earning of service revenue for cash
- Transaction 5—Earning of service revenue on account
- Transaction 6—Payment of expenses with cash
- Transaction 7—Payment on account (Accounts Payable)
- Transaction 8—Collection on account (Accounts Receivable)
- Transaction 9—Owner withdrawal of cash

LO 5. How do you prepare financial statements?

- Income statement
- Statement of owner's equity
- Balance sheet
- Statement of cash flows

LO 6. How do you use financial statements to evaluate business performance?

- Kohl's Corporation
  (see http://www.pearsonhighered.com/Horngren)

- Return on assets (ROA)

Chapter 1: Student Chapter Summary

LO 1. Explain why accounting is important and list the users of accounting information

Accounting is the language of business. Financial accounting is used by a variety of decision makers outside the company, including individuals, businesses, investors, creditors, and taxing authorities, while managerial accounting is directed to decision makers inside the company. All businesses need accountants. Accountants work in public accounting, private accounting, and governmental accounting jobs. Accountants can be licensed as a Certified Public Accountant (CPA), Certified Global Management Accountant (CGMA), or Certified Management Accountant (CMA), or Certified Financial Planner (CFP). Further, non-accountant business professionals require accounting knowledge as well, as they regularly utilize accounting information to make business decisions.

LO 2. Describe the organizations and rules that govern accounting

The rules that govern accounting are called Generally Accepted Accounting Principles (GAAP). The Financial Accounting Standards Board (FASB) is responsible for the creation and governance of U.S. GAAP. The Securities and Exchange Commission (SEC) oversees the U.S. financial markets and other standard setters, such as the FASB.

A thorough understanding of GAAP is essential to the use and preparation of financial statements. The primary objective of financial reporting is to provide information useful for making investment and credit decisions. Financial statement information must be relevant and have faithful representation to be considered useful. Relevant information is timely and is capable of making a difference in the user's decision. Information is faithfully representative when it is complete, neutral, and free from material error.

Four accounting principles are introduced. The economic entity assumption requires that the subject of a set of accounting financial statements is a single economic unit separate and distinct from its owners and from other economic units. The cost principle requires that transactions record acquisition of assets and services at their actual cost. The going concern assumption specifies that financial reporting should presume the entity will remain in operation for the foreseeable future. The monetary unit assumption requires that only economic events that can be measured in monetary units are represented in the financial statements.

LO 3. Describe the accounting equation and define assets, liabilities, and equity

The fundamental relationship on which all accounting is based is represented by the accounting equation: Assets = Liabilities + Equity. Assets are economic resources with future benefits. Liabilities are obligations owed to others. Equity represents the residual value of the assets left over after obligations represented by the liabilities are fulfilled.

LO 4. Use the accounting equation to analyze transactions

Transactions are economic events that affect the financial position of the company and can be measured reliably. Basic transactions affect at least two accounts. Transactions are analyzed in three steps:

Step 1. Identify the accounts and the account type (Asset, Liability, or Equity).
Step 2. Decide whether each account increases or decreases.
Step 3. Determine whether the accounting equation is in balance.

LO 5. Prepare financial statements

Four financial statements are prepared for each accounting period. The income statement reports net income or net loss, calculated as revenues earned minus expenses incurred, for a specific period of time. The statement of owner's equity reports the change in retained earnings from net income (or net loss) minus dividends for a specific period of time. The balance sheet reports the financial position (assets, liabilities, and equity) of the company at a specific point in time. The statement of cash flows reports the cash receipts and cash payments categorized by operating, investing, and financing activities. The financial statements are prepared in the following order: (1) income statement, (2) statement of owner's equity, (3) balance sheet, and (4) statement of cash flows.

LO 6. Use financial statements and return on assets (ROA) to evaluate business performance

The income statement evaluates profitability. The statement of owner's equity shows the amount of earnings kept and reinvested in the company. The balance sheet lists the economic resources owned, the debts and obligations owed, and the residual interest that remains for the owner. The statement of cash flows shows the change in cash resulting from operating, investing, and financing activities. Return on assets measures how profitably the company uses its assets.

Chapter 1: Assignment Grid and Other Materials

	LO 1	LO 2	LO 3	LO 4	LO 5	LO 6
S-F:1-1	X					
S-F:1-2		X				
S-F:1-3		X				
S-F:1-4		X				
S-F:1-5		X				
S-F:1-6			X			
S-F:1-7			X			
S-F:1-8			X			
S-F:1-9				X		
S-F:1-10				X		
S-F:1-11					X	
S-F:1-12					X	
S-F:1-13					X	
S-F:1-14					X	
S-F:1-15					X	
S-F:1-16						X
E-F:1-17	X					
E-F:1-18		X				
E-F:1-19			X		X	
E-F:1-20			X			
E-F:1-21			X			
E-F:1-22			X			
E-F:1-23			X			
E-F:1-24			X			
E-F:1-25				X		
E-F:1-26				X		
E-F:1-27				X		
E-F:1-28				X		
E-F:1-29				X		
E-F:1-30					X	
E-F:1-31					X	
E-F:1-32					X	
E-F:1-33					X	
E-F:1-34					X	
E-F:1-35					X	
E-F:1-36					X	
E-F:1-37					X	
E-F:1-38					X	
E-F:1-39						X

	LO 1	LO 2	LO 3	LO 4	LO 5	LO 6
E-F:1-40A				X		X
P-F:1-41A				X		
P-F:1-42A				X		
P-F:1-43A					X	
P-F:1-44A					X	
P-F:1-45A					X	
P-F:1-46A				X	X	
P-F:1-47A				X	X	X
P-F:1-48B				X		
P-F:1-49B				X		
P-F:1-50B					X	
P-F:1-51B					X	
P-F:1-52B					X	
P-F:1-53B					X	
P-F:1-54B				X	X	X

S—Short Exercises (*Easy*)
E—Exercises (*Moderate*)
P—Problems (*Difficult*)

Other End-of-Chapter Materials:

Continuing Problem F:1-1
Tying It All Together Case F:1-1
Decision Case F:1-1
Ethical Issue F:1-1
Fraud Case F:1-1
Financial Statement Case F:1-1

CHAPTER 1
TEN-MINUTE QUIZ

Circle the letter of the best response.

1. Financial markets in the United States are regulated by which of the following organizations?
   A. American Institute of Certified Public Accountants (AICPA)
   B. Financial Accounting Standards Board (FASB)
   C. International Accounting Standards Board (IASB)
   D. Securities and Exchange Commission (SEC)

2. Which accounting principle or assumption sets forth an entity as one business, separate from its owners?
   A. Economic entity assumption
   B. Cost principle
   C. Monetary unit assumption
   D. Going concern assumption

3. Which accounting principle or assumption assumes that an entity will remain in operation for the foreseeable future?
   A. Economic entity assumption
   B. Cost principle
   C. Monetary unit assumption
   D. Going concern assumption

4. Red Door Boutique is famous for fashion wristwatches and leather purses. At the end of a recent year, Red Door's total assets added up to $485,000,000, and liabilities were $163,000,000. How much was Red Door's equity?
   A. $163,000,000
   B. $322,000,000
   C. $485,000,000
   D. $648,000,000

5. Assume that Red Door Boutique purchased supplies on account for $58,000. How would this transaction affect Red Door's accounting equation?
   A. Increase assets and liabilities by $58,000
   B. Increase assets and equity by $58,000
   C. Increase liabilities and equity by $58,000
   D. Increase one asset and decrease another asset by $58,000

6. Which field of accounting provides information to external decision makers such as investors and lenders?
   A. Investment accounting
   B. Tax accounting
   C. Managerial accounting
   D. Financial accounting

7. Which of the following is a characteristic of a limited-liability company?
   A. Indefinite life
   B. Separate taxable entity
   C. One or more owners
   D. Personally liability of owner

8. Last year, Internet Service Company (ISC) sold services on account for $75,000 and incurred expenses totaling $48,000. At the end of the year, the balance for Accounts Receivable was $10,000, and the balance for Accounts Payable was $8,000. What was ISC's net income or net loss for the year?
   A. Net income of $29,000
   B. Net income of $27,000
   C. Net income of $25,000
   D. Net income of $9,000

9. The income statement reports the
   A. financial position for a specific period.
   B. financial position on a specific date.
   C. results of operations for a specific period.
   D. results of operations on a specific date.

10. On the 20XX income statement, Red Door Boutique reported net income of $900,000. The company reported beginning total assets of $8,000,000 and ending total assets of $10,000,000. What is Red Door's return on assets for 20XX?
    A. 9.00%
    B. 10.00%
    C. 11.25%
    D. 25.00%

Answer Key to Ten-Minute Quiz:

1. D

2. A

3. D

4. B
Assets = Liabilities + Equity
$485,000,000 = $163,000,000 + Equity
Equity = $485,000,000 −$163,000,000 = $322,000,000

5. A

6. D

7. A

8. B
Net Income (Loss) = Revenues −Expenses = $75,000 −$48,000 = $27,000

9. C

10. B
Return on assets = Net Income / Average total assets = $900,000 / [($800,000,000 + $10,000,000) / 2] = $900,000 / $9,000,000 = 10.00%

Extra Critical Thinking Questions

Decision Case F:1-2

Dave and Reba Guerrera saved all their married life to open a bed and breakfast (B&B) named Tres Amigos. They invested $100,000 of their own money. The business then got a $100,000 bank loan for the $200,000 needed to get started. The company bought a rundown old Spanish colonial home in Tucson for $80,000. It cost another $50,000 to renovate. They found most of the furniture at antique shops and flea markets—for a total cost of $20,000. Kitchen equipment cost $10,000, and a computer system cost $2,000.

Prior to the grand opening, the banker requests a report on their activities thus far. The bank statement of Tres Amigos shows a cash balance of $38,000. Dave and Reba believe that the $38,000 represents net income for the period, and they feel pretty good about the results of their business. To better understand how well they are doing, they prepare the following income statement for presentation to the bank:

Tres Amigos Bed and Breakfast
Income Statement
Six Months Ended June 30, 20XX

Revenues:		
Owner's capital	$ 100,000	
Bank loan	100,000	
Total revenues		$ 200,000
Expenses:		
Cost of the house	80,000	
Renovation to the house	50,000	
Furniture expense	20,000	
Kitchen equipment expense	10,000	
Computer expense	2,000	
Total expenses		162,000
Net Income		**$ 38,000**

Requirements

1. Suppose you are the Guerreras' banker, and they have given you this income statement. Would you congratulate them on their net income? If so, explain why. If not, how would you advise them to measure the net income of the business? Does the amount of cash in the bank measure net income? Explain.
2. Prepare the balance sheet for Tres Amigos based on these data.

Decision Case F:1-2: Solution

Requirement 1

The banker would not congratulate the Guerreras for their net income because they have not measured net income properly. In fact, they have no net income at all. Net income is revenues minus expenses, and the Guerreras do not have any revenues or expenses. The amount of cash in the bank does not measure net income, as it is the result of a loan from the bank.

Requirement 2

TRES AMIGOS BED AND BREAKFAST
Balance Sheet
June 30, 20XX

Assets		Liabilities	
Cash	$ 38,000	Bank Loan Payable	$ 100,000
Computer	2,000		
Kitchen Equipment	10,000		
Furniture	20,000	Owner's Equity	
Building ($80,000 + $50,000)	130,000	Owner's Capital	100,000
Total Assets	$ 200,000	Total Liabilities and Owner's Equity	$ 200,000

Team Project 1-1
You are opening Quail Creek Pet Kennel. Your purpose is to earn a profit, and you organize as a sole proprietorship.

Requirements

1. Make a detailed list of 10 factors you must consider to establish the business.
2. Identify 10 or more transactions that your business will undertake to open and operate the kennel.
3. Prepare the Quail Creek Pet Kennel income statement, statement of owner's equity, and balance sheet at the end of the first month of operations. Use made-up figures and include a complete heading for each financial statement. Date the balance sheet as of January 31, 20XX.
4. Discuss how you will evaluate the success of your business and how you will decide whether to continue its operation.

Team Project F:1-1: Solution

Requirement 1

1. How to organize the business—as a proprietorship, a partnership, an LLC, or a corporation (You have decided to organize as a sole proprietorship.)
2. Where to locate the business
3. How much of your own time and money to commit to the business
4. How to finance the business—with your own personal money, with equity contributions from others, or through borrowing
5. How many people to employ for the business
6. How to measure the business's success or failure; how to account for the assets, liabilities, and operations of the business
7. What type of animals to board (dogs only, dogs and cats, birds, reptiles, and so on)
8. Whether to sell pet foods, toys, and other supplies
9. Whether to offer obedience lessons and other pet training
10. How to advertise the business (newspapers, radio, posters, online)

Student answers may vary.

Requirement 2

1. Make an initial cash investment contribution to start the business
2. Purchase land and building
3. Renovate the building to make it suitable for a kennel
4. Purchase pet food and other supplies that will be needed to operate the kennel
5. Advertising
6. Earn service revenue
7. Pay utility bills
8. Pay for veterinarian services
9. Pay employee wages
10. Borrow money
11. Pay owner withdrawals

Student answers may vary.

Team Project F:1-1: Solution (cont'd)
Requirement 3

QUAIL CREEK PET KENNEL
Income Statement
Month Ended January 31, 20XX

Revenue:		
Service Revenue		$ 10,000
Expenses:*		
Wages Expense	$ 2,000	
Supplies Expense	400	
Advertising Expense	300	
Utilities Expense	100	
Total Expense		2,800
Net Income		$ 7,200

*Students may also include depreciation expense on the building.

QUAIL CREEK PET KENNEL
Statement of Owner's Equity
Month Ended January 31, 20XX

Owner's Equity, January 1, 20XX	$ 0
Owner's contribution	30,000
Net income for the month	7,200
	37,200
Withdrawals	(2,000)
Owner's Equity, January 31, 20XX	$ 35,200

QUAIL CREEK PET KENNEL
Balance Sheet
January 31, 20XX

Assets		Liabilities	
Cash	$ 1,500	Accounts Payable	$ 1,000
Supplies	200		
Building	25,000		
Land	9,500	Owner's Equity	
		Owner's Capital	35,200
		Total Owner's Equity	35,200
Total Assets	$ 36,200	Total Liabilities and Owner's Equity	$ 36,200

Team Project F:1-1: Solution (cont'd)

Requirement 4

We evaluate the success of the business by considering its:

- Net income or net loss for the period, as reported on the income statement
- Financial position at the end of the period, as reported on the balance sheet

A profitable business that should continue is one that shows net income for the period, assets exceeding liabilities, and positive cash flow.

Team Project F:1-2

You are promoting a rock concert in your area. Your purpose is to earn a profit, and you organize Concert Enterprises as a sole proprietorship.

Requirements

1. Make a detailed list of 10 factors you must consider to establish the business.
2. Describe 10 of the items your business must arrange in order to promote and stage the rock concert.
3. Prepare your business's income statement, statement of owner's equity, and balance sheet on June 30, 20XX, immediately after the rock concert. Use made-up amounts and include a complete heading for each financial statement. For the income statement and the statement of owner's equity, assume the period is the three months ended June 30, 20XX.
4. Assume that you will continue to promote rock concerts if the venture is successful. If it is unsuccessful, you will terminate the business within three months after the concert. Discuss how you will evaluate the success of your venture and how you will decide whether to continue in business.

Team Project F:1-2: Solution
(Suggested answers)

Requirement 1

1. How to organize the business—as a proprietorship, a partnership, an LLC, or a corporation (Assume you have decided to organize as a sole proprietorship.)
2. Where to locate the headquarters of the business
3. How much of your own time and money to commit to the business
4. How to finance the business—with your own personal money, with equity contributions from others, or through borrowing
5. How many people to employ for the business
6. How to measure the business's success or failure; how to account for the assets, liabilities, and operations of the business
7. What type of music to feature; what age group or interest group to appeal to
8. Whether to sell concessions (food, drinks, T-shirts, and so on) yourself or to arrange for outsiders to sell concessions at the concert
9. How to advertise the business (newspapers, radio, posters, online)

10. Whether to sponsor the concerts yourself or to arrange for corporate or charitable organizations to sponsor the concerts

Requirement 2

1. Which band (or bands) to feature at the concerts
2. How much and when to pay the performers (flat rate or a percentage of gate receipts)
3. Where to stage the concerts and how to pay for the site rental
4. Need for city or county permits to stage a concert
5. How to ensure security at the concert
6. How to get people to come to the concert—how to advertise the concerts (newspapers, radio, posters, or other) and how much to pay for advertising
7. How to offer concessions (buy and sell them yourself or arrange for outside concessionaires). If outsiders, how will they be compensated—keep their own revenues or share them with you?
8. Need for traffic control if the crowd disrupts city traffic
9. Weather considerations if the concert is staged outdoors
10. Timing of the concert in relation to other events in the area at the time.

Team Project F:1-2: Solution (cont'd)

Requirement 3

CONCERT ENTERPRISES
Income Statement
Three Months Ended June 30, 20XX

Revenue:		
Ticket Sales Revenue		$ 300,000
Concession Revenue		50,000
Total Revenue		350,000
Expenses:		
Band Expense	$ 100,000	
Advertising Expense	50,000	
Concession Expense	20,000	
Rent Expense	15,000	
Security Expense	10,000	
Utilities Expense	3,000	
Permits Expense	2,000	
Total Expenses		200,000
Net Income		$ 150,000

Team Project F:1-2: Solution (cont'd)

CONCERT ENTERPRISES Statement of Owner's Equity Three Months Ended June 30, 20XX	
Owner's Equity, April 1, 20XX	$ 0
Owner's contribution	1,000
Net income for quarter	150,000
	151,000
Withdrawals	(10,000)
Owner's Equity, June 30, 20XX	$ 141,000

CONCERT ENTERPRISES
Balance Sheet
June 30, 20XX

Assets		Liabilities	
Cash	$ 136,000	Accounts Payable	$ 7,000
Accounts Receivable	8,000		
Supplies	4,000	Owner's Equity	
		Owner's Capital	1,000
		Owner's Equity	140,000
		Total Owner's Equity	141,000
Total Assets	$ 148,000	Total Liabilities and Owner's Equity	$ 148,000

Requirement 4

We evaluate the success of the business by considering its:

- Net income or net loss for the period, as reported on the income statement
- Financial position at the end of the period, as reported on the balance sheet

A profitable business that should continue is one that shows net income for the period, assets exceeding liabilities, and positive cash flow.

Communication Activity F:1-1

Using 25 words or fewer, illustrate the accounting equation and explain each part of the accounting equation.

Communication Activity F:1-1: Solution

Assets = Liabilities + Equity simply shows the resources that a business owns and the claims that others have against those resources (assets).

Chapter M1

Introduction to Managerial Accounting

Chapter Overview

The chapter introduces students to managerial accounting as distinguished from financial accounting. Students learn about the information that managers—the decision makers inside the business—must know and use in order to effectively plan and control the business. The differences between financial and managerial accounting are delineated. The role of the manager and managerial accounting functions are emphasized. The chapter continues with a discussion of the professional ethical standards for management accountants: competence, confidentiality, integrity, and credibility.

Cost classification categories are explained, including direct/indirect costs, product/period costs, and types of manufacturing product costs (direct materials, direct labor, and manufacturing overhead), which can be alternatively categorized as prime costs (direct materials and direct labor) or conversion costs (direct labor and manufacturing overhead). Service companies, merchandising companies, and manufacturing companies are discussed, and a balance sheet and income statement examples are provided for each. The calculation of cost of goods manufactured is presented, and a schedule example is provided. Exhibits help students visualize the flow of costs through a manufacturing company's accounting system to the income statement. A discussion of today's business environment points out that recent trends include a shift toward a service economy, competing in the global marketplace, timed-based competition, advanced information systems, e-commerce, just-in-time management, advances in technology, the total quality movement, and integrated economic, social, and environmental reporting. The chapter concludes with a discussion on how to calculate cost per unit for a merchandising business and cost per service for a service business.

An Ethics feature provides an ethical dilemma that can be used for discussion purposes. A Tying It All Together feature provides a look into the balance sheet and income statement of Winnebago Industries, Inc. The Review section includes Things You Should Know which highlights the information students should have acquired from the chapter. A Check Your Understanding Problem reviews product/period cost categorization and calculation of cost of goods manufactured, cost of goods sold, and cost per unit. A list of Key Terms is provided. A Quick Check gives students a chance to assess their knowledge of the chapter learning objectives.

Chapter M1: Learning Objectives

LO 1. Define managerial accounting and understand how it is used

LO 2. Classify costs used in managerial accounting

LO 3. Prepare financial statements for a manufacturer, including a balance sheet, income statement, and schedule of cost of goods manufactured

LO 4. Describe business trends affecting managerial accounting

LO 5. Describe how managerial accounting is used in service and merchandising companies

Chapter M1: Teaching Outline with Lecture Notes

LO 1. Define managerial accounting and understand how it is used

- Exhibit M:1-1: Financial Accounting Versus Managerial Accounting

a) Managers' role in the organization

- Exhibit M:1-2: Organizational Chart for Smart Touch Learning (Partial)

b) Managerial accounting functions

- Exhibit M:1-3: Pathways Vision Model

c) Ethical standards of managers

- Exhibit M:1-4: Technical Skills on CMA Exam

- Exhibit M:1-5: IMA Statement of Ethical Professional Practice (Excerpt)

Lecture Notes: Students are not as familiar with managerial accounting as they are with financial accounting. Emphasize the key difference: Managerial accounting is focused on internal users of financial information for decision making, while financial accounting is focused on external users for financial reporting. Managers throughout the organization rely on managerial accounting to help plan, direct, control, and make decisions about the business. The Pathways Vision Model provides a visual way for students to more clearly understand the role of managerial accounting in making good decisions.

The CMA exam covers skills used internally in organizations to enhance decision making. The Institute of Management Accountants (IMA) has developed ethical standards requiring managerial accountants to maintain their professional competence, preserve the confidentiality of the information they handle, and act with integrity and credibility.

Suggested In-Class Exercise: E-M:1-13

LO 2. Classify costs used in managerial accounting

a) Service Company

b) Manufacturing companies

c) Direct and indirect costs

d) Manufacturing costs

- Exhibit M:1-6: Manufacturing Costs

e) Prime and conversion costs

- Exhibit M:1-7: Prime and Conversion Costs

f) Product and period costs

- Exhibit M:1-8: Period Versus Product Costs

- Exhibit M:1-9: Period and Product Costs for Smart Touch Learning

Lecture Notes: Point out the distinction between direct and indirect manufacturing costs. Direct costs are added to WIP, whereas indirect costs are usually collected in one or more Manufacturing Overhead accounts and then applied to WIP using a predetermined overhead rate. Therefore, when materials are used, you must know whether they are indirect or direct. When labor is incurred, you must know whether it is direct or indirect. The recording of labor in an asset account (WIP) may need additional explanation. Students might want to expense labor because it was expensed in previous chapters. Remind students that manufacturing companies add all product costs to inventory, and they are expensed (COGS) when inventory is sold.

Distinguish between product costs and period costs. GAAP requires that all manufacturing costs be treated as costs of making the product, which means these manufacturing costs (raw materials, manufacturing labor, and manufacturing overhead) are “attached” to the product. All nonmanufacturing costs go directly to the income statement in the period in which they occur. Consider an oversimplified company that has a factory in your local community and corporate offices in New York City (or some other major urban center). Everything that goes on at the factory in your local community is a manufacturing cost that becomes attached to the product by accumulating those costs in WIP. Everything that goes on in the corporate offices is a period cost that is charged directly to the income statement in the period in which it occurs. While this is an oversimplification (for example, sales offices or research labs can be located in a factory setting), it serves to fix the distinction in students’ minds.

Overhead includes all manufacturing costs other than direct materials and direct labor. Therefore, students must know whether a cost is manufacturing or nonmanufacturing. For example, “depreciation” will no longer suffice. Is it manufacturing or nonmanufacturing? As discussed for labor above, students may want to expense all indirect costs, such as depreciation, insurance, etc., because they were expensed in previous chapters. Remind students that manufacturing companies add all product costs to inventory—first to WIP, which is transferred to FG, and then as COGS when inventory is sold.

Suggested In-Class Exercise: E-M:1-15

LO 3. Prepare financial statements for a manufacturer, including a balance sheet, income statement, and schedule of cost of goods manufactured

a) Balance sheet

- Exhibit M:1-10: Balance Sheet Comparison

b) Income statement

- Exhibit M:1-11: Income Statement Comparison

c) Flow of product costs in a manufacturing company

- Exhibit M:1-12: Flow of Product Costs in a Manufacturing Company

d) Calculating cost of goods manufactured

i. Step 1: Calculate direct materials used.

ii. Step 2: Calculate total manufacturing costs incurred during the year.

iii. Step 3: Calculate cost of goods manufactured.

- Exhibit M:1-13: Schedule of Costs of Goods Manufactured

e) Calculating cost of goods sold

- Exhibit M:1-14: Income Statement—Manufacturing Company

f) Flow of product costs through the inventory accounts

- Exhibit M:1-15: Flow of Product Costs Through Smart Touch Learning's Inventory Accounts

g) Using the schedule of cost of goods manufactured to calculate unit product cost

Lecture Notes: Emphasize that management accounting concepts apply to all types of companies, not just manufacturing companies. Much attention is focused on manufacturing businesses because they are more complex and less familiar. Nonetheless, the product costing concepts discussed in relation to manufacturing can be applied to service costing and activity costing in the other types of companies.

Students will probably be able to relate to service companies and merchandising companies (such as auto repair shops and grocery stores) more easily than they can relate to manufacturing companies. Service companies and merchandising companies have already been discussed in the textbook. It may be helpful to ask students to provide examples of each type of company, especially merchandising and manufacturing, to assess their knowledge of the differences. Ask if anyone has toured a factory when it is operating.

When introducing inventory accounts, remind students how the Merchandise Inventory account works. Merchandise is purchased (increase Merchandise Inventory with a debit). Then when the inventory is sold, take it out of Merchandise Inventory and off the balance sheet (decrease Merchandise Inventory with a credit) and charge it to the income statement as the expense Cost of Goods Sold (increase the expense with a debit). If more merchandise is purchased than sold, the difference remains in Merchandise Inventory as the ending balance and is reported as an asset on the balance sheet. It then becomes next period's beginning inventory. Emphasize the basic generic inventory relationship:

Beginning + Additions – Ending balance = Amount used, manufactured, or sold

Manufacturers have three inventory accounts: Raw Materials Inventory (RM), Work-in-Process Inventory (WIP), and Finished Goods Inventory (FG). All three are assets on the balance sheet. Inventory is removed from FG and from the balance sheet when sold and then charged to the income statement as the expense Cost of Goods Sold (COGS). The WIP account is an accumulation account that collects product costs as they are added in the production process—direct materials, direct labor, and manufacturing overhead. Explain that WIP represents the product as it is being assembled on the factory floor. After the product comes off the production line and is boxed up and moved to the finished product warehouse, the related dollars are taken out of the WIP account and moved to the FG account.

Demonstrate that inventory accounts all function in the same way as the generic inventory account previously discussed:

Beginning balance + Additions − Ending balance = Amount used, manufactured, or sold

Point out that the increases in WIP represent the accumulation of direct materials, direct labor, and manufacturing overhead costs that become attached to the product being assembled.

Suggested In-Class Exercises: E-M:1-16, E-M:1-17, and E-M:1-18

LO 4. Describe business trends affecting managerial accounting

a) Shift toward a service economy

b) Global competition

c) Time-based competition

d) Advances in technology

e) Total quality management

   - Exhibit M:1-16: Value Chain

f) The triple bottom line

Suggested In-Class Exercise: E-M:1-22

LO 5. Describe how managerial accounting is used in service and merchandising companies

a) Calculating cost per service

b) Calculating cost per item

Suggested In-Class Exercise: E-M:1-24, E-M:1-25

Chapter M1: Handout for Student Notes

LO 1. Why is managerial accounting important?

- Managers' role in the organization

- Managerial accounting functions

- Ethical standards of managers

LO 2. How are costs classified?

  - Manufacturing companies

  - Direct and indirect costs

  - Manufacturing costs

  - Prime and conversion costs

  - Product and period costs

LO 3. How do manufacturing companies prepare financial statements?

  - Balance sheet

  - Income statement

- Flow of product costs in a manufacturing company
- Calculating cost of goods manufactured
- Calculating cost of goods sold
- Flow of product costs through the inventory accounts
- Using the schedule of costs of goods manufactured to calculate unit product cost

LO 4. What business trends are affecting managerial accounting?

- Shift toward a service economy
- Global competition
- Time-based competition
- Advances in technology
- Total quality management
- The triple bottom line

LO 5. How is managerial accounting used in service and merchandising companies?

- Calculating cost per service
- Calculating cost per item

Chapter M1: Student Chapter Summary

LO 1. Define managerial accounting and understand how it is used

Financial accounting prepares reports for external users, such as investors, creditors, and government agencies. Managerial accounting provides information for internal managers, such as department heads, division managers, chief executive officers, and vice presidents. This managerial accounting data helps managers plan, direct, control, and make decisions about the business. Managerial accountants may obtain professional certifications, such as Certified Management Accountant (CMA) or Chartered Global Management Accountant (CGMA). The IMA Standards of Ethical Professional Practice include competence, confidentiality, integrity, and credibility.

LO 2. Classify costs used in managerial accounting

Direct costs can be easily traced directly to a cost object, whereas indirect costs cannot. Manufacturing costs, also known as product costs, are all costs incurred in the manufacture of final products. The three categories of manufacturing costs are direct materials, direct labor, and manufacturing overhead. Prime costs are direct materials and direct labor. Conversion costs are direct labor and manufacturing overhead. Product costs are first recorded as inventory and are not expensed until the product is sold. Period costs are all costs not considered product costs. Period costs are expensed in the accounting period incurred.

LO 3. Prepare financial statements for a manufacturer, including a balance sheet, income statement, and schedule of cost of goods manufactured

Manufacturers have three inventory accounts: Raw Materials Inventory (RM), Work-in-Process Inventory (WIP), and Finished Goods Inventory (FG). All three are assets on the balance sheet. Inventory costs are removed from FG and from the balance sheet when the product is sold and then charged to the income statement as the expense Cost of Goods Sold (COGS). The WIP account is an accumulation account that collects product costs as they are added in the production process—direct materials, direct labor, and manufacturing overhead. WIP represents the cost of the product as it is being assembled on the factory floor. After the product comes off the production line and is boxed up and moved to the finished product warehouse, the related dollars are taken out of the WIP account and moved to the FG account.

Calculating cost of goods manufactured and cost of goods sold requires knowledge of how product costs flow through a manufacturing company. Cost of goods manufactured is calculated in three steps:

Step 1: Calculate direct materials used.

Step 2: Calculate total manufacturing costs incurred during the year.

Step 3: Calculate cost of goods manufactured.

Cost of goods sold represents the cost of the Finished Goods Inventory that has been sold. All inventory accounts function in the same way:

Beginning balance + Additions − Ending balance = Amount used, manufactured, or sold

LO 4. Describe business trends affecting managerial accounting

The shift toward a service economy, global competition, time-based competition, advances in technology, Total Quality Management (TQM), and the triple bottom line are business trends affecting managerial accounting today. Managers in the service industry need to understand the cost of providing services, supporting customers, and planning for future customer and service needs. Companies are moving operations to other countries to be closer to new markets or partnering with foreign companies to meet local needs. Companies have also developed the time-saving responses to keep up with the pace of business in the instant messaging age, such as advanced information systems, e-commerce, and just-in-time management. Recent advances in technology can provide businesses with a competitive advantage. Software tools allow accountants to work with information technology teams to analyze large quantities of data and use the analysis to make more-informed decisions, while robotic process automation (RPA) and artificial intelligence (AI) use technology to improve operational efficiency and decrease costs. TQM is a philosophy of continuous improvement of products and processes leading to fewer defects and higher customer satisfaction. Companies are also recognizing that they have multiple responsibilities—economic, social, and environmental—and that generating profits for owners and investors is only one aspect of being a socially responsible organization.

LO 5. Describe how managerial accounting is used in service and merchandising companies

Managerial accounting isn’t just for manufacturing companies. Service companies and merchandising companies also use managerial accounting.

- Unit cost per service = Total operating costs / Total number of services provided
- Unit cost per item = Total cost of goods sold / Total number of items sold

Chapter M1: Assignment Grid and Other Materials

	LO 1	LO 2	LO 3	LO 4	LO 5
S-M:1-1	X				
S-M:1-2	X				
S-M:1-3		X			
S-M:1-4		X			
S-M:1-5		X			
S-M:1-6			X		
S-M:1-7			X		
S-M:1-8			X		
S-M:1-9			X		
S-M:1-10			X		
S-M:1-11				X	
S-M:1-12					X
E-M:1-13	X				
E-M:1-14	X				
E-M:1-15		X			
E-M:1-16			X		
E-M:1-17			X		
E-M:1-18			X		
E-M:1-19			X		
E-M:1-20			X		
E-M:1-21			X		
E-M:1-22				X	
E-M:1-23				X	
E-M:1-24			X		X
E-M:1-25			X		X
P-M:1-26A, P-M:1-34B	X				
P-M:1-27A, P-M:1-35B		X			
P-M:1-28A, P-M:1-36B			X		
P-M:1-29A, P-M:1-37B			X		
P-M:1-30A, P-M:1-38B			X		
P-M:1-31A, P-M:1-39B			X		
P-M:1-32A, P-M:1-40B			X		X
P-M:1-33A, P-M:1-41B			X		X

S—Short Exercises (*Easy*)
E—Exercises (*Moderate*)
P—Problems (*Difficult*)

Other End-of-Chapter Materials:

Continuing Problem M:1-1
Tying It All Together Case M:1-1
Decision Case M:1-1
Ethical Issue M:1-1
Communication Activity M:1-1

CHAPTER M1
TEN-MINUTE QUIZ

Circle the letter of the best response.

1. Which of the following is a characteristic of managerial accounting information?
   A. Provides information that is useful to external decision makers
   B. Usually reported on a quarterly or annual basis
   C. Not required to follow GAAP
   D. Focuses on past results

2. Which of the following is a software system representing an advance in technology used to analyze large quantities of data for more-informed decisions?
   A. Enterprise Value Chain
   B. Tableau
   C. Advanced information systems
   D. Just-in-time management systems

3. Which of the following characteristics of today's business environment is most closely associated with the philosophy of continuous improvement?
   A. Global competition
   B. Total Quality Management
   C. Time-based competition
   D. E-commerce

4. Which of the following accounts is used by a manufacturing company but not by a service company?
   A. Cost of Goods Sold
   B. Salaries Payable
   C. Supplies Expense
   D. Retained Earnings

5. Goods available for sale that are *not* part of Cost of Goods Sold are included in
   A. Work-in-Process Inventory beginning balance.
   B. Work-in-Process Inventory ending balance.
   C. Finished Goods Inventory beginning balance.
   D. Finished Goods Inventory ending balance.

6. Which of the following is an indirect cost of manufacturing a car?
   A. Salary of an assembly line worker who assembles the cars
   B. Salary of the plant supervisor who plans the factory production schedule
   C. Cost of a car engine
   D. Cost of a car door

7. Which of the following is a product cost?
   A. Advertising expense
   B. Insurance on plant and equipment in the factory
   C. Depreciation on computer equipment at the corporate headquarters
   D. Sales commissions

Questions 8 and 9 use the data in the following table, which has been provided by a bakery:

Beginning Direct Materials	$ 6,000
Ending Direct Materials	9,000
Beginning Work-in-Process Inventory	12,000
Ending Work-in-Process Inventory	17,000
Beginning Finished Goods Inventory	3,000
Ending Finished Goods Inventory	5,000
Manufacturing Overhead	21,000
Direct labor	30,000
Direct materials used in production	95,000

8. What is cost of direct materials purchased?
   A. $ 3,000
   B. $ 92,000
   C. $ 98,000
   D. $110,000

9. What is the cost of goods manufactured?
   A. $125,000
   B. $141,000
   C. $146,000
   D. $151,000

10. A management accountant who communicates information fairly and objectively is practicing the ethical standard of
    A. integrity.
    B. confidentiality.
    C. competence.
    D. credibility.

Answer Key to Ten-Minute Quiz:

1. C

2. B

3. B

4. A

5. D

6. B

7. B

8. C

Beginning Direct Materials	$ 6,000
Purchases of Direct Materials	?
Direct Materials Available for Use	?
Ending Direct Materials	(9,000)
Direct Materials Used	$ 95,000

Direct Materials Available for Use = Direct Materials Used + Ending Direct Materials
= $95,000 + $9,000 = $104,000
Purchases of Direct Materials = Direct Materials Available for Use − Beginning Direct Materials
= $104,000 − $6,000 = $98,000

9. B

Beginning Work-in-Process Inventory		$ 12,000
Direct Materials Used	$ 95,000	
Direct Labor	30,000	
Manufacturing Overhead	21,000	
Total Manufacturing Costs Incurred during the Period		146,000
Total Manufacturing Costs to Account For		158,000
Ending Work-in-Process Inventory		(17,000)
Cost of Goods Manufactured		$ 141,000

10. D

Extra Critical Thinking Questions

Decision Case M:1-2
The IMA's Statement of Ethical Professional Practice can be applied to more than just managerial accounting. It is also relevant to college students.

Explain at least one situation that shows how each IMA standard in Exhibit M:1-5 is relevant to your experiences as a student. For example, the ethical standard of competence would suggest not cutting classes!

Decision Case M:1-2: Solution

Students' responses will vary. Illustrative answers follow:

- *Competence*. Students have a responsibility to build their professional competence by attending classes, conscientiously completing homework, and studying for exams.
- *Confidentiality*. When friends or family members share intimate information or highly personal information, you should respect the trust they have placed in you and keep that information confidential, as is appropriate for the situation.
- *Integrity*. Students have a responsibility to act with integrity and not to cheat. Students also should help ensure the integrity of the process. For example, students should inform the instructor if they suspect other students have a copy of an upcoming exam.
- *Credibility*. Be honest and straightforward when communicating with others. Do not lie or deliberately mislead others.

Fraud Case M:1-1

Juan Gomez was the fastest-rising star of a small CPA firm in West Palm Beach, Florida. Most of his clients traveled in stratospheric circles of wealth, and Juan knew that fitting in with this crowd was essential to his career. Although he made good money, it wasn't enough to live that kind of lifestyle. Meanwhile, Juan had become friends with one of his clients, Tony Russo. Knowing Russo's books inside and out and being on close terms with him, Juan asked Tony for a personal loan. Juan was sure he'd be able to pay it back when he got his next bonus, but things stretched out, and additional loans were made. Two years later, Tony's company hit some losses, and the numbers were looking grim. Tony reminded Juan that it would not look good for his career if his CPA firm knew Juan had borrowed from a client, and so Juan changed a few numbers and signed off on clean financials for Tony's firm. This went on for three years, until one morning when Juan got a call. Russo had died; his sons had gone through the books, and the whole scheme came out. Juan did some prison time and lost his license, but he was repentant and made an instructional video for accounting students to warn them of the temptations they may encounter in the real world of business.

Requirements

1. Although the central character of this story worked in public accounting, please refer to the IMA Statement of Ethical Professional Practice in Exhibit M:1-5 and discuss which of those issues are reflected in this case.
2. Could Juan have removed himself from his situation? How?

Fraud Case M:1-1: Solution

Students' responses will vary. Illustrative answers follow.

Requirement 1

This case reflects a clear conflict of interest in that Juan Gomez, as a public accountant, was supposed to be independent of his client but was, in fact, financially involved. This is a clear violation of *integrity*. It also involves the issue of *credibility*, in that Juan "cooked the books" for his client and thus sanctioned the publication of false financial information.

Requirement 2

Juan would first have to pay back the loan he took from his client. Then he would have to remove himself from the engagement with this client, admit his actions, and possibly resign from his firm because the falsified financial information would become apparent to whomever followed Juan on the engagement. These actions might, or might not, shield Juan from criminal or civil prosecution. The bottom line is that once Juan took the money, his career was in irreversible jeopardy.

Team Project M:1-1

Search the Internet for a nearby company that has a Web site. Arrange an interview for your team with a managerial accountant, a controller, or another accounting/finance officer of the company.

Requirements

Before your team conducts the interview, answer the following questions:

1. Is this a service, merchandising, or manufacturing company? What is its primary product or service?
2. Is the primary purpose of the company's Web site to provide information about the company and its products, to sell online, or to provide financial information for investors?
3. Are parts of the company's Web site restricted so that you need password authorization to enter? What appears to be the purpose of limiting access?
4. Does the Web site provide an e-mail link for contacting the company?

At the interview, begin by clarifying your team's answers to Questions 1 through 4 and ask the following additional questions:

5. If the company sells over the Internet, what benefits has the company derived? Did the company perform a cost/benefit analysis before deciding to begin Web sales?
   Or
   If the company does not sell over the Internet, why not? Has the company performed a cost/benefit analysis and decided not to sell over the Web?
6. What is the biggest cost of operating the Web site?
7. Does the company make any purchases over the Internet? What percentage?
8. How has e-commerce affected the company's managerial accounting system? Have the managerial accountant's responsibilities become more or less complex? More or less interesting?
9. Does the company use Web-based accounting applications, such as accounts receivable or accounts payable?
10. Does the company use an ERP system? If so, do managers view the system as a success? What have been the benefits? The costs?

Your team should summarize your findings in a short paper. Provide any exhibits that enhance your explanation of key items. Provide proper references and a works cited page.

Team Project M:1-1: Solution

Students' responses will vary. However, following are some observations.

The person interviewed could be identified through a connection of one of the students, a connection made by the instructor, or a connection through the school.

Requiring students to answer the first four questions before the interview will help ensure that they are prepared for the interview. It is important that students be prepared so they can make a favorable impression on the interviewee (for the school and future employment!) and so they do not waste the interviewee's time. If the company is of any reasonable size, students should be able to gather information from the library or the Internet.

While it would be unusual for a company not to have a Web site, the role of its Web site in the company's business plan can vary significantly. The site may simply provide information about the company and/or its products and, for a manufacturer, a dealer locator. Other Web sites are designed to sell products. Certain Web pages may be designed for sales to the general public, while other parts of the site may require a password and offer sales to specific customers on prearranged terms. The Web site might not give a full indication of the extent to which a company relies on the Internet. For example, a company may rely on the Internet for purchasing, budgeting, or communicating within the firm.

Increasing dependence on the Internet has implications for management accounting. A full-featured Web site may cost millions of dollars, so the CFO will likely be involved in the investment decision and in monitoring and evaluating the success of this investment. Management accountants will collect and analyze new types of data, such as the number of unique customers at the company's Web site and the length of time each customer spends at the site.

Accounting applications also may follow the underlying transactions to the Web. For example, when a company moves business-to-business sales to the Web, it also may adopt Internet-based receivables management software to reduce billing costs and speed up collection. The company also may install an ERP system to further integrate and speed up its transaction processing.