Solutions Manual to Accompany

Introduction to Financial Accounting

Second Edition (Revised)

Based on International Financial Reporting Standards

David Annand

Published by Valley Educational Services Ltd.

4910C – 58 St., Athabasca AB T9S 1L5

ISBN 978-0-9953266-1-3

Printed and bound in Canada by Athabasca University

Library and Archives Canada Cataloguing in Publication

Annand, David, 1954–

Latest version available at http://business.athabascau.ca/faculty/david-annand-edd/

Please forward suggested changes to davida@athabascau.ca.

Version 2.2

December 31, 2016

TABLE OF CONTENTS

CHAPTER ONE
Introduction to Financial Accounting

Concept Self-check

1. Managerial accounting serves the decision-making needs of internal users. Financial accounting focuses on external reporting and meeting the needs of users like creditors and shareholders.

2. Business organizations sell products and services for profit. A non-business organization exists to meet various societal needs and does not have profit as a goal. Examples of non-business organizations are churches, mosques, and hospitals.

3. There are three common forms of business organizations—a proprietorship, a partnership, and a corporation. A proprietorship is a business owned by one person. A partnership is a business owned by two or more individuals. A corporation is a business owned by one or more shareholders.

4. A corporation that sells its shares publicly, typically on a stock exchange, is called a publicly accountable enterprise (PAE). A corporation that holds its shares privately is known as a private enterprise (PE). Its shares are generally held by only one or a few individuals who are often related.

5. Limited liability means that the shareholders of a corporation are not responsible for the corporation's debts. The most that shareholders can lose is what they invested in the corporation.

6. Generally accepted accounting principles (GAAP) refer to the guidelines for financial accounting used in any given jurisdiction. They include the standards and common, agreed practices that accountants follow in recording and summarizing financial information, and in the preparation of financial statements.

Concept Self-check continued

7. The six qualitative characteristics of GAAP are relevance, faithful representation, comparability, verifiability, timeliness, and understandability.
   - relevant information has the ability to make a difference in the decision-making process;
   - faithful representation means that information is complete, neutral, and free from error;
   - comparability tells users of the information that businesses utilize similar accounting practices;
   - verifiability means that others are able to confirm that the information accurately represents the economic activities of the business;
   - timely information is available to decision makers while it is still useful; and
   - understandable information is clear and concise.
8. Financial statements evaluate the performance of an entity and measure its progress. Financial information is collected, then summarised and reported in the financial statements (statement of financial position, income statement, statement of cash flows, and statement of changes in equity).
9. The purpose of the income statement is to communicate the inflow of assets, in the form of revenues, and the outflow or consumption of assets, in the form of expenses, *over a period of time*. Total inflows greater than total outflows creates net income or profit, which is reported on the income statement and in retained earnings in the shareholders' equity section of the statement of financial position. The purpose of the statement of financial position is to communicate what the entity owns (its *assets),* what the entity owes (its *liabilities),* and the difference between assets and liabilities (its *equity)* at *a point in time*.
10. Revenue is an increase in an entity's assets or a decrease in liabilities in return for services performed or goods sold, expressed in monetary units like dollars. An expense is an asset that is used up or obligations incurred in selling goods or performing services.
11. Net income is the difference between revenues and expenses. It is one measure of the success of the entity.
12. The statement of changes in equity shows why share capital and retained earnings have changed over a specified period of time – for instance, when shares are issued or net income is earned.
13. Shareholders' equity consists of share capital and retained earnings. Share capital represents how much shareholders have invested. Retained earnings is the sum of all net incomes earned (net of losses incurred) by a corporation over its life, less any distributions of these net incomes to shareholders.
14. Dividends are distributions of retained earnings to shareholders.

Concept Self-check continued

15. The statement of financial position consists of assets, liabilities, and shareholders' equity. Liabilities plus shareholders' equity always equal assets.
16. An asset is anything of value that is owned by the entity. Assets are economic resources controlled by an entity. They have some future value to the entity, usually for used generating revenue.
17. A liability is an obligation to pay an asset or to provide services or goods in the future. Until the obligations are paid, creditors have claims against the assets of the entity.

    Shareholders' equity represents the amount of assets owing to the owners of the entity. The total assets of an entity belong either to the shareholders or to the creditors.
18. The statement of cash flows (SCF) explains how the cash reported on the statement of financial position changed over a period of time by detailing its sources and uses of cash. The income statement does not disclose all important activities of the entity involving cash that is shown on the SCF, like investment in long-lived assets or repayment of debt.
19. Notes to the financial statements provide greater detail about various amounts shown in the financial statements, or provide non-quantitative information that is useful to users, like loan repayment terms.
20. The double entry accounting system is used to record financial transactions. Each transaction affects at least two items in the accounting equation, in order to maintain its equality. For example,
    a. Revenue is earned in cash: The asset Cash increases and Shareholders' Equity increases by the same amount. (Net income increases. This increases Retained Earnings, which is part of Shareholders' Equity.)
    b. An obligation is paid: The liability Accounts Payable decreases and the asset Cash decreases by the same amount.
    c. An amount owing from a customer is collected: The asset Cash increases and the asset Accounts Receivable decreases equally.

    In this way, the accounting equation always remains in balance after each transaction is recorded.
21. Financial statements are prepared at regular intervals to keep a number of interested groups informed about the financial performance of a corporation. The timing is determined in response to the needs of management in running the entity or of outside parties, such as bankers and shareholders. These external users make lending or investing decision in part based on the financial statements.

Concept Self-check continued

22. The accounting equation takes the following form:

ASSETS	=	LIABILITIES	+	SHAREHOLDERS' EQUITY
(Economic resources owned by an entity)		(Creditors' claims to assets)		(Owners' claims to assets, or residual claims)

The entity has assets, which are the resources it owns. The total assets owned by an entity must always equal the total claims of creditors and owners, who have the residual claims.

23. The exchange of assets or obligations by a business entity, expressed in monetary terms like dollars, is called a financial transaction. The exchange of cash for land or a building is an example of such a transaction.

CP 1–1

A	= L	+ +E	
(+)		(+)	Issued share capital for cash
(+)(-)			Purchased a truck for cash
(+)	(+)		Received a bank loan to pay for equipment
(+)(-)			Purchased the equipment for cash
(+)(-)			Made a deposit for electricity service to be provided in the future
(-)		(-)	Paid rent for the month just ended
	No Effect		Signed a new union contract that provides for increased wages in the future
	No Effect		Hired a messenger service to deliver letters during a mail strike
(-)		(-)	Received a parcel; paid the delivery service
(+)		(+)	Billed customers for services performed
(-)	(-)		Made a cash payment to satisfy an outstanding obligation
(+)(-)			Received a payment of cash in satisfaction of an amount owed by a customer
(+)		(+)	Collected cash from a customer for services rendered the same day
(-)		(-)	Paid cash for truck expenses (gas, oil, etc.)
(-)	(-)	(-)	Made a monthly payment on the bank loan; this payment included a payment on part of the loan and also an amount of interest expense. Shareholders' equity is affected because interest expense is incurred
	(-)	(+)	Issued shares in the company to pay off a loan
(-)		(-)	Paid a dividend with cash.

CP 1–2

1	Issued share capital for cash (+) Cash (+) Share Capital
5	Paid an account payable (-) Cash (-) Accounts Payable
2	Borrowed money from a bank (+) Cash (+) Bank Loan
3	Collected an account receivable (+) Cash (-) Accounts Receivable
1	Collected a commission on a sale made today (+) Cash (+) Revenue [or (+) Accounts Receivable (+) Revenue, then (+) Cash (-) Accounts Receivable if the sale is first recorded as an account receivable]
4	Paid for this month's advertizing in a newspaper (-) Cash (-) Expense [or (+) Accounts Payable (-) Expense, then (-) Cash (-) Accounts Payable if the bill is first set up as an Accounts Payable]
2	Repaid money borrowed from a bank (-) Cash (-) Bank Loan
X	Signed a contract to purchase a computer NO EFFECT
6	Received a bill for supplies used during the month (+) Accounts Payable (-) Expense
3	Received a cash payment in satisfaction of an amount owed by a customer (+) Cash (-) Accounts Receivable
1	Sent a bill to a customer for repairs made today (+) Accounts Receivable (+) Revenue
3	Sold equipment for cash (+) Cash (-) Equipment
2	Purchased a truck on credit, to be paid in six months (+) Truck (+) Accounts Payable (or Loan)
X	Requested payment from a customer of an account receivable that is overdue NO EFFECT
X	Increased vacations for employees from four weeks to six weeks NO EFFECT
6	Recorded the amount due to the landlord as rent (+) Accounts Payable (-) Expense
6	Received the monthly telephone answering service bill (+) Accounts Payable (-) Expense

CP 1–3

ASSETS			=	LIABILITIES	+	SHAREHOLDERS' EQUITY		
Cash	+	Equipment	=	Accounts Payable	+	Share Capital	+	Retained Earnings

A. Retained earnings = \$5,000 (3,000 + 8,000 - 4,000 - 2,000)
B. Accounts payable = \$3,000 (1,000 + 6,000 - 3,000 - 1,000)
C. Cash = \$1,000 (4,000 - 1,500 - 3,000 - 500)
D. Retained earnings = \$6,000 (6,000 + 7,000 - 3,000 - 4,000)
E. Equipment = \$3,500 (2,500-4,500-500-1,000)

CP 1–4

ASSETS = LIABILITIES + SHAREHOLDERS' EQUITY
Shareholders' equity at Jan. 1 = \$10,000 (\$50,000 – 40,000)
Shareholders' equity at Dec. 31 = \$15,000 (\$35,000 – 20,000)

The increase in shareholders' equity during the year was \$5,000 (\$15,000-10,000). This must be the net income amount.

CP 1–5

1. L	8. A
2. A	9. E
3. L	10. E
4. A	11. E
5. A	12. E
6. E	13. A
7. L	14. E

CP 1–6

1.	ASSETS	=	Cash + Accounts receivable + Unused supplies + Land + Building + Equipment
		=	\$33,000 + \$82,000 + \$2,000 + \$25,000 + \$70,000 + \$30,000
		=	\$242,000
2.	LIABILITIES	=	Bank loan + Accounts payable
		=	\$15,000 + \$27,000
		=	\$42,000
3.	ASSETS	=	LIABILITIES + SHAREHOLDERS' EQUITY
	S/H EQUITY	=	\$242,000 - \$42,000
		=	\$200,000
		=	
	RET. EARN.		\$40,000 – 1,000
		=	\$39,000

Since shareholders' equity is \$200,000 and retained earnings is \$39,000, share capital must be \$161,000.

CP 1–7

Income Statement
For the Month Ended January 31, 2017

Revenue		
Service fees		$20,000
Expenses		
Insurance	$1,500	
Miscellaneous	2,500	
Office Supplies	1,000	
Wages	9,000	
Total expenses		14,000
Net income		$ 6,000

Statement of Changes in Equity
For the Month Ended January 31, 2017

	Share capital	*Retained earnings*	*Total equity*
Opening balance	$-0-	$ -0-	$ -0-
Shares issued	4,000		4,000
Net income		6,000	6,000
Dividends	-	(2,000)	(2,000)
Ending balance	$4,000	$4,000	$8,000

Statement of Financial Position
At January 31, 2017

Assets		
Cash		$ 1,000
Accounts receivable		4,000
Merchandise inventory		8,000
Total assets		$13,000
Liabilities		
Accounts payable		$ 5,000
Shareholders' Equity		
Share capital	$ 4,000	
Retained earnings	4,000	8,000
Total liabilities and shareholders' equity		$13,000

CP 1–8

Adams Ltd.
Income Statement
For the Month Ended January 31, 2017

Revenue		
Services		$3,335
Expenses		
Rent	$ 300	
Repairs	500	
Salaries	1,000	
Miscellaneous	335	
Total expenses		2,135
Net income		$1,200

Adams Ltd.
Statement of Changes in Equity
For the Month Ended January 31, 2017

	Share capital	*Retained earnings*	*Total equity*
Opening balance	$ -0-	$ -0-	$ -0-
Shares issued	3,000	-0-	3,000
Net income	-0-	1,200	1,200
Dividends	-0-	(500)	(500)
Ending balance	$3,000	$ 700	$3,700

Adams Ltd.
Statement of Financial Position
At January 31, 2017

Assets		
Cash	$1,000	
Land	1,000	
Building	2,000	
Total assets		$4,000
Liabilities		
Accounts payable		$ 300
Shareholders' Equity		
Share capital	$3,000	
Retained earnings	700	
Total shareholders' equity		3,700
Total liabilities and shareholders' equity		$4,000

CP 1-9

a. Caldwell employs the principle of *materiality.* Even though the stapler is theoretically an asset, it would be expensed Its small cost is not large or important enough to affect the judgement of a reasonably knowledgeable user about the financial results of the company.

b. Fred Rozak follows the *business entity* principle*,* which states that each entity is an individual unit of accountability separate from its owners and from other entities.

c. In accordance with the *historical cost* principle*,* the machine is recorded at cost even though its value may increase.

d. Dollar amounts used to establish cost are assumed to be constant over time in accordance with the stable *monetary unit* principle.

e. Hull Corporation accountants follow the *going concern* principle*.* Because the corporation is assumed to continue indefinitely, assets are not revalued at estimated disposal amounts.

f. Investors of Spellman Corporation have benefitted from the application of the *consistency* principle.

g. Senior managers of Looten Corporation are using the *full disclosure* principle in the company's financial statements.

P 1–1

Hill Chairs Inc.
Transactions Worksheet
At April 30, 2017

	ASSETS				= LIABILITY	+ S/H EQUITY		
	Cash +	Accounts Receivable +	Prepaid Expense +	Unused Supplies =	Accounts Payable +	Share Capital +	Retained Earnings	
Opening	1,400	3,600	1,000	350	2,000	4,350		
a.	+2,000	-2,000						
b.		+3,000					+3,000	Revenue
c.	-2,400						-300	Advertizing expense
							-2,000	Salaries expense
							-100	Telephone expense
d.	-1,000				-1,000			
e.					+500		-500	Truck operating expense
f.	+2,500	-2,500						
g.		+1,500					+1,500	Revenue
h.			-500				-500	Rent expense
i.				-150			-150	Supplies expense
J.	+1,000					+1,000		
k.	-200						-200	Dividend
	$3,300 +	$3,600 +	$ 500 +	$200 =	$1,500 +	$5,350 +	$ 750	

$\underbrace{\$3,300 + \$3,600 + \$500 + \$200}_{\$7,600 \text{ ASSETS}} = \underbrace{\$1,500 + \$5,350 + \$750}_{\$7,600 \text{ LIABILITIES + S/H EQUITY}}$

$7,600 = $7,600
ASSETS = LIABILITIES + S/H EQUITY

P 1–2

1.

Larson Services Inc.
Transactions Worksheet
At August 31, 2017

		ASSETS					=	LIABILITIES			+	S/H EQUITY		
		Cash	+ Acct. Rec.	+ Ppd. Exp.	+ Unused Supplies	+ Truck	=	Bank Loan	+ Acct. Pay	+ Unearn. Revenue	+	Share Capital	+ Retained Earnings	
Aug.	1	+3,000										+3,000		
	1	+10,000						+10,000						
	1	-8,000				+8,000								
	4	-600		+$600										
	5	+2,000								+2,000				
	7		+ 5,000										+5,000	Fees revenue
	9	-250											-250	Supplies
	12				+500				+500					
	15	+1,000	-1,000											
	16	-200											-200	Advertizing
	20	-250							-250					
	25	-2,800											-350	Rent expense
													-2,150	Supplies
													-50	Telephone
													-250	Truck operating
	28	No Effect												
	29		+4,500							-1,500			+6,000	Fees revenue
	31			-50									-50	Insurance
	31				-400								-400	Supplies
		$3,900	+ $8,500	+ $550	+ $100	+ $8,000	=	$10,000	+ $250	$500		$3,000	+ $7,300	

ASSETS=21,050

LIABILITIES +EQUITY=$21,050

P 1–2 continued

2.

Larson Services Inc.
Income Statement
For the Month Ended August 31, 2017

Revenue		
Fees		$11,000
Expenses		
Advertizing	$ 200	
Insurance	50	
Rent	350	
Salaries	2,150	
Supplies	650	
Telephone	50	
Truck operating	250	
Total expenses		3,700
Net income		$7,300

Larson Services Inc.
Statement of Financial Position
At August 31, 2017

Assets		
Cash	$3,900	
Accounts receivable	8,500	
Prepaid expenses	550	
Unused supplies	100	
Truck	8,000	
Total assets		$21,050
Liabilities		
Bank loan	$10,000	
Accounts payable	250	
Unearned revenue	500	10,750
Shareholders' Equity		
Share capital	3,000	
Retained earnings	7,300	10,300
Total liabilities and shareholders' equity		$21,050

Larson Services Inc.
Statement of Changes in Equity
For the Month Ended August 31, 2017

	Share capital	*Retained earnings*	*Total equity*
Opening balance	$ -0-	$ -0-	$ -0-
Shares issued	3,000	-0-	3,000
Net income	-0-	7,300	7,300
Ending balance	$3,000	$7,300	$10,300

P 1–3

Dumont Inc.
Income Statement
For the Month Ended January 31, 2017

Revenue		
Services		$7,500
Expenses		
Advertizing	$ 500	
Commissions	720	
Insurance	50	
Interest	80	
Rent	400	
Supplies	100	
Telephone	150	
Wages	2,300	
Total expenses		4,300
Net income		$3,200

Dumont Inc.
Statement of Financial Position
At January 31, 2017

Assets		
Cash	$ 1,300	
Accounts receivable	2,400	
Prepaid expenses	550	
Unused supplies	750	
Truck	9,000	
Total assets		$14,000
Liabilities		
Bank loan	$ 8,000	
Accounts payable	1,000	9,000
Shareholders' Equity		
Share capital	2,000	
Retained earnings	3,000	5,000
Total liabilities and shareholders' equity		$14,000

Dumont Inc.
Statement of Changes in Equity
For the Month Ended January 31, 2017

	Share capital	*Retained earnings*	*Total equity*
Opening balance	$ -0-	$ -0-	$ -0-
Shares issued	2,000	-0-	2,000
Net income	-0-	3,200	3,200
Dividends	-0-	(200)	(200)
Ending balance	$2,000	$3,000	$5,000

P 1–4

Kenyon Services Corporation
Income Statement
For the Month Ended March 31, 2017

Revenue		
Fees		$4,500
Expenses		
Advertizing	$ 300	
Equipment rental	500	
Insurance	400	
Interest	100	
Truck operating	700	
Wages	1,500	
Total expenses		3,500
Net income		$1,000

Kenyon Services Corporation
Statement of Financial Position
At March 31, 2017

Assets		
Cash	$3,100	
Accounts receivable	3,900	
Equipment	5,000	
Total assets		$12,000
Liabilities		
Accounts payable		$ 9,000
Shareholders' Equity		
Share capital	2,000	
Retained earnings	1,000	3,000
Total liabilities and shareholders' equity		$12,000

Kenyon Services Corporation
Statement of Changes in Equity
For the Month Ended January 31, 2017

	Share capital	*Retained earnings*	*Total equity*
Opening balance	$2,000	$ -0-	$2,000
Net income	-0-	1,000	1,000
Ending balance	$2,000	$1,000	$3,000

P 1–5

1. It's hard to tell. The corporation's fiscal year-end is likely December 31. It started business on January 1. These are interim financial statements. Any year-end date is possible between September 1 and December 31 without knowing more information.

2. and 3.

Laberge Sheathing Inc.
Income Statement
For the Eighth Month Period Ended August 31, 2017

Revenue		
Services		$6,000
Expenses		
Advertizing	$ 300	
Interest	500	
Maintenance	475	
Supplies	125	
Wages	2,000	
Total expenses		3,400
Net income		$2,600

Laberge Sheathing Inc.
Statement of Financial Position
At August 31, 2017

Assets		
Cash	$ 400	
Accounts receivable	3,800	
Unused supplies	100	
Equipment	8,700	
Total assets		$13,000
Liabilities		
Accounts payable		$ 7,800
Shareholders' Equity		
Share capital	3,200	
Retained earnings	2,000	5,200
Total liabilities and shareholders' equity		$13,000

Laberge Sheathing Inc.
Statement of Changes in Equity
For the Eighth Month Period Ended August 31, 2017

	Share capital	*Retained earnings*	*Total equity*
Opening balance	$3,200	$ -0-	$3,200
Net income	-0-	2,600	2,600
Dividends	-0-	(600)	(600)
Ending balance	$3,200	$2,000	$5,200

P 1–6

1.

McIntyre Builders Corporation
Transactions Worksheet
At March 31,2017

		ASSETS					=	LIABILITIES		+ EQUITY		
		Cash	+ Accts. Rec.	+ Ppd. Exp.	+ Unused Supplies	+ Equipment	=	Accounts Payable	+ Loan Payable	+ Share Capital	+ Ret. Earn.	
Jun.	1	+8,000								+8,000		
	1					+5,000		+5,000				
	2	+600									+ 600	Reno rev
	3	-20									-20	Supplies
	4				+1,000			+1,000				
	5		+2,500								+2,500	Reno rev
	8	+500	-500									
	10	-2,500						-2,500				
	15		+1,000			-1,000						
	18	-1,000							-1,000			
	20							+100			-100	Util. exp.
	22	-600		+600								
	23	No Effect										
	25	+1,000	-1,000									
	27	-3,700									-150	Adv. exp.
											-50	Tel. exp.
											-1,000	Truck op.
											-2,500	Wages
	30		+2,000								+2,000	Reno rev
	30			-300							-300	Rent
	30				-850						-850	Supplies
	30	-30									-30	Dividend
		$2,250	+ $4,000	+ $300	+ $ 150	+ $4,000	=	$1,600	$1,000	+ $8,000	+ $100	

ASSETS =$10,700

LIABILITIES + EQUITY = $10,700

P 1–6 continued

2.

McIntyre Builders Corporation
Income Statement
For the Month Ended June 30, 2017

Revenue		
Renovations		$5,100
Expenses		
Advertizing	$ 150	
Rent	300	
Supplies	870	
Telephone	50	
Truck operating	1,000	
Utilities	100	
Wages	2,500	
Total expenses		4,970
Net income		$ 130

McIntyre Builders Corporation
Statement of Financial Position
At June 30, 2017

Assets		
Cash		$ 2,250
Accounts receivable		4,000
Prepaid expenses		300
Unused supplies		150
Equipment		4,000
Total assets		$10,700
Liabilities		
Accounts payable	$1,600	
Loan payable	1,000	2,600
Shareholders' Equity		
Share capital	$8,000	
Retained earnings	100	8,100
Total liabilities and shareholders' equity		$10,700

McIntyre Builders Corporation
Statement of Changes in Equity
For the Month Ended June 30, 2017

	Share capital	*Retained earnings*	*Total equity*
Opening balance	$ -0-	$ -0-	$ -0-
Shares issued	8,000	-0-	8,000
Net income	-0-	130	130
Dividends	-0-	(30)	(30)
Ending balance	$8,000	$ 100	$8,100

P 1–7

1. The land and the building cost $30,000 in total. If one-third of the total cost is applied to land, then land is $10,000 and building is $20,000. Total assets then equal $128,430. Since assets = liabilities, total shareholders' equity must equal $100,577 ($128,430 - 27,853). Since retained earnings equals $1,000, share capital equals $99,577 ($100,577 - 1,000).

P 1-7 continued

2.

Clarke Limited
Transactions Worksheet
At October 31, 2017

		ASSETS															LIABILITIES			S/H EQUITY
		Cash	+	Acct. Rec.	+	Un. Supp.	+	Land	+	Bldg.	+	Furn.	+	Equip.	+	Truck	=	Acct. Pay.	+	Loans Payable	+	Share Capital
Sep	30	14,215		+11,785		+1,220		+10,000		+20,000		+8,000		+60,000		+3,210	=	3,853		+25,000		+99,577
Oct	2	-110																-110				
.																						
	3	+670		-670																		
	4					+400												+400				
	8	+16,000																				+16,000
	10	+1,000		-1,000																		
	11	-2,000												+22,000				+20,000				
	15	-400																-400				
	20a.	-10,000																-10,000				
	20b.																	-10,000		+10,000		
	31	+300		-300																		
		$19,675	+	$ 9,815	+	$1,620	+	$10,000	+	$20,000	+	$8,000	+	$82,000	+	$3,210	=	$ 3,743	+	$35,000	+	$115,577

ASSETS
= $154,320

LIABILITIES+S/H EQUITY
= $154,320

3. Since there are no transactions recorded in the Retained Earnings column for the month, Net Income is zero.

CHAPTER TWO
The Accounting Process

Concept Self-check

1. An *account* is an accounting record designed to classify and accumulate the dollar effect of financial transactions. In a simplified account called a T–account, the term “debit” is used to describe the left side of the account, while the term “credit” refers to the right side.

2. A T-account shows increases and decreases in an account. It graphically illustrates how a general ledger account functions.

3. The left side of a T-account records debit entries and the right side records credit entries.

4. A chart of accounts is a list of all general ledger accounts used in a business, showing each account’s name and number. A common practice is to have the accounts arranged in a manner that is compatible with the order of their use in financial statements.

5. Increases in shareholders’ equity are recorded as a credit – for example, issuing share capital, or recording revenue.

6. Decreases in shareholders’ equity are recorded as a debit – for example, dividends or expenses are debits.

7. | *Assets, Expenses , Dividends* | *Liabilities, Share Capital, Revenues* |
   |---|---|
   | Increases are debited. | Increases are credited. |
   | Decreases are credited. | Decreases are debited. |

8. A trial balance is a list of each account contained in the general ledger of an entity, together with its individual debit or credit balance. It is prepared in order to establish the equality of debits with credits before the preparation of the financial statements

9. A trial balance shows the totals of each revenue and expense account that will appear on the income statement and the asset, liability, and shareholders’ equity balances that will appear on the statement of financial position, usually in the order these accounts appear in the statement of financial position and income statement.

10. A general journal is a chronological record of an entity’s financial transactions. It is often called a book of original entry because each transaction is recorded in the general journal first before it is posted to the entity’s accounts in the general ledger.

Concept Self-check continued

11. A general ledger is a book that contains the separate asset, liability, shareholders' equity, revenue, and expense accounts of an entity. It is often referred to as a *book of final entry* and it is prepared so that the balance of each account can be found easily at any time.

12. *Posting* consists of transferring debits and credits from the general journal to the appropriate general ledger accounts.

13. The steps in the accounting cycle are
    a. Transactions are analysed and recorded.
    b. Transactions are summarized by account.
    c. The equality of debits with credits is established to ensure accuracy.
    d. The summarized transactions are used to prepare the income statement, statement of financial position, and statement of changes in equity

CP 2–1

Transaction	Any Asset		Any Liability		Share Capital		Any Revenue		Any Expense	
	Debit (increase)	*Credit* (decrease)	*Debit* (decrease)	*Credit* (increase)	*Debit* (decrease)	*Credit* (increase)	*Debit* (decrease)	*Credit* (increase)	*Debit* (decrease)	*Credit* (increase)
(1)	X					X				
(2)	X	X								
(3)	X	X								
(4)	X			X						
(5)				X					X	
(6)	X							X		
(7)	X							X		
(8)		X	X							
(9)	X	X								
(10)		X	X							
(11)				X					X	
(12)		X	X							
(13)	X	X								

CP 2–2

ASSETS = LIABILITIES + SHAREHOLDERS' EQUITY

Cash + Truck = Accounts Payable + Bank Loan + Share Capital + Net Income

A.	$0	(100+200-50-75-175)
B.	$122	(72+130-10-50-20)
C.	$65	(71-5-25-100-6)
D.	$139	(20+200-10-61-10)

CP 2–3

	Assets		Liabilities		S/H Equity	
	Debit (increase)	*Credit* (decrease)	*Debit* (decrease)	*Credit* (increase)	*Debit* (decrease)	*Credit* (increase)
2. Borrowed $5,000 from the bank	5,000			5,000		
3. Paid $2,000 of the bank loan		2,000	2,000			
4. Paid $600 in advance for a one–year insurance policy	600	600				
5. Received $500 in advance for next month's rental of office space.	500			500		

CP 2–4

		Debit	*Credit*
2.	Purchased equipment on credit	Equipment	Accounts Payable
3.	Paid for a one–year insurance policy	Prepaid Insurance	Cash
4.	Billed a customer for repairs completed today	Accounts Receivable	Repair Revenue
5.	Paid for this month's rent	Rent Expense	Cash
6.	Collected the amount billed in transaction 4 above	Cash	Accounts Receivable
7.	Collected cash for repairs completed today	Cash	Repair Revenue
8.	Paid for the equipment purchased in transaction 2 above	Accounts Payable	Cash
9.	Signed a union contract	n/a	
10.	Collected cash for repairs to be made for customers next month	Cash	Unearned Revenue
11.	Transferred this month's portion of prepaid insurance to expenses	Insurance Expense	Prepaid Rent

CP 2-5

Cash

(1)	5,000	(2)	900
(5)	7,500	(8)	2,500
(6)	500	(10)	2,000

Bank Loan

(8)	2,500	(5)	7,500

Share Capital

		(1)	5,000

Repair Revenue

		(3)	1,500

Accounts Receivable

(3)	1,500	(6)	500

Accounts Payable

(10)	2,000	(4)	2,000
		(7)	200

Electricity Expense

(7)	200		

Prepaid Rent

(2)	900	(11)	300

Rent Expense

(11)	300		

Unused Supplies

(4)	2,000	(9)	800

Supplies Expense

(9)	800		

CP 2–6

		Debit	*Credit*
1.	Cash	3,000	
	Share Capital		3,000
	To record the issuance of share capital.		
2.	Equipment	2,000	
	Accounts Payable		2,000
	To record the purchase of equipment on account.		
3.*	Rent Expense	400	
	Cash		400
	To record the payment of rent for the month.		
4.	Supplies	4,000	
	Accounts Payable		4,000
	To record the purchase of supplies.		
5.	Accounts Receivable	2,500	
	Repair Revenue		2,500
	To record repair revenue.		
6.	Accounts Payable	2,000	
	Cash		2,000
	To record the payment on account.		
7.	Cash	500	
	Accounts Receivable		500
	To record collection of an amount owed.		
8.	Cash	1,000	
	Equipment		1,000
	To record the sale of equipment.		

*Alternately, two entries could be made

3. Prepaid Rent	400	
Cash		400
To record payment in advance of rent for the month.		
9. Rent Expense	400	
Prepaid Rent		400
To record rent expense for the month.		

CP 2–7

1. Cash
    Share Capital
   To record issuance of share capital.

2. Unused Supplies
    Cash
    Accounts Payable
   To record purchase of supplies not used immediately.

3. Cash
    Repair Revenue
   To record revenue earned.

4. Accounts Receivable
    Repair Revenue
   To record revenue earned.

5. Prepaid Expense
    Cash
   To record expense paid in advance.

6. Supplies Expense
    Accounts Payable
   To record bill received for supplies used immediately.

7. Electricity Expense
    Accounts Payable
   To record bill received for electricity used.

8. Supplies Expense
    Prepaid Expense
   To record use of supplies on hand.

9. Rent Expense
    Prepaid Rent
   To record rent for period.

10. Accounts Payable
    Cash
   To record payment of account payable.

11. Cash
    Bank Loan
   To record the receipt of a bank loan.

CP 2-8

Cross Corporation
Trial Balance
At December 31, 2017

Acct. No.	*Account Title*	*Account Balances* *Debit*	*Credit*
101	Cash	$120,400	
110	Accounts receivable	26,000	
173	Unused supplies	6,000	
180	Land	8,000	
181	Building	120,000	
201	Bank loan		$80,000
210	Accounts payable		30,000
320	Share capital		170,000
420	Commissions earned		5,000
631	Insurance expense	100	
654	Rent expense	1,000	
656	Salaries expense	3,000	
668	Supplies expense	300	
669	Telephone expense	200	-
		$285,000	$285,000
		Total Debits =	Total Credits

CP 2–9

1. March 2017	Schulte Corporation GENERAL JOURNAL			Page 1
	Description	F	Debit	Credit
1	Cash	101	5	
	Share Capital	320		5
	To record issuance of share capital.			
2	Equipment	183	6	
	Cash	101		3
	Accounts Payable	210		3
	To record purchase of equipment for cash and on account.			
3	Prepaid Rent	162	2	
	Cash	101		2
	To record payment of rent in advance.			
15	Cash	101	4	
	Accounts Receivable	110	2	
	Service Revenue	470		6
	To record receipt of payments and billing of customers for work done.			
17	Cash	101	1	
	Equipment	183		1
	To record sale of equipment for cash.			
18	Supplies Expense	668	3	
	Accounts Payable	210		3
	To record purchase of supplies on account.			
24	Accounts Receivable	110	1	
	Service Revenue	470		1
	To record billing of client for work done.			
31	Rent Expense	654	1	
	Prepaid Rent	162		1
	To record write–off of rent expired for the month.			
31	Truck Operating Expense	670	2	
	Accounts Payable	210		2
	To record receipt of bill with respect to truck expenses incurred.			
31	Accounts Payable	210	1	
	Cash	101		1
	To record payment of account payable.			

CP 2-9 continued

2. Schulte Corporation

Cash			No. 101
Mar. 1	5	Mar.2	3
15	4	3	2
17	1	31	1
	10		6
Bal.	4		

Accounts Receivable			No. 110
Mar.15	2		
24	1		
Bal.	3		

Prepaid Rent			No. 162
Mar. 3	2	Mar.31	1
Bal.	1		

Equipment			No. 183
Mar. 2	6	Mar.17	1
Bal.	5		

Accounts Payable			No. 210
Mar.31	1	Mar. 2	3
		18	3
		31	2
	1		8
		Bal.	7

Share Capital			No. 320
		Mar.1	5

Service Revenue			No. 470
		Mar.15	6
		24	1
		Bal.	7

Rent Expense			No. 654
Mar.31	1		

Supplies Expense			No. 668
Mar.18	3		

Truck Operating Expense			No. 670
Mar.31	2		

CP 2–9 continued

3.

Schulte Corporation
Trial Balance
At March 31, 2017

	Account Balances	
	Debit	*Credit*
Cash	$ 4	
Accounts receivable	3	
Prepaid rent	1	
Equipment	5	
Accounts payable		$ 7
Share capital		5
Service revenue		7
Rent expense	1	
Supplies expense	3	
Truck operating expense	2	
	$19	$19

Total Debits = Total Credits

4.

Schulte Corporation
Income Statement
For the Month Ended March 31, 2017

Revenue		
Services		$7
Expenses		
Rent	$1	
Supplies	3	
Truck operating	2	
Total expenses		6
Net income		$1

Schulte Corporation
Statement of Changes in Equity
For the Month Ended March 31, 2017

	Share capital	*Retained earnings*	*Total equity*
Opening balance	$ -0-	$ -0-	$ -0-
Shares issued	5	-0-	5
Net income	--0-	1	1
Ending balance	$ 5	$ 1	$ 6

CP 2–9 continued

Schulte Corporation
Statement of Financial Position
At March 31, 2017

Assets		
Cash		$ 4
Accounts receivable		3
Prepaid rent		1
Equipment		5
Total assets		$13
Liabilities		
Accounts payable		$7
Shareholders' Equity		
Share capital	$5	
Retained earnings	1	6
Total liabilities and shareholders' equity		$13

CP 2–10

McQueen Corp.
Trial Balance
At December 31, 2017

Acct. No.	*Account Title*	*Account Balances* *Debit*	*Credit*
101	Cash	$ 15,500	
110	Accounts receivable	10,000	
161	Prepaid insurance	9,600	
162	Prepaid rent	8,000	
173	Unused supplies	2,800	
180	Land	12,000	
181	Building	50,000	
182	Furniture	6,000	
201	Bank loan		$ 28,000
210	Accounts payable		13,250
320	Share capital		75,000
350	Dividends	2,350	-
		$116,250	$116,250

CP 2–11

1.

Date	Account	*Debit*	*Credit*
Jun. 1	Cash	25,000	
	Share Capital		25,000
	To record the issuance of share capital.		
1	Rent Expense	500	
	Cash		500
	To record rent paid for the month.		
1	Prepaid Insurance	2,000	
	Cash		2,000
	To record payment of insurance, policy effective one year.		
15	Salaries Expense	1,000	
	Cash		1,000
	To record payment of salaries.		
20	Cash	5,000	
	Repair Revenue		5,000
	To record repair revenue earned.		
23	Unused Supplies	4,000	
	Cash		4,000
	To record the purchase of office supplies.		
27	Telephone Expense	100	
	Accounts Payable		100
	To record telephone expense.		
30	Salaries Expense	1,000	
	Cash		1,000
	To record the payment of salaries.		
30	Land	5,000	
	Building	15,000	
	Bank Loan		4,000
	Cash		16,000
	To record the purchase of land and building.		
30	Insurance Expense	200	
	Prepaid Insurance		200
	To record June insurance expense		
30	Accounts Receivable	3,000	
	Repair Revenue		3,000
	To record repair revenue earned.		
30	Supplies Expense	200	
	Unused Supplies		200
	To record office supplies used.		

CP 2–11 continued

2. Collins Corporation
Trial Balance
June 30, 2017

Account Title	*Account Balances* Debit	*Account Balances* Credit
Cash	$ 5,500	
Accounts receivable	3,000	
Prepaid insurance	1,800	
Unused supplies	3,800	
Land	5,000	
Building	15,000	
Bank loan		$ 4,000
Accounts payable		100
Share capital		25,000
Repair revenue		8,000
Insurance expense	200	
Rent expense	500	
Salaries expense	2,000	
Supplies expense	200	
Telephone expense	100	
	$37,100	$37,100

3. Collins Corporation
Income Statement
For the Month Ended June 30, 2017

Revenue		
Repairs		$8,000
Expenses		
Insurance	$ 200	
Rent	500	
Salaries	2,000	
Supplies	200	
Telephone	100	
Total Expenses		3,000
Net Income		$5,000

CP 2-11 continued

Collins Corporation
Statement of Changes in Equity
For the Month Ended January 31, 2017

	Share capital	*Retained earnings*	*Total equity*
Opening balance	$ -0-	$ - 0-	$ - -0-
Shares issued	25,000	0	25,000
Net income	-0-	5,000	5,000
Ending balance	$25,000	$5,000	$30,000

Collins Corporation
Statement of Financial Position
At June 30,2017

Assets		
Cash		$5,500
Account receivable		3,000
Prepaid insurance		1,800
Unused supplies		3,800
Land		5,000
Building		15,000
Total assets		$34,100
Liabilities		
Accounts payable	$ 100	
Bank loan	4,000	4,100
Shareholders' Equity		
Share capital	25,000	
Retained earnings	5,000	30,000
Total liabilities and shareholders' equity		$34,100

CP 2–12

1\. Sabre Travels Inc.
Trial Balance
January 31, 2017

	Account Balances	
	Debit	*Credit*
Cash	$ 60	
Accounts receivable	140	
Unused supplies	10	
Equipment	300	
Building	700	
Land	300	
Accounts payable		$ 20
Bank loan		100
Share capital		250
Fees earned		1,875
Advertizing expense	200	
Repairs expense	100	
Supplies expense	20	
Telephone expense	10	
Utilities expense	5	
Wages expense	400	
	$2,245	$2,245

2\. Sabre Travels Inc.
Income Statement
For the Year Ended January 31, 2017

Revenue		
Fees earned		1,875
Expenses		
Advertizing	$200	
Repairs	100	
Supplies	20	
Telephone	10	
Utilities	5	
Wages	400	
Total expenses		735
Net income		$1,140

Sabre Travels Inc.
Statement of Financial Position
At January 31, 2017

Assets		
Cash		$ 60
Accounts receivable		140
Unused supplies		10
Equipment		300
Building		700
Land		300
Total assets		$1,510
Liabilities		
Accounts payable	$ 20	
Bank loan	100	
		120
Shareholders' Equity		
Share capital	250	
Retained earnings	1,140	1,390
Total liabilities and shareholders' equity		$1,510

CP 2–12 continued

Sabre Travels Inc.
Statement of Changes in Equity
For the Year Ended January 31, 2017

	Share capital	*Retained earnings*	*Total equity*
Opening balance	$ 250	$ -0-	$ 250
Net income	-0-	1,140	1,140
Ending balance	$ 250	$1,140	$1,390

CP 2-13

1. Elgert Corporation

Cash

Jan. 1	10,000	Jan. 5	200
11	1,300	4	4,000
		30	1,800
		31	50
	11,300		6,050
Bal.	5,250		

Accounts Payable

		Jan. 28	450

Share Capital

		Jan. 1	10,000

Service Revenue

		Jan. 11	1,300
		31	1,600
		Bal.	2,900

Accounts Receivable

Jan. 31	1,600		

Dividends

Jan. 31	50		

Rent Expense

Jan. 5	200		

Unused Supplies

Jan. 9	4,000	Jan.31	200
Bal.	3,800		

Truck Operating Expense

Jan. 28	450		

Salaries Expense

Jan. 30	1,800		

Supplies Expense

Jan. 31	200		

CP 2–13 continued

2.

Elgert Corporation
Trial Balance
January 31,2017

Account Title	*Accounts Balances* Debit	Credit
Cash	$ 5,250	
Accounts receivable	1,600	
Unused supplies	3,800	
Accounts payable		$ 450
Share capital		10,000
Dividends	50	
Service revenue		2,900
Rent expense	200	
Truck operating expense	450	
Salaries expense	1,800	
Supplies expense	200	
	$13,350	$13,350

3.

Elgert Corporation
Income Statement
For the Month Ended January 31, 2017

Revenue		
Services		$2,900
Expenses		
Rent	$200	
Truck operating	450	
Salaries	1,800	
Supplies	200	
Total expenses		2,650
Net income		$ 250

CP 2–13 continued

3. (continued)

Elgert Corporation
Statement of Changes in Equity
For the Month Ended January 31, 2017

	Share capital	*Retained earnings*	*Total equity*
Opening balance	$ 0	$ 0	$ 0
Shares issued	10,000	0	10,000
Net income		250	250
Dividends	0	(50)	(50)
Ending balance	$10,000	$ 200	$10,200

Elgert Corporation
Statement of Financial Position
At January 31,2017

Assets		
Cash		$ 5,250
Accounts receivable		1,600
Unused supplies		3,800
Total assets		$10,650
Liabilities		
Accounts payable		$450
Shareholders' Equity		
Share capital	$10,000	
Retained earnings	200	10,200
Total liabilities and shareholders' equity		$10,650

P 2–1

1. Fox Creek Service Limited
Trial Balance
At October 31, 2017

	Account Balances	
	Debit	*Credit*
Cash	$ 1,000	
Accounts receivable	6,000	
Equipment	7,000	
Truck	9,000	
Bank loan		$ 5,000
Accounts payable		9,000
Wages payable		1,500
Share capital		2,000
Repair revenue		19,000
Advertizing expense	2,200	
Commissions expense	4,500	
Insurance expense	500	
Supplies expense	800	
Telephone expense	250	
Truck operating expense	1,250	
Wages expense	4,000	
	$36,500	$36,500

P 2–1 continued

2.

Fox Creek Service Limited
Statement of Changes in Equity
For the Year Ended October 31, 2017

	Share capital	*Retained earnings*	*Total equity*
Opening balance	$ -0-	$ -0-	$ -0-
Shares issued	2,000	-0-	2,000
Net income	-0-	5,500	5,500
Ending balance	$2,000	$5,500	$7,500

3.

Fox Creek Service Limited
Income Statement
For the Year Ended October 31, 2017

Revenue		
Repairs		$19,000
Expenses		
Advertizing	$2,200	
Commissions	4,500	
Insurance	500	
Supplies	800	
Telephone	250	
Truck operating	1,250	
Wages	4,000	
Total expenses		13,500
Net income		$ 5,500

Fox Creek Service Limited
Statement of Financial Position
At October 31, 2017

Assets		
Cash		$ 1,000
Accounts receivable		6,000
Equipment		7,000
Truck		9,000
Total assets		$23,000
Liabilities		
Bank loan	$5,000	
Accounts payable	9,000	
Wages payable	1,500	15,500
Shareholders' Equity		
Share capital	2,000	
Retained earnings	5,500	7,500
Total liabilities and shareholders' equity		$23,000

P 2–2

1. Davidson Tool Rentals Corporation
GENERAL JOURNAL Page 1

Date	Description	F	Debit	Credit
May 1	Cash	101	5,000	
	Share Capital	320		5,000
	To record issuance of share capital.			
5	Accounts Receivable	110	3,000	
	Service Revenue	470		3,000
	To record billings to customers.			
6	Cash	101	2,000	
	Service Revenue	470		2,000
	To record cash payment by customers for work completed.			
10	Cash	101	1,500	
	Accounts Receivable	110		1,500
	To record collections on account.			
11	Equipment	183	2,000	
	Cash	101		1,000
	Accounts Payable	210		1,000
	To record purchase of equipment partially paid by cash, remainder on account.			
15	Cash	101	1,200	
	Accounts Receivable	110		1,200
	To record payment received on account.			
16	Prepaid Advertizing	160	500	
	Cash	101		500
	To record payment of advertizing in advance.			
18	Accounts Receivable	110	2,500	
	Service Revenue	470		2,500
	To record billings to customers.			
20	Unused Supplies	173	300	
	Cash	101		300
	To record purchase of supplies for inventory.			
21	Cash	101	800	
	Equipment	183		800
	To record sale of equipment at cost.			

P 2–2 continued

Davidson Tool Rentals Corporation
GENERAL JOURNAL
Page 2

Date	Description	F	Debit	Credit
May 22	Accounts Payable	210	600	
	Cash	101		600
	To record payment of amounts owing.			
23	Telephone Expense	669	150	
	Accounts Payable	210		150
	To record receipt of telephone bill.			
24	Commissions Expense	615	1,100	
	Accounts Payable	210		1,100
	To record receipt of commissions bill.			
28	Rent Expense	654	400	
	Cash	101		400
	To record payment of rent for May.			
29	Salaries Expense	656	3,500	
	Cash	101		3,500
	To record payment of wages incurred.			
30	Supplies Expense	668	100	
	Unused Supplies	173		100
	To record supplies used during the month.			
31	Advertizing Expense	610	250	
	Prepaid Advertizing	160		250
	To record expiry of prepaid advertizing.			

P 2-2 continued

Davidson Tools Rentals Corporation

Cash	No. 101
5,000	1,000
2,000	500
1,500	300
1,200	600
800	400
-	3,500
10,500	6,300
Bal. 4,200	

Accounts Receivable	No. 110
3,000	1,500
2,500	1,200
5,500	2,700
Bal. 2,800	

Prepaid Advertizing	No. 160
500	250
Bal. 250	

Unused Supplies	No. 173
300	100
Bal 200	

Equipment	No. 183
2,000	800
Bal. 1,200	

Accounts Payable	No. 210
600	1,000
	150
	1,100
600	2,250
	Bal. 1,650

Share Capital	No. 320
	5,000

Service Revenue	No. 460
	3,000
	2,000
	2,500
	Bal. 7,500

Advertizing Expense	No. 610
250	

Commissions Expense	No. 615
1,100	

Rent Expense	No. 654
400	

Salaries Expense	No. 656
3,500	

Supplies Expense	No. 668
100	

Telephone Expense	No. 669
150	

P 2–2 continued

2.

Davidson Tools Rentals Corporation
Trial Balance
May 31, 2017

Acct. No.	*Account Title*	*Account Balances Debit*	*Credit*
101	Cash	$ 4,200	
110	Accounts receivable	2,800	
160	Prepaid advertizing	250	
173	Unused supplies	200	
183	Equipment	1,200	
210	Accounts payable		$ 1,650
320	Share capital		5,000
460	Service revenue		7,500
610	Advertizing expense	250	
615	Commissions expense	1,100	
654	Rent expense	400	
656	Salaries expense	3,500	
668	Supplies expense	100	
669	Telephone expense	150	
		$14,150	$14,150

P 2–3

1.

Findlay Consultants Corp.
Trial Balance
At January 31, 2017

Acct. No.	*Account Title*	*Account Balances* *Debit*	*Credit*
101	Cash	$ 2,000	
110	Accounts receivable	8,000	
160	Prepaid advertizing	300	
182	Furniture	1,000	
183	Equipment	4,000	
184	Truck	9,000	
210	Accounts payable		$9,000
226	Salaries payable		1,500
236	Utilities payable		3,625
320	Share capital		7,000
420	Fees earned		9,500
610	Advertizing expense	150	
631	Insurance expense	200	
641	Maintenance expense	250	
654	Rent expense	400	
656	Salaries expense	2,600	
668	Supplies expense	350	
669	Telephone expense	125	
670	Truck operating expense	750	
677	Wages expense	1,500	
		$30,625	$30,625

2.

Findlay Consultants Corp.
Income Statement
For the Month Ended January 31, 2017

Revenue		
Fees		$9,500
Expenses		
Advertizing	$ 150	
Insurance	200	
Maintenance	250	
Rent	400	
Salaries	2,600	
Supplies	350	
Telephone	125	
Truck operating	750	
Wages	1,500	
Total expenses		6,325
Net income		$3,175

P 2-3 continued

Findlay Consultants Corp.
Statement of Changes in Equity
For the Month Ended January 31, 2017

	Share capital	*Retained earnings*	*Total equity*
Opening balance	$ -0-	$ -0-	$ -0-
Shares issued	7,000	-0-	7,000
Net income	-0-	3,175	3,175
Ending balance	$7,000	$3,175	$10,175

3.

Findlay Consultants Corp.
Statement of Financial Position
At January 31, 2017

Assets		
Cash		$2,000
Accounts receivable		8,000
Prepaid advertizing		300
Equipment		4,000
Furniture		1,000
Truck		9,000
Total assets		$24,300
Liabilities		
Accounts payable	$9,000	
Salaries payable	1,500	
Utilities payable	3,625	14,125
Shareholders' Equity		
Share capital	7,000	
Retained earnings	3,175	10,175
Total liabilities and shareholders' equity		$24,300

P 2-4

1. and 3.

Fenton Table Rentals Corporation

Cash No. 101

Apr.1	1,400	c.	2,400
a.	2,000	d.	1,000
f.	2,500	j.	100
	5,900		3,500
Bal.	2,400		

Accounts Receivable No. 110

Apr.1	3,600	a.	2,000
b.	3,000	f.	2,500
g.	1,500		
	8,100		4,500
Bal.	3,600		

Prepaid Rent No. 162

Apr.1	1,000	h.	500
Bal.	500		

Unused Supplies No. 173

Apr.1	350	i.	150
Bal.	200		

Accounts Payable No. 210

d.	1,000	Apr.1	2,000
		e.	500
	1,000		2,500
		Bal.	1,500

Share Capital No. 320

		Apr.1	4,350

Dividends No. 350

j.	100		

Service Revenue No. 470

		b.	3,000
		g.	1,500
		Bal.	4,500

Advertizing Expense No. 610

c.	300		

Rent Expense No. 654

h.	500		

Salaries Expense No. 656

c.	2,000		

Supplies Expense No. 668

i.	150		

Telephone Expense No. 669

c.	100		

Truck Operating Expense No. 670

e.	500		

P 2-4 continued

2.

Fenton Table Rentals Corporation
GENERAL JOURNAL page 1

April 2017	Description	F	Debit	Credit
a.	Cash	101	2,000	
	Accounts receivable	110		2,000
	To record a collection on account.			
b.	Accounts Receivable	110	3,000	
	Service Revenue	170		3,000
	To record billings to customers.			
c.	Advertizing Expense	610	300	
	Salaries Expense	656	2,000	
	Telephone Expense	669	100	
	Cash	101		2,400
	To record payment of expenses incurred.			
d.	Accounts payable	210	1,000	
	Cash	101		1,000
	To record payment made on account.			
e.	Truck Operating Expense	670	500	
	Accounts Payable	210		500
	To record bill received for truck repair expense.			
f.	Cash	101	2,500	
	Accounts Receivable	110		2,500
	To record payment received on account.			
g.	Accounts Receivable	110	1,500	
	Service revenue	470		1,500
	To record billings to customers.			
h.	Rent Expense	654	500	
	Prepaid Rent	162		500
	To record expiry of a portion of prepaid rent.			
i.	Supplies Expense	668	150	
	Unused Supplies	173		150
	To record supplies used, based on count of unused supplies at end of month.			
j.	Dividends	350	100	
	Cash	101		100
	To record dividends paid in cash.			

P 2–4 continued

4.

Fenton Table Rentals Corporation
Trial Balance
At April 30, 2017

Acct. No.	*Account Title*	*Account Balances* Debit	Credit
101	Cash	$ 2,400	
110	Accounts receivable	3,600	
162	Prepaid rent	500	
173	Unused supplies	200	
210	Accounts payable		$ 1,500
320	Share capital		4,350
350	Dividends	100	
470	Service revenue		4,500
610	Advertizing expense	300	
654	Rent expense	500	
656	Salaries expense	2,000	
668	Supplies expense	150	
669	Telephone expense	100	
670	Truck operating expense	500	
		$10,350	$10,350

P 2–4 continued

5.

Fenton Table Rentals Corporation
Income Statement
For the Month Ended April 30, 2017

Revenue		
Services		$4,500
Expenses		
Advertizing	$ 300	
Rent	500	
Salaries	2,000	
Supplies	150	
Telephone	100	
Truck operating	500	
Total expenses		3,550
Net income		$ 950

Fenton Table Rentals Corporation
Statement of Financial Position
At April 30, 2017

Assets		
Cash		$2,400
Accounts receivable		3,600
Prepaid rent		500
Unused supplies		200
Total assets		$6,700
Liabilities		
Accounts payable		$1,500
Shareholders' Equity		
Share capital	$4,350	
Retained earnings	850	5,200
Total liabilities and shareholders' equity		$6,700

Fenton Table Rentals Corporation
Statement of Changes in Equity
For the Month Ended April 30, 2017

	Share capital	*Retained earnings*	*Total equity*
Opening balance	$ 4,350	$ -0-	$ 4,350
Net income		950	950
Dividends	0	(100)	(100)
Ending balance	$4,350	$ 850	$5,200

P 2-5

1. and 3.

Thorn Accounting Services Inc.

Cash — No. 101

Aug.1	3,000	Aug.1	8,000
1	10,000	4	600
5	2,000	9	250
15	1,000	16	200
		20	250
		25	2,800
	16,000		12,100
Bal.	3,900		

Accounts Receivable — No. 110

Aug.7	5,000	Aug.15	1,000
29	6,000		
	11,000		1,000
Bal.	10,000		

Prepaid Insurance — No. 161

Aug.4	600	Aug.31	50
Bal.	550		

Unused Supplies — No. 173

Aug.12	500	Aug.31	400
Bal.	100		

Truck — No. 184

Aug.1	8,000		

Bank Loan — No. 201

		Aug.1	10,000

Accounts Payable — No. 210

Aug.20	250	Aug.12	500
		Bal.	250

Share Capital — No. 320

		Aug.1	3,000

Fees Earned — No. 420

		Aug.5	2,000
		7	5,000
		29	6,000
		Bal.	13,000

Advertizing Expense — No. 610

Aug.16	200		

Insurance Expense — No. 631

Aug.31	50		

Rent Expense — No. 654

Aug.25	350		

Salaries Expense — No. 656

Aug.25	2,150		

Supplies Expense — No. 668

Aug.9	250		
31	400		
Bal.	650		

Telephone Expense — No. 669

Aug.25	50		

Truck Operating Expense — No. 670

Aug.25	250		

P 2–5 continued

2.

Thorn Accounting Services Inc.
General Journal

Page 1

Date 2017	Description	F	Debit	Credit
Aug. 1	Cash	101	3,000	
	Share Capital	320		3,000
	To record issuance of share capital.			
1	Cash	101	10,000	
	Bank Loan	201		10,000
	To record amount borrowed from bank.			
1	Truck	184	8,000	
	Cash	101		8,000
	To record purchase of a used truck.			
4	Prepaid Insurance	161	600	
	Cash	101		600
	To record payment of a one-year insurance policy.			
5	Cash	101	2,000	
	Fees Earned	420		2,000
	To record collection of cash fees from a customer.			
7	Accounts Receivable	110	5,000	
	Fees Earned	420		5,000
	To record billings to customers.			
9	Supplies Expense	668	250	
	Cash	101		250
	To record payment of supplies used.			
12	Unused Supplies	173	500	
	Accounts Payable	210		500
	To record purchase of supplies on account.			
15	Cash	101	1,000	
	Accounts Receivable	110		1,000
	To record collection of customer accounts.			
16	Advertizing Expense	610	200	
	Cash	101		200
	To record payment of advertizing expense.			

P 2–5 continued

Thorn Accounting Services Inc.
General Journal

Page 2

Aug. 2017	Description	F	Debit	Credit
Aug. 20	Accounts Payable	210	250	
	Cash	101		250
	To record payment made on account.			
25	Rent Expense	654	350	
	Salaries Expense	656	2,150	
	Telephone Expense	669	50	
	Truck Operating Expense	670	250	
	Cash	101		2,800
	To record cash payment of expenses.			
29	Accounts Receivable	110	6,000	
	Fees Earned	420		6,000
	To record billings to customers.			
31	Insurance Expense	631	50	
	Prepaid Insurance	161		50
	To record insurance expired for August ($600/12 months)			
31	Supplies Expense	668	400	
	Unused Supplies	173		400
	To record supplies used for August.			

P 2–5 continued

4.

Thorn Accounting Services Inc.
Trial Balance
At August 31, 2017

Acct. No.	*Account Title*	*Account Balances Debit*	*Credit*
101	Cash	$ 3,900	
110	Accounts receivable	10,000	
161	Prepaid insurance	550	
173	Unused supplies	100	
184	Truck	8,000	
201	Bank loan		$10,000
210	Accounts payable		250
320	Share capital		3,000
420	Fees earned		13,000
610	Advertizing expense	200	
631	Insurance expense	50	
654	Rent expense	350	
656	Salaries expense	2,150	
668	Supplies expense	650	
669	Telephone expense	50	
670	Truck operating expense	250	
		$26,250	$26,250

P 2-5 continued

5.

Thorn Accounting Services Inc.
Income Statement
For the Month Ended August 31,2017

Revenue		
Fees earned		$13,000
Expenses		
Advertizing	$ 200	
Insurance	50	
Rent	350	
Salaries	2,150	
Supplies	650	
Telephone	50	
Truck operating	250	
Total expenses		3,700
Net income		$ 9,300

Thorn Accounting Services Inc.
Statement of Financial Position
At August 31, 2017

Assets		
Cash		$ 3,900
Accounts receivable		10,000
Prepaid insurance		550
Unused supplies		100
Truck		8,000
Total assets		$22,550
Liabilities		
Bank loan	$10,000	
Accounts payable	250	10,250
Shareholders' Equity		
Share capital	3,000	
Retained earnings	9,300	12,300
Total liabilities and shareholders' equity		$22,550

Thorn Accounting Service Inc.
Statement of Changes in Equity
For the Month Ended August 31, 2017

	Share capital	*Retained earnings*	*Total equity*
Opening balance	$ -0-	$ -0-	$ 0
Shares issued	3,000	-0-	3,000
Net income	-0-	9,300	9,300
Ending balance	$3,000	$9,300	$12,300

P 2-6

1. and 3.

Chan Renovations Corporation

Cash No. 101

Jun. 1	8,000	Jun. 3	20
2	600	10	2,500
8	500	18	1,000
25	1,000	22	600
		25	3,700
	10,100		7,820
Bal.	2,280		

Accounts Receivable No. 110

Jun. 5	2,500	Jun. 8	500
15	1,000	25	1,000
30	2,000		
	5,500		1,500
Bal.	4,000		

Prepaid Rent No. 162

Jun. 22	600	Jun. 30	300
Bal.	300		

Unused Supplies No. 173

Jun. 4	1,000	Jun. 30	850
Bal.	150		

Equipment No. 183

Jun. 1	5,000	Jun. 15	1,000
Bal.	4,000		

Accounts Payable No. 210

Jun. 10	2,500	Jun. 1	5,000
18	1,000	4	1,000
		20	100
	3,500		6,100
		Bal.	2,600

Share Capital No. 320

		Jun.1	8,000

Repair Revenue No. 450

		Jun. 2	600
		5	2,500
		30	2,000
		Bal.	5,100

Telephone Expense No. 669

Jun. 25	50		

Advertizing Expense No. 610

Jun. 25	150		

Truck Operating Expense No. 670

Jun. 25	1,000		

Rent Expense No. 654

Jun. 30	300		

Utilities Expense No. 676

Jun. 20	100		

Supplies Expense No. 668

Jun. 3	20		
30	850		
Bal.	870		

Wages Expenses No. 677

Jun. 25	2,500		

P 2-6 continued

2.

Chan Renovations Corporation
General Journal

Page 1

2017	Description	F	Debit	Credit
Jun. 1	Cash	101	8,000	
	Share Capital	320		8,000
	To record issuance of share capital.			
1	Equipment	183	5,000	
	Accounts Payable	210		5,000
	To record purchase of equipment on account.			
2	Cash	101	600	
	Repair Revenue	450		600
	To record collection of cash from customer.			
3	Supplies Expense	668	20	
	Cash	101		20
	To record payment of supplies used.			
4	Unused Supplies	173	1,000	
	Accounts Payable	210		1,000
	To record purchase of unused supplies on account.			
5	Accounts Receivable	110	2,500	
	Repair Revenue	450		2,500
	To record billings to customers.			
8	Cash	101	500	
	Accounts Receivable	110		500
	To record collection on account.			
10	Accounts Payable	210	2,500	
	Cash	101		2,500
	To record payment on account.			
15	Accounts Receivable	110	1,000	
	Equipment	183		1,000
	To record sale of equipment on account.			
18	Accounts Payable	210	1,000	
	Cash	101		1,000
	To record payment made on account.			

P 2-6 continued

Chan Renovations Corporation
General Journal

Page 2

2017	Description	F	Debit	Credit
Jun. 20	Utilities Expense	676	100	
	Share Capital	210		100
	To record bill received for utilities.			
22	Prepaid Rent	162	600	
	Cash	101		600
	To record June and July rent payments made in advance.			
25	Cash	101	1,000	
	Accounts Receivable	110		1,000
	To record payment received on account.			
27	Advertizing Expense	610	150	
	Telephone Expense	669	50	
	Truck Operating Expense	670	1,000	
	Wages Expense	677	2,500	
	Cash	101		3,700
	To record payment of expenses in cash.			
30	Accounts Receivable	110	2,000	
	Repair Revenue	450		2,000
	To record customer billings.			
30	Rent Expense	654	300	
	Prepaid Rent	162		300
	To record expiry of June rent.			
30	Supplies Expense	668	850	
	Unused Supplies	173		850
	To record supplies used in June.			

P 2-6 continued

4.

Chan Renovations Corporation
Trial Balance
At June 30, 2017

Acct. No.	*Account Title*	*Account Balances* *Debit*	*Credit*
101	Cash	$ 2,280	
110	Accounts receivable	4,000	
162	Prepaid rent	300	
172	Unused supplies	150	
183	Equipment	4,000	
210	Accounts payable		$ 2,600
320	Share capital		8,000
450	Repair revenue		5,100
610	Advertizing expense	150	
654	Rent expense	300	
668	Supplies expense	870	
669	Telephone expense	50	
670	Truck operating expense	1,000	
676	Utilities expense	100	
677	Wages expense	2,500	
		$15,700	$ 15,700

P 2-6 continued

5.

Chan Renovations Corporation
Income Statement
For the Month Ended June 30, 2017

Revenue		
Repairs		$5,100
Expenses		
Advertizing	$ 150	
Rent	300	
Supplies	870	
Telephone	50	
Truck operating	1,000	
Utilities	100	
Wages	2,500	
Total expenses		4,970
Net income		$ 130

Chan Renovations Corporation
Statement of Financial Position
At June 30, 2017

Assets		
Cash		$ 2,280
Accounts receivable		4,000
Prepaid rent		300
Unused supplies		150
Equipment		4,000
Total assets		$10,730
Liabilities		
Accounts payable		$ 2,600
Shareholders' Equity		
Share capital	8,000	
Retained earnings	130	8,130
Total liabilities and shareholders' equity		$10,730

Chan Renovations Corporation
Statement of Changes in Equity
For the Month Ended June 30, 2017

	Share capital	*Retained earnings*	*Total equity*
Opening balance	$ -0-	$ -0-	$ -0-
Shares issued	8,000	-0-	8,000
Net income	-0-	130	130
Ending balance	$8,000	$ 130	$8,130

CHAPTER THREE
Financial Accounting
and the Use of Adjusting Entries

Concept Self-check

1. The sequence of financial transactions that occurs continuously during an accounting time period is called the *operating cycle*. Operations begin with some cash on hand. The cash is used to purchase supplies and pay expenses while revenue is being generated. Often when revenue is earned, an account receivable is created, which is later collected in cash. This begins the cycle over again. There are many operating cycles occurring simultaneously. While some transactions are being completed, others are only beginning.

2. The operating cycle does not have to be complete before income can be measured. Accrual accounting is the means to accomplish this. Revenue can be recorded as earned when the product is sold or the service performed regardless of when cash is collected. To measure income, expenses must be matched to revenues or the relevant time period. This usually can be done whether or not the operating cycle is complete.

3. Accrual accounting matches expenses to revenues for a particular time period. The accrual method is the basis on which accounts are adjusted to reach this objective. Under this method, expenses are matched to the revenues during the period that the revenues are generated. The revenue recognition assumption helps determine when revenues are earned, thus allowing expenses to be matched to these revenues. Revenues are not generally matched to expenses by convention. The rationale is that generating revenue is the principal objective of a business. Therefore, these are recognized and then expenses are matched to revenues.

4. Adjusting entries are changes made at the end of an operating cycle to more accurately reflect economic activity during the period. For instance, depreciation is calculated on plant and equipment and charged to the income statement as depreciation expense.

Concept Self-check continued

5. The five types of adjusting entries are:

(1)

Dec. 31	Expense	XX	
	Prepaid Expense		XX
	To adjust prepaid expense for the amount of benefit used.		

(2)

Dec. 31	Account Recievable	XX	
	Revenue		XX
	To record reveue earned on credit.		

(3)

Dec. 31	Depreciation Expense	XX	
	Accumulated Depreciation		XX
	To allocate the cost of plant and equipment over their useful lives.		

(4)

Dec. 31	Unearned Revenue	XX	
	Revenue		XX
	To adjust unearned amounts now earned.		

(5)

Dec. 31	Expense	XX	
	Payable		XX
	To adjust for accrued expenses.		

6. At the end of the accounting period, an accountant must determine the amount of future benefits (assets like Prepaid Insurance) that belong on the statement of financial position and how much should be recorded in the income statement (as Insurance Expense, in this example). The appropriate amounts must be transferred by means of adjusting entries.

7. Long-lived asset accounts like Equipment and are handled differently than other asset accounts. The expired portion of the cost of such an asset is estimated based on its useful life and recorded as depreciation expense. This requires no cash outlay, despite being an expense. Capital asset accounts themselves are not reduced by the depreciation expense; rather, a contra asset account is set up in order to show the asset at its carrying value on the statement of financial position.

Concept Self-check continued

8. A contra account is used to reduce the value of a related statement of financial position item. For instance, the account Accumulated Depreciation—Equipment is credited by the amount of depreciation expense recorded each year. The balance in this account is netted against the related account (Equipment, in this example) so that the asset is shown at carrying amount on the statement of financial position.

9. At the end of the accounting period, the amount of services that still remain to be performed is determined. The related revenue and liability account balances are adjusted through the use of an adjusting entry (in this case, Unearned Repair Revenue, a liability account and Repair Revenue, a revenue account).

10. Accrued revenues and accrued expenses are items that are not recognized in the normal course of recording financial transactions.. They are not captured by source documents like sales and purchase invoices. They are recorded through the use of accrual adjusting entries at the end of the accounting period. Examples of revenues and expenses that accrue are rent revenue and expenses, interest revenue and expense, salaries and wages expenses, and income taxes expense.

    Related asset or liability accounts record the offsetting debits and credits. These statement of financial position accounts are eventually reduced when cash is received or paid, as applicable.

11. An adjusted trial balance is prepared after posting the adjusting entries in order to establish the equality of debits and credits, and before preparing the financial statements.

12. The adjusted trial balance conveniently summarises the general ledger accounts in order of their appearance in the financial statements. This facilitates preparation of the financial statements.

13. The eight steps in the accounting cycle are:
    1. Transactions are analyzed and recorded in the general journal.
    2. The journal entries in the general journal are posted to accounts in the general ledger.
    3. An unadjusted trial balance is prepared to ensure total debits equal total credits.
    4. The unadjusted account balances are analyzed, and adjusting entries are journalized in the general journal and posted to the general ledger.
    5. An adjusted trial balance is prepared to prove the equality of debits and credits.
    6. The adjusted trial balance is used to prepare financial statements.
    7. Closing entries are journalized and posted.
    8. A post-closing trial balance is prepared.

Concept Self-check continued

14. The first two steps in the accounting cycle occur continuously throughout the accounting period:
    1. Transactions are analyzed and recorded in the general journal.
    2. The journal entries in the general journal are posted to accounts in the general ledger.

15. The last two steps in the accounting cycle occur only at the end of the accounting period:
    7. Closing entries are journalized and posted.
    8. A post-closing trial balance is prepared.

    These steps differ from the others because they are only used to zero out temporary accounts and adjust retained earnings to the amount shown on the fiscal year-end statement of financial position.

16. The need for regular financial information requires that revenue and expense accounts of a business be accumulated for usually no more than one year by convention, and that financial statements be prepared for that period. Using a consistent time period allows revenue and expenses for one period to be compared to a preceding period. A one-year cycle reduces effects of seasonal variations in business activity, for instance, but also allows for business performance to be evaluated by owners and creditors regularly and predictably.

17. Temporary accounts include all revenues and expense categories that are reduced to zero at the end of the fiscal year when they are closed to the Retained Earnings account. Permanent accounts have a continuing balance from one fiscal year to the next. All statement of financial position accounts are permanent accounts.

18. An Income Summary account is an general ledger record used only at year-end to accumulate all revenue and expense balances, and to reduce their general ledger accounts to zero at the end of the fiscal year. This account summarises the net income (or net loss) for the year. It is closed to the Retained Earnings account at year-end.

Concept Self-check continued

19. The general forms of the four closing entries are:

(1)

Dec. 31	Revenue	XX	
	Income Summary		XX
	To close revenue account balances to the Income Summary account.		

(2)

Dec. 31	Income Summary	YY	
	Expense		YY
	To close expense account balances to the Income Summary account.		

(3)

Dec. 31	Income Summary	ZZ	
	Retained Earnings		ZZ
	To close the Income Summary account balance to Retained Earnings (ZZ = XX – YY; ZZ must equal net income).		

(4)

Dec. 31	Retained Earnings	AA	
	Dividends		AA
	To close the Dividend account to Retained Earnings.		

The purpose of the Income Summary is to accumulate the debits and credits to revenue and expense accounts respectively at the end of the fiscal year to ensure that these are equal to net income shown on the income statement. This balance is then closed to retained earnings.

20. The Dividends account is not closed to the Income Summary account because it is not an income statement item. It is closed directly to the Retained Earnings account at the end of the fiscal year as it is considered a distribution of retained earnings to shareholders.

21. A post-closing trial balance is a listing of permanent (statement of financial position) accounts and their balances after all temporary accounts have been closed. It proves the equality of general ledger debit and credit balances before the next accounting period commences.

CP 3-1

a.	Insurance Expense	7.	Prepaid Insurance
b.	Rent Earned	10.	Unearned Rent
c.	Prepaid Rent	6.	Rent Expense
d.	Interest Payable	9.	Interest Expense
e.	Interest Receivable	8.	Interest Earned
f.	Fees Earned	4.	Unearned Fees
g.	Unused Supplies	2.	Supplies Expense
h.	Unearned Commissions Revenue	1.	Commissions Earned
i.	Salaries Payable	3.	Salaries Expense
j.	Depreciation Expense	5.	Accumulated Depreciation

CP 3-2

2018				
Dec. 31	Depreciation Expense—Truck	624	1,200	
	Accumulated Depreciation—Truck	194		1,200
	To record additional truck depreciation for the year ($2,500 – 1,300)			

$$\frac{\$10,000}{4 \text{ years}} = \$2,500/\text{year}$$

CP 3-3

2018				
Dec. 31	Interest Expense	632	100	
	Interest Payable	222		100
	To adjust accrued interest ($1,200 – 1,100).			

CP 3-4

Armstrong Corp.
General Journal

	Date 2018	Description	F	Debit	Credit
a.	Jun. 30	Office Supplies Expense		135	
		Unused Office Supplies			135
		To adjust of office supplies on hand to the remaining amount.			
b.	30	Depreciation Expense-Truck		400	
		Accumulated Depreciation-Truck			400
		To record truck depreciation for the period.			
c.	30	Insurance Expense		240	
		Prepaid Insurance			240
		To adjust the portion of insurance expired for the period.			
d.	30	Interest Expense		100	
		Interest Payable			100
		To adjust interest payable for the period.			
e.	30	Unearned Rent Revenue		500	
		Rent Earned			500
		To adjust the portion of unearned rent at the end of the period.			

CP 3–5

1. and 3.

Graham Corporation
General Ledger

ASSETS	=	LIABILITIES	+	SHAREHOLDERS' EQUITY

Rent Receivable

Debit	Credit
(a) 110	

Interest Payable

Debit	Credit
	(c) 90

Rent Earned

Debit	Credit
	(a) 110

Prepaid Insurance

Debit	Credit
1,800	
	(b) 1,200
Bal. 600	

2.

Graham Corporation
GENERAL JOURNAL
Page 1

Date	Description	F	Debit	Credit
	Adjusting Entries			
a.	Rent Receivable		110	
	Rent Earned			110
b.	Insurance Expense		1,200	
	Prepaid Insurance			1,200
c.	Interest Expense		90	
	Interest Payable			90

4.

Rent Earned	$ 110
Insurance Expense	1,200
Interest Expense	90

CP 3-6

1. General Journal

	Date 2018	Description	F	Debit	Credit
a.	Dec. 31	Rent Expense		200	
		Prepaid Rent			200
		To adjust prepaid rent account to the proper balance.			
b.	31	Office Supplies Expense		400	
		Unused Office Supplies			400
		To adjust the ending balance of supplies on hand.			
c.	31	Income Taxes Expense		5,000	
		Income Taxes Payable			5,000
		To record income taxes for the period.			
d.	31	Unearned Commissions Revenue		1,000	
		Commissions Earned			1,000
		To record the proper balance in the Unearned Commissions account.			
e.	31	Salaries Expense		300	
		Salaries Payable			300
		To accrue salaries for the period.			

2. Assets would be overstated by $600 (a: 200+b: 400)
Liabilities would be understated by $4,300 (c: 5,000 – d: 1,000 + e: 300)
Revenue would be understated by $1,000 (d)
Expenses would be understated by $5,900 (a: 200 + b: 400 + c: 5,000 + e: 300)
Shareholders' equity would be overstated by $4,900 (asset overstatement: $600 + liabilities understatement: $4,300), while net income would be overstated by $4,900 (revenue understatement: $1,000 – expense understatement: $5,900).

CP 3-7

Bernard Inc.
General Journal

	Date 2018	Description	F	Debit	Credit
a.	Dec.31	Advertizing Expense	610	500	
		Prepaid Advertizing	160		500
		To record the expired portion of advertizing expense for the period.			
b.	31	Supplies Expense	668	400	
		Unused Supplies	173		400
		To adjust supplies on hand to the remaining amount.			
c.	31	Depreciation Expense—Equipment	623	250	
		Accumulated Depreciation—Equipment	193		250
		To record depreciation for the period.			
d.	31	Maintenance Expense	641	200	
		Telephone Expense	669	100	
		Utilities Expense	676	400	
		Commissions Expense	615	800	
		Accounts Payable	210		1,500
		To record expenses incurred but not yet paid for the period.			
e.	31	Salaries Expense	656	700	
		Salaries Payable	226		700
		To record salaries accrued for the period.			
f.	31	Unearned Subscription Revenue	250	5,000	
		Subscription Revenue	480		5,000
		To record subscription revenue earned for the period.			

CP 3-8

1.

Cash 101

750	50
950	150
90	50
	24
	20
	70

Accounts Receivable 110

228	90

Rent Receivable 125

(f) 40	

Prepaid Insurance 161

24	2 (a)

Unused Office Supplies 170

50	25 (c)

Unused Repair Supplies 171

145	80 (d)

Furniture 182

150	

Acc. Dep’n – Furniture 191

	2 (b)

Accounts Payable 210

70	145

Unearned Repair Revenue 247

	500
(e) 400	

Interest Payable 222

	12 (g)

Income Taxes Pay. 260

	400 (h)

Interest Expense 632

(g) 12	

Income Taxes Expense 830

(h) 400	

Share Capital 320

	400

Ret. Earn. 340

	350

Repair Rev. 450

	950
	228
	400 (e)

Rent Earned 440

	40 (f)

Dep’n Exp. - Furniture 621

(b) 2	

Insurance Exp. 631

(a) 2	

Office Supplies Exp. 650

(c) 25	

Rent Expense 654

50	

Repair Supplies Expense 655

(d) 80	

Telephone Expense 669

20	

CP 3-8 continued

2. Hynes Corporation

General Journal

Page 1

	Date	Description	F	Debit	Credit
		<u>Adjusting Entries</u>			
a.	Dec. 31	Insurance Expense	631	2	
		Prepaid Insurance	161		2
		To record expiry of prepaid insurance.			
b.	31	Depreciation Expense—Furniture	621	2	
		Accumulated Depreciation—Furniture	191		2
		To record depreciation.			
c.	31	Office Supplies Expense	650	25	
		Unused Office Supplies	170		25
		To record use of office supplies.			
d.	31	Repair Supplies Expense	655	80	
		Unused Repair Supplies	171		80
		To record use of supplies.			
e.	31	Unearned Repair Revenue	247	400	
		Repair Revenue	450		400
		To adjust unearned repair revenue to actual.			
f.	31	Rent Receivable	125	40	
		Rent Earned	440		40
		To adjust for rent receivable.			
g.	31	Interest Expense	632	12	
		Interest Payable	222		12
h.	31	Income Taxes Expense	669	400	
		Income Taxes Payable	260		400
		To adjust for income taxes.			

CP 3-9

1.

Acct. No.	*Account*	*Trial Balance*		*Adjustments*		*Adjusted Trial Balance*	
		Debit	*Credit*	*Debit*	*Credit*	*Debit*	*Credit*
101	Cash	$ 4,000				$ 4,000	
110	Accounts receivable	5,000				5,000	
161	Prepaid insurance	3,600			(a) 300	3,300	
162	Prepaid rent	1,000			(b) 500	500	
184	Truck	6,000				6,000	
194	Acc. dep. – truck				(c) 1,500		$1,500
210	Accounts payable		$7,000				7,000
222	Interest payable				(d) 400		400
226	Salaries payable				(e) 1,000		1,000
248	Unearned rent revenue		1,200	(f) 600			600
320	Share capital		2,700				2,700
440	Rent earned		25,000		(f) 600		25,600
610	Advertizing expense	700				700	
615	Commissions expense	2,000				2,000	
624	Dep. expense – truck			(c) 1,500		1,500	
631	Insurance expense			(a) 300		300	
632	Interest expense	100		(d) 400		500	
654	Rent expense	5,500		(b) 500		6,000	
656	Salaries expense	8,000		(e) 1,000		9,000	
	Totals	$35,900	$35,900	$4,300	$4,300	$38,800	$38,800

CP 3-9 continued

2. Lauer Corporation
General Journal

	2018	Description	F	Debit	Credit
		Adjusting Entries			
a.	Dec.31	Insurance Expense	631	300	
		Prepaid Insurance	131		300
		To record expiry of prepaid insurance.			
b.	31	Rent Expense	654	500	
		Prepaid Rent	162		500
		To record expiry of prepaid rent.			
c.	31	Depreciation Expense	624	1,500	
		Accumulated Depreciation—Truck	194		1,500
		To record truck depreciation.			
d.	31	Interest Expense	632	400	
		Interest Payable	222		400
		To accrue interest.			
e.	31	Salaries Expense	656	1,000	
		Salaries Payable	226		1,000
		To accrue unpaid salaries.			
f.	31	Unearned Rent	248	600	
		Rent Earned	440		600
		To record rent earned.			

CP 3-10

1.

Wolfe Corporation
General Journal
Page 1

	Date 2018	Description	F	Debit	Credit
		<u>Adjusting Entries</u>			
a.	Dec. 31	Insurance Expense	631	600	
		Prepaid Insurance	161		600
		To adjust for expiry of 6 months insurance ($1,200 x ½).			
b.	31	Supplies Expense	668	200	
		Unused Supplies	173		200
		To adjust supplies on hand to physical count.			
c.	31	Rent Expense	654	50	
		Accounts Payable	210		50
		To adjust for unpaid rent.			

CP 3-10 continued

2. and 4.

Wolfe Corporation

Cash 101

Bal.	2,700		

Accounts Receivable 110

Bal.	2,000		

Prepaid Insurance 161

Op. Bal.	1,200	(a)	600
Bal.	600		

Unused Supplies 173

Op. Bal.	700	(b)	200
Bal.	500		

Accounts Payable 210

		(c)	50

Share Capital 320

		Bal.	3,800

Retained Earnings 340

		(f)	1,950
		Bal.	1,950

Income Summary 360

(e)	5,800	(d)	7,750
(f)	1,950		
Bal.	0		

Repair Revenue 450

(d)	7,750	Op. Bal.	7,750
		Bal.	0

Advertizing Expense 610

Op. Bal.	200	(e)	200
Bal.	0		

Insurance Expense 631

(a)	600	(e)	600
Bal.	0		

Rent Expense 654

Op. Bal.	250		
(c)	50		
Bal.	300	(e)	300
Bal.	0		

Salaries Expense 656

Op. Bal.	4,500	(e)	4,500
Bal.	0		

Supplies Expense 668

(b)	200	(e)	200
Bal.	0		

CP 3–10 continued

3.

Wolfe Corporation
General Journal

Page 2

	Date 2018	Description	F	Debit	Credit
		<u>Closing Entries</u>			
d.	Dec. 31	Repair Revenue	450	7,750	
		Income Summary	360		7,750
e.	31	Income Summary	360	5,800	
		Advertizing Expense	610		200
		Insurance Expense	631		600
		Rent Expense	654		300
		Salaries Expense	656		4,500
		Supplies Expense	668		200
f.	31	Income Summary	360	1,950	
		Retained Earnings	340		1,950

P 3–1

Meekins Limited
General Journal

	Date	Description	F	Debit	Credit
		Adjusting Entries			
a.	Dec.31	Prepaid Rent		300	
		Rent Expense			300
		To record prepaid rent at year-end.			
b.	31	Wages Expense		200	
		Wages Payable			200
		To record accrued wages at year-end.			
c.	31	Income Taxes Expense		1,000	
		Income Taxes Payable			1,000
		To record income taxes.			
d.	31	Commissions Earned		1,000	
		Unearned Commissions Revenue			1,000
		To record unearned commissions at year-end.			
e.	31	Other Unearned Revenue		5,000	
		Revenue			5,000
		To adjust unearned revenue to actual at year-end.			
f.	31	Prepaid Advertizing		1,500	
		Advertizing Expense			1,500
		To record prepaid advertizing at year-end.			
g.	31	Depreciation Expense—Equipment		500	
		Accumulated Depreciation—Equipment			500
		To record depreciation expense.			
h.	31	Unused Supplies		225	
		Supplies Expense			225
		To adjust for unused supplies.			
i.	31	Truck Expense		500	
		Accounts Payable			500
		To record accounts payable at year-end.			

P 3–2

Lukas Films Corporation
General Journal

	Date 2018	Description	F	Debit	Credit
		Adjusting Entries			
a.	Dec. 31	Unused Supplies		300	
		Supplies Expense			300
b.	31	Telephone Expense		75	
		Accounts Payable			75
c.	31	Wages Expense		125	
		Wages Payable			125
d.	31	Depreciation Expense—Equipment		100	
		Accumulated Depreciation—Equipment			100
e.	31	Rent Expense		500	
		Prepaid Rent			500
f.	31	Unearned Advertizing Revenue		500	
		Other Revenue			500
g.	31	Prepaid Insurance		450	
		Insurance Expense			450

P 3–3

Mighty Fine Services Inc.
General Journal

Date		Description	F	Debit	Credit
		Adjusting Entries			
a.	Dec. 31	Insurance Expense		200	
		Prepaid Insurance			200
b.	31	Supplies Expense		200	
		Unused Supplies			200
c.	31	Interest Expense		25	
		Interest Payable			25
d.	31	Subscription Revenue		7,500	
		Unearned Subscription Revenue			7,500
		($9,000 x 5/6 mos. = $7,500)			
e.	31	Salaries Expense		300	
		Salaries Payable			300
f.	31	Prepaid Rent		300	
		Rent Expense			300
g.	31	Truck Operating Expense		400	
		Accounts Payable			400

P 3–4

Bill Pitt Corp.
General Journal

	Date 2018	Description	F	Debit	Credit
		<u>Adjusting Entries</u>			
a.	Dec. 31	Depreciation Expense—Truck		150	
		Accumulated Depreciation—Truck			150
		($6,000 x 6/48 mos. = $750 – 600 = $150)			
b.		No Entry Required			
c.	31	Unused Supplies		300	
		Supplies Expense			300
d.	31	Rent Expense		400	
		Prepaid Rent			400
e	31	Wages Expense		250	
		Wages Payable			250
f.	31	Interest Expense		200	
		Interest Payable			200
		($8,000 x 10% = $800 – 600 = $200)			
g.	31	Utilities Expense		150	
		Utilities Payable			150
h.	31	Insurance Expense		500	
		Prepaid Insurance			500
		($1,200 x 1/12 mos. = $100 prepaid; $600 – 100 = $500)			
i.	31	Unearned Rent Revenue		600	
		Rent Earned			600
j.	31	Commissions Earned		2,000	
		Other Unearned Revenue			2,000

P 3–5

1.

Pape Pens Corporation
General Journal Page 1

	Dec. 2018	Description	F	Debit	Credit
		<u>Adjusting Entries</u>			
a.	Dec.31	Insurance Expense	631	600	
		Prepaid Insurance	161		600
b.	31	Supplies Expense	668	200	
		Unused Supplies	173		200
c.	31	Depreciation Expense-Truck	624	1,000	
		Accumulated Depreciation- Truck	194		1,000
		($8,000 x 6/48 mos. = $1,000)			
d.	31	Salaries Expense	656	200	
		Salaries Payable	226		200
e.	31	Unearned Rent Revenue	248	1,200	
		Rent Earned	440		1,200
f.	31	Telephone Expense	669	100	
		Accounts Payable	210		100
g.	31	Income Taxes Expense	830	300	
		Income Taxes Payable	260		300

P 3–5 continued

2.

Pape Pens Corporation
Adjusted Trial Balance
December 31, 2018

Acct. No.	*Account*	*Balance Debit*	*Balance Credit*
101	Cash	$ 3,300	
110	Accounts receivable	4,000	
161	Prepaid insurance	600	
173	Unused supplies	300	
184	Truck	8,000	
194	Acc. dep. – truck		$ 1,000
210	Accounts payable		5,100
226	Salaries payable		200
248	Unearned rent revenue		1,200
260	Income taxes payable		300
320	Share capital		7,000
350	Dividends	1,000	
410	Commissions earned		16,100
440	Rent earned		1,200
610	Advertizing expense	200	
615	Commissions expense	1,000	
624	Dep. expense – truck	1,000	
631	Insurance expense	600	
632	Interest expense	400	
654	Rent expense	3,600	
656	Salaries expense	7,200	
668	Supplies expense	200	
669	Telephone expense	400	
830	Income taxes expense	300	
		$32,100	$32,100

P 3–5 continued

3. Pape Pens Corporation
Income Statement
For the Year Ended December 31, 2018

Revenue		
Commissions	$16,100	
Rent	1,200	
Total revenue		$17,300
Expenses		
Advertizing	200	
Commissions	1,000	
Depreciation—truck	1,000	
Insurance	600	
Interest	400	
Rent	3,600	
Salaries	7,200	
Supplies	200	
Telephone	400	
Income taxes	300	
Total expenses		14,900
Net income		$ 2,400

Pape Pens Corporation
Statement of Changes in Equity
For the Year Ended December 31, 2018

	Share capital	*Retained earnings*	*Total equity*
Balance, beginning of year	$ -0-	$ -0-	$ -0-
Shares issued	7,000	-0-	7,000
Net income		2,400	2,400
Dividends	-0-	(1,000)	(1,000)
Balance, end of year	$7,000	$1,400	$8,400

P 3–5 continued

3. continued

Pape Pens Corporation
Statement of Financial Position
At December 31, 2018

Assets		
Cash		$ 3,300
Accounts receivable		4,000
Prepaid insurance		600
Unused supplies		300
Truck	$8,000	
Less: Accum. dep.	1,000	7,000
Total assets		$15,200
Liabilities		
Accounts payable		$5,100
Salaries payable		200
Unearned rent revenue		1,200
Income taxes payable		300
Total liabilities		6,800
Shareholders' Equity		
Share capital	$7,000	
Retained earnings	1,400	
Total shareholders' equity		8,400
Total liabilities and shareholders' equity		$15,200

P 3–5 continued

4. Pape Pens Corporation
General Journal
Page 2

	Dec. 2018	Description	F	Debit	Credit
		Closing Entries			
1.	Dec. 31	Commissions Earned	410	16,100	
		Rent Earned	440	1,200	
		Income Summary	360		17,300
		To close the revenue account balances.			
2.	31	Income Summary	360	14,900	
		Advertizing Expense	610		200
		Commissions Expense	615		1,000
		Depreciation Expense—Truck	624		1,000
		Insurance Expense	631		600
		Interest Expense	632		400
		Rent Expense	654		3,600
		Salaries Expense	656		7,200
		Supplies Expense	668		200
		Telephone Expense	669		400
		Income Taxes Expense	830		300
		To close the expense account balances.			
3.	31	Income Summary	360	2,400	
		Retained Earnings	340		2,400
		To close the income summary balances to retained earnings.			
4.	31	Retained Earnings	340	1,000	
		Dividends	350		1,000
		To close dividends to retained earnings.			

P 3–5 continued

5.

Pape Pens Corporation
Post-closing Trial Balance
December 31, 2018

Acct.		*Balance*	
No.	*Account*	*Debit*	*Credit*
101	Cash	$ 3,300	
110	Accounts receivable	4,000	
161	Prepaid insurance	600	
173	Unused supplies	300	
184	Truck	8,000	
194	Acc. dep. – truck		$ 1,000
210	Accounts payable		5,100
226	Salaries payable		200
248	Unearned rent revenue		1,200
260	Income taxes payable		300
320	Share capital		7,000
340	Retained earnings		1,400
		$16,200	$16,200

P 3-6 1., 3., 4., and 6.

Roth Contractors Corporation

Cash

(a)	5,000	(b)	1,200
(g)	800	(e)	1,800
(i)	2,000	(h)	3,450
(m)	2,000	(l)	3,225
	9,800		9,675
Bal.	125		

Accounts Receivable

(f)	4,500	(i)	2,000
(j)	6,500		
	11,000		2,000
Bal.	9,000		

Prepaid Insurance

(e)	1,800	(o)	150
Bal.	1,650		

Prepaid Rent

(b)	1,200	(p)	400
Bal.	800		

Unused Supplies

(q)	350		

Truck

(c)	10,000		

Accounts Payable

		(c)	10,000
		(d)	1,000
		(n)	100
		Bal.	11,100

Wages Payable

		(s)	1,500

Unearned Repair Revenue

		(r)	2,000

Income Taxes Payable

		(u)	500

Accum. Dep'n Truck

		(t)	208

Share Capital

		(a)	5,000

Repair Revenue

(r)	2,000	(f)	4,500
		(g)	800
		(j)	6,500
		(m)	2,000
	2,000		13,800
		Bal.	11,800

Advertizing Expense

(h)	350		
(l)	200		
Bal.	550		

Depreciation Expense-Truck

(t)	208		

Insurance Expense

(o)	150		

Interest Expense

(h)	100		
(l)	150		
Bal.	250		

Income Taxes Expense

(u)	500		

Rent Expense

(p)	400		

Supplies Expense

(d)	1,000	(q)	350
Bal.	650		

Telephone Expense

(h)	75		

Truck Operating Expense

(h)	425		
(l)	375		
Bal.	800		

Utilities Expense

(n)	100		

Wages Expense

(h)	2,500		
(l)	2,500		
(s)	1,500		
Bal.	6,500		

P 3–6 continued

2. Roth Contractors Corporation
General Journal Page 1

Dec. 2018	Description	F	Debit	Credit
a.	Cash		5,000	
	Share Capital			5,000
b.	Prepaid Rent		1,200	
	Cash			1,200
c.	Truck		10,000	
	Accounts Payable			10,000
d.	Supplies Expense		1,000	
	Accounts Payable			1,000
e.	Prepaid Insurance		1,800	
	Cash			1,800
f.	Accounts Receivable		4,500	
	Repair Revenue			4,500
g.	Cash		800	
	Repair Revenue			800
h.	Advertizing Expense		350	
	Interest Expense		100	
	Telephone Expense		75	
	Truck Operating Expense		425	
	Wages Expense		2,500	
	Cash			3,450
i.	Cash		2,000	
	Accounts Receivable			2,000
j.	Accounts Receivable		6,500	
	Repair Revenue			6,500
l.	Advertizing Expense		200	
	Interest Expense		150	
	Truck Operating Expense		375	
	Wages Expense		2,500	
	Cash			3,225

P 3–6 continued

Roth Contractors Corporation
General Journal continued

Dec. 2018	Description	F	Debit	Credit
m.	Cash		2,000	
	Repair Revenue			2,000
n.	Utilities Expense		100	
	Accounts Payable			100

5. Roth Contractors Corporation
General Journal
Page 2

Dec. 31 2018	Description	F	Debit	Credit
	Adjusting Entries			
o.	Insurance Expense		150	
	Prepaid Insurance			150
p.	Rent Expense		400	
	Prepaid Rent			400
r.	Unused Supplies		350	
	Supplies Expense			350
q.	Repair Revenue		2,000	
	Unearned Repair Revenue			2,000
r.	Wages Expense		1,500	
	Wages Payable			1,500
t.	Depreciation Expense—Truck		208	
	Accumulated Depreciation—Truck			208
	$10,000/48 mos. = $208 per month (rounded)			
u.	Income Taxes Expense		500	
	Income Taxes Payable			500

P 3-6 continued

7. Roth Contractors Corporation
Adjusted Trial Balance
December 31, 2018

	Account Balances	
	Debit	*Credit*
Cash	$ 125	
Accounts Receivable	9,000	
Prepaid Insurance	1,650	
Prepaid Rent	800	
Unused Supplies	350	
Truck	10,000	
Accumulated Depreciation—Truck		$ 208
Accounts Payable		11,100
Wages Payable		1,500
Income Taxes Payable		500
Unearned Revenue		2,000
Share Capital		5,000
Repair Revenue		11,800
Advertizing Expense	550	
Depreciation Expense—Truck	208	
Insurance Expense	150	
Interest Expense	250	
Rent Expense	400	
Supplies Expense	650	
Telephone Expense	75	
Truck Operating Expense	800	
Utilities Expense	100	
Wages Expense	6,500	
Income Taxes Expense	500	
	$32,108	$32,108

P 3–6 continued

8. Roth Contractors Corporation
Income Statement
For the Year Ended December 31, 2018

Revenue		
Repairs		$11,800
Expenses		
Advertizing	$ 550	
Depreciation—truck	208	
Insurance	150	
Interest	250	
Rent	400	
Supplies	650	
Telephone	75	
Truck operating	800	
Utilities	100	
Wages	6,500	
Income taxes	500	
Total expenses		10,183
Net income		$ 1,617

Roth Contractors Corporation
Statement of Changes in Equity
For the Year Ended December 31, 2018

	Share capital	*Retained earnings*	*Total equity*
Balance, beginning of year	$ -0-	$ -0-	$ -0-
Shares issued	5,000	-0-	5,000
Net income		1,617	1,617
Balance, end of year	$5,000	$1,617	$6,617

P 3–6 continued

3. continued

Roth Contractors Corporation
Statement of Financial Position
At December 31, 2018

Assets		
Cash		$ 125
Accounts receivable		9,000
Prepaid insurance		1,650
Prepaid rent		800
Unused supplies		350
Truck	$10,000	
Less: Accum. dep.	208	9,792
Total assets		$21,717
Liabilities		
Accounts payable		$11,100
Wages payable		1,500
Unearned repair revenue		2,000
Income taxes payable		500
Total liabilities		15,100
Shareholders' Equity		
Share capital	$5,000	
Retained earnings	1,617	
Total shareholders' equity		6,617
Total liabilities and shareholders' equity		$21,717

P 3–6 continued

9. Roth Contractors Corporation

General Journal

Page 2

	Dec. 2018	Description	F	Debit	Credit
		Closing Entries			
1.	Dec. 31	Repair Revenue		11,800	
		Income Summary			11,800
		To close the revenue account balances.			
2.	31	Income Summary		10,183	
		Advertizing Expense			550
		Depreciation Expense—Truck			208
		Insurance Expense			150
		Interest Expense			250
		Rent Expense			400
		Supplies Expense			650
		Telephone Expense			75
		Truck Operating Expense			800
		Utilities Expense			100
		Wages Expense			6,500
		Income Taxes Expense			500
		To close the expense account balances.			
3.	31	Income Summary		1,617	
		Retained Earnings			1,617
		To close the income summary balances to retained earnings.			

P 3–6 continued

9. continued

Roth Contractors Corporation
Post-closing Trial Balance
December 31, 2018

Account	*Balance* *Debit*	*Credit*
Cash	$ 125	
Accounts receivable	9,000	
Prepaid insurance	1,650	
Prepaid rent	800	
Unused supplies	350	
Truck	10,000	
Acc. dep. – truck		$ 208
Accounts payable		11,100
Wages payable		1,500
Unearned repair revenue		2,000
Income taxes payable		500
Share capital		5,000
Retained earnings		1,617
	$21,925	$21,925

P 3-7

1., 3., 4., and 6.

Snow Services Corporation

Cash

Bal.	30,000	(a)	15,000
(b)	12,000	(c)	600
(f)	900	(d)	5,000
(g)	150	(h)	5,000
(i)	1,200	(j)	3,000
	44,250		28,600
Bal.	15,650		

Short-term Investments

(d)	5,000		

Interest Receivable

(q)	50		

Prepaid Insurance

(c)	600	(m)	50
Bal.	550		

Unused Supplies

(o)	200		

Equipment

(h)	5,000		

Truck

(a)	15,000		

Accumulated Depreciation-Equipment

		(r)	104

Accumulated Depreciation-Truck No.194

		(k)	250

Accounts Payable

		(e)	500

Wages Payable

		(t)	150

Unearned Advertizing Revenue

		(p)	600

Unearned Fees Revenue

		(l)	8,000

Unearned Interest Revenue

		(n)	75

Unearned Rent Revenue

		(s)	800

Share Capital

		Bal.	30,000

Other Revenue

(p)	600	(f)	900
		Bal.	300

Interest Earned

(n)	75	(g)	150
		(q)	50
	75		200
		Bal.	125

Rent Earned

(s)	800	(i)	1,200
		Bal.	400

Service Revenue

(l)	8,000	(b)	12,000
		Bal.	4,000

Depreciation Expense Equipment

(r)	104		

Depreciation Expense-Truck

(k)	250		

Insurance Expense

(m)	50		

Supplies Expense

(e)	500	(o)	200
Bal.	300		

Wages Expense

(j)	3,000		
(t)	150		
Bal.	3,150		

P 3–7 continued

2. Snow Services Corporation

General Journal

Page 1

	Jan. 2018	Description	F	Debit	Credit
a.	Jan. 31	Truck		15,000	
		Cash			15,000
b.	31	Cash		12,000	
		Service Revenue			12,000
c.	31	Prepaid Insurance		600	
		Cash			600
d.	31	Short-term investments		5,000	
		Cash			5,000
e.	31	Supplies Expense		500	
		Accounts Payable			500
f.	31	Cash		900	
		Other Revenue			900
g.	31	Cash		150	
		Interest Earned			150
h.	31	Equipment		5,000	
		Cash			5,000
i.	31	Cash		1,200	
		Rent Earned			1,200
j.	31	Wages Expense		3,000	
		Cash			3,000

P 3–7 continued

5. Snow Services Corporation

General Journal

Page 2

Jan 2018		Description	F	Debit	Credit
		Adjusting Entries			
k.	Jan. 31	Depreciation Expense—Truck		250	
		Accumulated Depreciation—Truck			250
		($15,000 x 1/60 mos. = $250)			
l.	31	Service Revenue		8,000	
		Unearned Fees Revenue			8,000
m.	31	Insurance Expense		50	
		Prepaid Insurance			50
n.	31	Interest Earned		75	
		Unearned Interest Revenue			75
o.	31	Unused Supplies		200	
		Supplies Expense			200
p.	31	Other Revenue		600	
		Unearned Advertizing Revenue			600
q.	31	Interest Receivable		50	
		Interest Earned			50
r.	31	Depreciation Expense—Equipment		104	
		Accumulated Depreciation—Equipment			104
		($5,000 x 1/48 mos. = $104 rounded)			
s.	31	Rent Earned		800	
		Unearned Rent Revenue			800
t.	31	Wages Expense		150	
		Wages Payable			150

P 3–7 continued

7\. Snow Services Corporation
Adjusted Trial Balance
January 31, 2018

	Account Balances	
	Debit	*Credit*
Cash	$15,650	
Short-term investments	5,000	
Interest receivable	50	
Prepaid insurance	550	
Unused supplies	200	
Equipment	5,000	
Truck	15,000	
Accumulated depreciation—equipment		$ 104
Accumulated depreciation—truck		250
Accounts payable		500
Wages payable		150
Unearned advertizing revenue		600
Unearned fees revenue		8,000
Unearned interest revenue		75
Unearned rent revenue		800
Share capital		30,000
Other revenue		300
Interest earned		125
Rent earned		400
Service revenue		4,000
Depreciation expense—equipment	104	
Depreciation expense—truck	250	
Insurance expense	50	
Supplies expense	300	
Wages expense	3,150	
	$45,304	$45,304

CHAPTER FOUR
The Classified Statement of Financial Position and Related Disclosures

Concept Self-check

1. Economists define wealth as an increase or decrease in the entity's ability to purchase goods and services. Accountants use a more specific measurement—they consider only increases and decreases resulting from actual transactions. If a transaction has not taken place, they do not record a change in wealth.

2. Financial statements are primarily intended for external users.

3. Assets and liabilities are classified as either *current* or *non-current*. The current asset category includes accounts whose future benefits are expected to expire within one fiscal year. Non-current assets consist of PPE, long-term investments like shares of another corporation, and intangible assets like patents. Current liabilities consist of amounts due within one-year on borrowings, accounts payable, and accruals like income taxes payable. Non-current liabilities include items like long-term borrowings. Shareholder's equity is divided into share capital and retained earnings.

4. Current assets are those resources that the entity expects to convert to cash or consume in the upcoming fiscal year or operating cycle, whichever is longer.

5. Non-current assets are assets that will be useful for more than one year or more than one operating cycle, whichever is longer.

6. Current liabilities are obligations that must be paid within the next fiscal year. or normal operating cycle, if this is longer than the fiscal year.

7. Non-current liabilities are borrowings that do not require repayment for more than one year or for more than one operating cycle, whichever is longer.

8. Notes to the financial statements provide relevant details that are not included in the body of the financial statements, like repayment terms of borrowings and depreciation rates of plant and equipment. Notes usually also disclose items like significant accounting policies and assumptions used to prepare the financial statements.

9. The auditor's report is a structured statement issued by an independent examiner, usually a professional accountant, who is contracted by the company to report the audit's findings to the company's board of directors. An audit report provides some assurance to present and potential investors and creditors that the company's financial statements are trustworthy. Therefore, it is a useful means to reduce the risk of their financial decisions.

Concept Self-check continued

10. The report describes management's responsibility for the accurate preparation and presentation of financial statements. This statement underscores the division of duties involved with the publication of financial statements. It clearly states that management is responsible for preparing the financial statements, including estimates that underlie the accounting numbers.

11. The economic resources of Big Dog Carworks Corp. are its assets: cash, accounts receivable, inventories, prepaid expenses and property, plant and equipment.

12. The financial statements are the statement of financial position, the income statement, the statement of changes in equity, and the statement of cash flows. Notes to the financial statements are also included. The statements report the financial position of the company at year-end, the results of operations for the year, changes in share capital and retained earnings, sources and uses of cash during the year, and information in the notes that is not quantifiable or that provides additional supporting information to the financial statements.

13. Fundamentally, accounting measures the financial progress of an entity. The purpose of financial statements is to communicate information about this progress to external users, chiefly investors and creditors.

14. ASSETS = LIABILITIES + SHAREHOLDERS' EQUITY
    $284,645 = 241,145 + 43,500.

15. Net assets equal $43,500 ($284,645 – 241,145). Net assets is synonymous with shareholder's equity. They represent the amount of total assets attributable to the shareholders after taking into account the claims of creditors.

16. The individual assets of Big Dog Carworks Corp. as shown on the statement of financial position are cash, accounts receivable, merchandize inventories, prepaid expenses, and property, plant, and equipment. Its liabilities are borrowings, accounts payable, and income taxes payable.

17. GAEB permit the accountant to report financial information more fairly, objectively, comparably, and relevantly to outside parties who rely on this information. For instance, the use of accrual accounting allows the activities of the company to be divided into meaningful time periods that facilitate the timely analysis of financial performance.

18. Note 3(g) refers to materiality as a consideration in the estimates and assumptions used to recognise assets, liabilities, income, and expenses. The fact that all figures are rounded to the nearest dollar is an application of materiality.

19. Big Dog Carworks Corp. uses the accrual basis of accounting because it records items such as accounts receivable, inventory, and accounts payable.

20. Per Note 3(d), property, plant, and equipment are depreciated on a straight-line basis over their estimated useful lives. Land is not depreciated.

Concept Self-check continued

21. The president's salary is payment for work already done, not for work that will be done. It is likely true that some work the president has done will benefit future periods, but this benefit is too difficult to quantify and involves too much uncertainty to record it as an asset.

22. a. Current asset accounts: Per Note 3(a), revenue and expenses are accrued. This will give rise to current assets like accounts receivable, prepaid expenses, accounts payable, income taxes payable, and accrued liabilities.

    b. Non-current asset accounts: Per Note 3(d), PPE are depreciated at various rate. This would require yearly adjustments to the accounts.

    c. Current liability accounts: income taxes payable are adjusted at the end of the period to reflect the estimated amount of taxes incurred for the period. All expenses that are incurred but not yet paid are added to the unrecorded accrual accounts. Examples are salaries payable for partial periods and interest owed but not yet paid.

    d. Non-current liability accounts: borrowings must be analyzed to determine current and non-current amounts, as shown in Note 5.

23. The accounting process is generally as follows and likely applies to BDCC:
    a. Transactions are analyzed and recorded in the general journal.
    b. The general journal entries are posted to the general ledger accounts.
    c. The equality of debits and credits is established by the trial balance.
    d. The account balances are analyzed, and adjusting entries are prepared.
    e. The adjusting entries are posted to the general ledger accounts.
    f. An adjusted trial balance is prepared to prove the equality of debits and credits.
    g. Closing entries are prepared from the worksheet.
    h. Closing entries are posted to the general ledger.
    i. A post-closing trial balance is prepared.

24. The statement of financial position is classified in order to facilitate the analysis of its information. For instance, comparing amounts that will be needed to be satisfied within the upcoming year (current liabilities) with resources available to satisfy these claims (current assets) allows readers to assess the relative ability of the corporation to meets its short-term obligations as they become due.

25. Big Dog Carworks Corp. makes it easier to compare financial information from period to period by presenting comparative annual financial data for two years.

26. The auditor is H. K. Walker, Chartered Professional Accountant. The audit report states that the financial statements of BDCC have been examined in accordance with generally accepted auditing standards. It also states that, in the auditor's opinion, the statements present fairly the financial position of BDCC and the results of its operations and changes in financial position for the year ended December 31, 2020. There are no concerns raised in the report.

Concept Self-check continued

27. The auditor's report indicates that GAEB have been consistently applied in BDCC's financial statements (see last sentence of the report).

28. Management's responsibilities for financial statements are to:
    a. Ensure that they are prepared in accordance with GAEB, in this case International Financial Reporting Standards.
    b. Ensure their integrity and objectivity.
    c. Establish a system of internal controls to safeguard assets and produce reliable accounting records.

    Though the financial statements are produced under the direction of management, they belong to the shareholders. Shareholders are the beneficial owners of the company.

CP 4–1

Viking Company Ltd.
Statement of Financial Position
At December 31, 2018

Assets		
Current		
Cash	$20	
Accounts receivable	100	
Notes receivable	40	
Prepaid insurance	30	
Unused supplies	10	
Total current assets		$ 200
Property, plant, and equipment		
Land	2,000	
Building	1,000	
Equipment	500	
Net property, plant, and equipment		3,500
Total assets		$3,700
Liabilities		
Current		
Accounts payable	$200	
Bank loan	500	
Salaries payable	60	
Total current liabilities		$ 760
Non-current		
Mortgage payable		1,500
Total liabilities		2,260
Shareholders' Equity		
Share capital	1,200	
Retained earnings	220	
Total shareholders' equity		1,440
Total liabilities and shareholders' equity		$3,700

CP 4–2

Oregon Corporation
Statement of Financial Position
At October 31, 2018

Assets		
Current		
Cash	$2	
Accounts receivable	5	
Inventories	3	
Total current assets		$ 10
Non-current investments		4
Property, plant, and equipment		
Land	200	
Buildings	10	
Equipment	5	
Net property, plant, and equipment		215
Total assets		$229
Liabilities		
Current		
Accounts payable	$30	
Current portion of mortgage payable	4	
Total current liabilities		$34
Non-current		
Mortgage payable		6
Total liabilities		40
Shareholders' Equity		
Share capital	100	
Retained earnings (balancing figure)	89	
Total shareholders' equity		189
Total liabilities and shareholders' equity		$229

P 4-1

1. Equipment is always an asset and in this case non-current asset, as its useful life is likely greater than one fiscal year. Cash is almost always a current asset. Short-term investments are current assets because they are readily marketable, by definition. Notes receivable should be divided into current and non-current portions. Unused supplies are likely current assets, as they are generally used in the next fiscal year. The bank loan is a liability divided into current and non-current portions as indicated. Salaries payable is likely a current liability, as these will be paid in the next fiscal year in all likelihood. The last line on the statement of financial position should read "Total Liabilities and Shareholders' Equity". The statement of financial position lists a building account but not a land account. Sometimes a company owns a building without owning land, but it is more likely that these two assets should have been separated when they were acquired. The building (or land and building) is correctly shown as a current asset as it was sold within one fiscal year of the statement of financial position date. A note to the financial statements would be needed to explain why this item is treated in such an unusual manner. Retained earnings should be shown in the shareholders' equity section.

3. Additional disclosure should be considered for (see BDCC notes in text):
   – treatment of capitalised borrowing costs, if any
   – valuation bases for non-current assets, share capital, and inventory
   – depreciation rates for plant and equipment
   – details about cost and accumulated depreciation amounts for property, plant, and equipment
   – details about debt, including basis of valuation, interest rates, due dates, any assets securing the debt, repayment amounts and intervals, and when terms will be re-negotiated
   – details about share capital.

P 4-1 continued

2.

Abbey Limited
Statement of Financial Position
At November 30, 2018

	Assets	
Current		
Cash	$ 1,000	
Short-term investments	2,500	
Notes receivable	5,000	
Merchandize inventory	3,000	
Unused supplies	100	
Building*	12,000	
Total current assets		$23,600
Non-current notes receivable		1,000
Property, plant, and equipment		
Equipment	2,000	
Truck	1,350	
Net property, plant, and equipment		3,350
Total assets		$27,950
	Liabilities	
Current		
Bank loan	$ 400	
Accounts payable	5,600	
Notes payable	500	
Salaries payable	250	
Current portion of mortgage payable	2,000	
Total current liabilities		$ 8,750
Non-current		
Bank loan	600	
Notes payable	1,500	
Mortgage payable	4,000	
Total non-current liabilities		6,100
Total liabilities		14,850
	Shareholders' Equity	
Share capital	11,100	
Retained earnings	2,000	
Total shareholders' equity		13,100
Total liabilities and shareholders' equity		$27,950

*Land may need to be separated out

P 4-2

1.

	2018	*2017*
Opening retained earnings		
(2018: given; 2017: derived)	$ 2,000	$ 1,000
Net income (derived)	**6,000**	**1,000**
Dividends (given)	(1,000)	(-0-)
Ending retained earnings (needed to balance)	$7,000	*$2,000

* Retained earnings at the end of 2017 must be the same as the amount at the start of 2018 ($2,000).

2.

Joyes Enterprises Ltd.
Statement of Financial Position
At December 31, 2018
($000)

	2018	*2017*
Assets		
Current		
Cash	$ 2,000	$ 1,000
Accounts receivable	5,000	3,000
Merchandize inventory	19,000	24,500
Prepaid insurance	1,000	1,000
Notes receivable	1,500	2,000
Total current assets	28,500	31,500
Non-current notes receivable	1,500	-0-
Property, plant, and equipment		
Land	5,000	5,000
Buildings	24,000	20,000
Equipment	16,000	12,000
Net property, plant, and equipment	45,000	37,000
Total assets	$75,000	$68,500
Liabilities		
Current liabilities		
Bank loan*	$ 1,000	$ -0-
Mortgage payable*	2,000	2,000
Accounts payable	7,000	4,000
Income taxes payable	3,000	2,500
Total current liabilities	13,000	8,500
Non-current liabilities		
Bank loan	4,000	5,000
Mortgage payable	3,000	5,000
Total non-current liabilities	7,000	10,000
Total liabilities	20,000	18,500
Shareholders' Equity		
Share capital	48,000	48,000
Retained earnings (per 1. above)	7,000	2,000
Total shareholders' equity	55,000	50,000
Total liabilities and shareholders' equity	$75,000	$68,500

P 4-2 continued

*The mortgage payable declined from $7,000 to $5,000 during 2018. Therefore, the current portion at December 31, 2017 must be $2,000. The bank loan balance did not change during 2018. Therefore, the current portion at December 31, 2017 must be $-0-.

3. Current assets total $28,500. Current liabilities total $13,000. The company appears to have sufficient resources to meet its obligations in 2019.

4. The statement of financial position would show:

	2018	*2017*
Property, plant, and equipment (Note X)	**$**45,000	$37,000

Note X might show:

X. Property, plant, and equipment

Details of the company's property, plant, and equipment and their carrying amounts at December 31 are as follows:

	2018				*2017*
	Land	*Building*	*Equip.*	*Total*	*Total*
Carrying Amount, Jan. 1	$ 5,000	$ 20,000	$ 12,000	$37,000	$ 37,000
Additions	-0-	4,000	4,000	8,000	-0-
Carrying Amount, Dec. 31	$ 5,000	$ 24,000	$ 16,000	$45,000	$ 37,000

(Other presentation formats are acceptable if reasonable and informative.)

P 4-3

_b_ 1. The significant accounting policies, which management believes are appropriate for the company, are described in Note X to the financial statements.

_c_ 2. The financial statements of Acme Supplies Ltd. have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued the International Accounting Standards Boards (IASB).

_b_ 3. Management has established systems of internal control that are designed to provide reasonable assurance that assets are safeguarded from loss or unauthorized use [. . .]

_b_ 4. The board of directors is responsible for ensuring that management fulfils its responsibilities for financial reporting and internal control.

_c_ 5. When preparing the financial statements, management undertakes a number of judgments, estimates, and assumptions about the recognition and measurement of assets, liabilities, income, and expenses. Information about estimates and assumptions that have the most significant effect on recognition and measurement of assets, liabilities, income, and expenses is provided below. Actual results may be substantially different.

_c_ 6. The mortgage is payable to Last Chance Bank. It bears interest at 5% per year and is amortized over 20 years.

P 4-3 continued

_a_ 7. [. . .] the accompanying financial statements of Acme Supplies Ltd., which comprise the statement of financial position as at December 31, 2020, the income statement, statement of changes in equity, and statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

_a_ 8. An [. . .] involves performing procedures to obtain [. . .] evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the [. . .] judgment, including assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

_b_ 9. The accompanying financial statements of the company are the responsibility of management.

_c_ 10. Revenue arises from the rendering of service. It is measured by reference to the fair value of consideration received or receivable.

_c_ 11. The bank loan is due on demand and bears interest at 4% per year. It is secured by real estate of the company.

_b_ 12. The audit committee reviews the annual financial statements and reporting to the board, and makes recommendations with respect to their acceptance.

_b_ 13. Management recognizes its responsibility for conducting the company's affairs in compliance with established financial standards and applicable laws, and maintains proper standards of conduct for its activities.

_a_ 14. My responsibility is to express an opinion on the financial statements based on my audit.

_b_ 15. Estimates are necessary in the preparation of these statements and, based on careful judgments, have been properly reflected.

_a_ 16. I believe that the [. . .] evidence I have obtained is sufficient and appropriate to provide a basis for my [. . .].

_c_ 17. Land held for use in production or administration is stated at cost. Other property, plant, and equipment are initially recognized at acquisition cost plus any costs directly attributable to bringing the assets to the locations and conditions necessary to be employed in operations. They are subsequently measured using the cost model: cost less subsequent depreciation.

_b_ 18. In making those risk assessments, [. . .]considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design [. . .]procedures that are appropriate in the circumstances

_c_ 19. The share capital of Acme Supplies Ltd. consists of fully-paid common shares with a stated value of $1 each.

_c_ 20. The principal activity of Acme Supplies Ltd. is the retail sale of merchandize.

CHAPTER FIVE
Accounting for the Sale of Goods

Concept Self-check

1. A company providing a service holds no inventory for resale. A company that sells goods must match the cost of the goods sold with the revenue the sales generate. The income statement will show this. This includes the calculation of gross profit—the difference between sales and cost of goods sold. A service business income statement would not show these items.

2. Gross profit results from deducting cost of goods sold from sales. For example, if a vehicle is sold for $16,000 but cost $12,000, the gross profit calculation would be

Sales	$16,000
Cost of Goods Sold	12,000
Gross Profit	4,000

   The gross profit on the sale is $4,000. The gross profit percentage is $4,000/16,000 or 25 per cent. That is for every $1 of sales, the business earns $.25 on average to cover other expenses.

3. In a perpetual inventory system, the Merchandize Inventory and Cost Of Goods Sold accounts in the general ledger are updated immediately when a purchase or sale of goods occurs.

4. When merchandize inventory is purchased, the cost is recorded in a Merchandize Inventory general ledger account.

5. The amount of a purchase allowance is recorded as a credit to the Merchandize Inventory account and a debit to Accounts Payable (or Cash if the account has been paid and a cheque received.)

6. The term "1/15, n30" means that the amount owing must be paid within 30 days ('n' = net). However, if cash payment is made within 15 days, the purchase price will be reduced by 1%.

7. A purchase discount is recorded at the time of payment. Accounts Payable is debited for the full amount. Cash is credited for the net payment (full amount owing minus the purchase discount). Merchandize inventory is credited for the amount of the purchase discount.

8. The sale of merchandize inventory is recorded with two entries:
   a. recording the sale by debiting Cash or Accounts Receivable and crediting Sales, and
   b. recording the cost of the sale by debiting Cost of Goods Sold and crediting Merchandize Inventory.

Concept Self-check continued

9. When a sales return occurs, the sales and related cost of goods sold recorded in the general ledger are reversed, since the goods are returned to inventory.

10. A sales discount is a reduction in sales amounts when a customer pays within a certain time period. Cash is debited for the net amount (amount receivable less sales discount). Accounts Receivable is credited for the full amount. Sales Discounts is debited for the amount of the discount. This account is netted against Sales on the income statement.

11. Usually, a physical count of inventory is conducted at the fiscal year-end and valued. This amount is then compared to the Merchandize Inventory account balance in the general ledger. These should agree, unless inventory has been lost for some reason. This discrepancy is called shrinkage. To adjust for shrinkage, Merchandize Inventory is credited and Cost of Goods Sold is debited.

12. Purchases, purchase discounts and allowances, transportation expenses to deliver goods to the merchandizer, and shrinkage are recorded in the Merchandize Inventory general ledger account under the perpetual inventory system.

13. All items with credit balances are still closed to the Income Summary for a merchandizing company. In a service company, usually this closing entry only includes the Revenue general ledger account. In a merchandizing company, Purchase Returns and Allowances and Purchase Discounts, as well as Sales, will also be closed to the Income Summary, as these all have normal credit balances. Additional accounts with normal debit balances also need to be closed to the Income Summary in a merchandizing company. These include Sales Discounts and Sales Returns and Allowances under a perpetual inventory system.

14. The classified multiple-step income statement shows expenses by both function and nature. The broad categories that show expenses by function include operating expenses, selling expenses, general and administrative expenses, and income taxes. Within each of these categories, the nature of expenses is disclosed such as sales salaries, advertizing, depreciation, supplies, and insurance.

15. Rent revenue, interest and dividends earned, and gains on the sale of property, plant, and equipment are reported under Other Revenues and Expenses because these types of revenue are usually not part of normal operations. Interest expense can also be listed under Other Revenues and Expenses because it does not result from operating activities; it is a financing activity because it is associated with the borrowing of money. Other examples of non-operating expenses include losses on the sale of property, plant, and equipment.

Concept Self-check continued

16. The perpetual inventory system records all transactions affecting the statement of financial position item Merchandize Inventory at the point that these are incurred. These expenditures' include purchases, import duties, discounts and allowances for damage and returns, transportation and handling costs necessary to prepare goods for sale, and subsequent sales of merchandize to customers. The periodic inventory system records all these types of transactions as income statement items. The Merchandize Inventory account is adjusted only at the end of the accounting year. A physical count of goods on hand is conducted, the goods are valued and the Merchandize Inventory account is adjusted accordingly. The advantage of the perpetual inventory system is its relative simplicity and lower administrative costs. The advantage of the perpetual inventory system is that it provides a more accurate inventory valuation at all times. It can be used to compare recorded and actual inventory items on hand at year-end to determine if there are discrepancies due to theft, for instance.

17. The contra accounts associated with Purchases are
    a. Purchase returns and Allowances, which accumulates goods returned to suppliers because of some defect or error; and
    b. Purchase discounts, which accumulates discounts taken when payment is made within a specified discount period.

18. Cost of goods available for sale is calculated by taking opening inventory (counted and valued at the prior period-end), adding the balance from the Purchases account in the, deducting Purchase Returns and Allowances and Purchase Discounts balances, and adding the Transportation-In balance from their general ledger accounts.

19. Cost of goods sold is calculated by taking cost of goods available for sale (see #18 above), and deducting ending inventory (counted and valued at the period-end).

20. Ending inventory is recorded in the accounts of a merchandizer through closing entries. The opening balance in the Merchandizing Inventory (statement of financial position) account is credited and the Income Summary account debited. The ending inventory is counted and valued. This amount is then recorded by debiting the Merchandize Inventory account in the general ledger and crediting the Income Summary account.

CP 5–1

1.

	2021	*2020*	*2019*	*2018*
Sales	$10,000	$9,000	$8,000	$7,000
Cost of Goods Sold	7,500	6,840	6,160	[b] 5,460
Gross Profit	2,500	2,160	1,840	[a] $1,540
Gross Profit Percentage	25%	24%	23%	22%

[a] $7,000 x .22 = $1,540
[b] $7,000 – 1,540 = $5,460

2. Gross profit percentages are increasing steadily each year, as are sales. These are healthy trends.

CP 5–2

Reber Corp.
General Journal

Date 2018	Description	F	Debit	Credit
Jul. 6	Merchandize Inventory	150	600	
	Accounts Payable	210		600
	To record purchase of inventory on account.			
9	Accounts Payable	210	200	
	Merchandize Inventory	150		200
	To record returns made on goods purchased.			
15	Accounts Payable	210	400	
	Cash	101		396
	Purchase Discounts	559		4
	To record payment made within discount period [($600 – 200) x 1% = $4].			

CP 5–3

Boucher Ltd.
General Journal

Date 2017	Description	F	Debit	Credit
Jun. 1	Merchandize Inventory	150	1,200	
	Accounts Payable	210		1,200
	To record inventory purchase.			
3	Accounts Receivable	110	1,500	
	Sales	500		1,500
	Cost of Goods Sold	570	1,200	
	Merchandize Inventory	150		1,200
	To record sale to Wright Inc.: terms 2/10, net 30.			
8	Sales Returns and Allowances	508	800	
	Accounts Receivable	110		800
	Merchandize Inventory	150	600	
	Cost of Goods Sold	570		600
	To record merchandize returned.			
13	Sales Discounts	509	14	
	Cash	101	686	
	Accounts Receivable	110		700
	To record payment received and discount taken [($1,500 – 800) x 2% = $14].			

CP 5–4

1. Horne Inc.:

May 5	Accounts Receivable	4,000	
	Sales		4,000
	Cost of Goods Sold	2,500	
	Merchandize Inventory		2,500
	To record sale on account to Sperling.		
May 7	Sales Returns and Allowances	500	
	Accounts Receivable		500
	Merchandize Inventory	300	
	Cost of Goods Sold		300
	To record return of items from Sperling.		
May 15	Cash	3,430	
	Sales Discounts	70	
	Accounts Receivable		3,500
	To record payment by Sperling: discount applied.		
Dec. 31	Cost of Goods Sold	100	
	Merchandize Inventory		100
	To adjust the Merchandize Inventory account at year-end to physical count ($3,000 – 2,500 + 300 = $800 per records - $700 per count = $100 adjustment needed for shrinkage.)		

2. Sperling Renovations Ltd:

May 5	Merchandize Inventory	4,000	
	Accounts Payable		4,000
	To record purchase on account from Horne.		
May 7	Accounts Payable	500	
	Merchandize Inventory		500
	To record return of merchandize to Horne.		
May 15	Accounts Payable	3,500	
	Merchandize Inventory	70	
	Cash		3,430
	To record payment to Horne: discount taken.		

CP 5–5

1.

Smith Corp.
Income Statement
For the Year Ended June 20, 2018

Sales		$72,000
Less: Sales returns and allowances		(2,000)
Net sales		70,000
Cost of goods sold		50,000
Gross profit		20,000
Selling expenses		
Advertizing	$1,500	
Commissions	4,000	
Delivery	1,000	
Insurance	1,000	
Rent	2,500	
Salaries	5,000	15,000
Net income		$ 5,000

2. Gross profit percentage = $20,000/70,000 = 28.6%

CP 5–6

(a)

Dec. 31	Sales	500	72,000	
	Income Summary	360		72,000
	To close all income statement accounts with credit balances to the Income Summary account.			

(b)

Dec. 31	Income Summary	360	67,000	
	Advertizing Expense	610		1,500
	Commissions Expense	615		4,000
	Cost of Goods Sold	570		50,000
	Delivery Expense	620		1,000
	Insurance Expense	631		1,000
	Rent Expense	654		2,500
	Salaries Expense	656		5,000
	Sales Returns and Allowances	508		2,000
	To close all income statement accounts with debit balances to the Income Summary and remove opening inventory from the Merchandize Inventory account.			

(c)

Dec. 31	Income Summary	360	5,000	
	Retained Earnings	340		5,000
	To close the Income Summary account to the Retained Earnings account.			

CP 5–7

Opening Inventory + Purchases + Transportation-In = Cost of Goods Available
Cost of Goods Available - Ending Inventory = Cost of Goods Sold

A. ? + $1,415 + $25 = $1,940
Opening Inventory = $500

$1,940 = $340 = ?
Cost of Goods Sold = $1,600

B. $184 + ? + $6 = $534
Purchases = $344

$534 - $200 = ?
Cost of Goods Sold = $334

C. $112 + $840 + $15 = ?
Cost of Goods Available = $967

$967 - $135 = ?
Cost of Goods Sold = $832

D. $750 + $5,860 + ? = $6,620
Transportation-In = $10

$6,620 - ? = $5,740
Ending Inventory = $880

CP 5–8

Opening inventory		$ 375
Purchases	$2,930	
Purchase discounts	(5)	
Purchase returns and allowances	(20)	
Transportation-in	105	
Goods available for sale		3,010
Less: Ending inventory		(440)
Cost of goods sold		$2,945

CP 5–9

1.

	A	*B*	*C*	*D*
Sales (a)	$300	$150	$300 [8]	$ 90
Opening Inventory	80 [1]	40	40	12
Purchases	240	120 [6]	220 [7]	63
Cost of Goods Available	320	160 [5]	260	75 [9]
Less: Ending Inventory	(120) [3]	(60)	(60)	(15)
Cost of Goods Sold	200 [2]	100	200	60
Gross Profit (b)	$100	$ 50 [4]	$100	$ 30 [10]
Gross Profit percentage (a/b)	33%	33%	33%	33%

[1] $320 – 240 = $80
[2] $300 – 100 = $200
[3] $320 – 200 = $120
[4] $150 – 100 = $50
[5] $100 + 60 = $160
[6] $160 – 40 = $120
[7] $260 – 40 = $220
[8] $100 + 200 = $300
[9] $12 + 63 = $75
[10] $90 – 60 = $30

2. All the companies have the same gross profit percentage. It is difficult to differentiate performance on this basis alone.

CP 5–10

1.

Mohan Corp.
Income Statement
For the Year Ended December 31, 2018

Sales		$25,000
Less: Sales discounts		(400)
Sales returns and allowances		(2,000)
Net sales		22,600
Cost of goods sold		
Purchases	$20,000	
Purchase returns and allowances	(1,000)	
Purchase discounts	(300)	
Transportation-in	500	
Cost of goods available for sale	19,200	
Less: Ending inventory	(7,900)	
Cost of goods sold		11,300
Gross profit		$11,300

2. Gross profit percentage = $11,300/$22,600 = 50%

CP 5–11

1.

O'Donnell Corp.
Income Statement
For the Year Ended June 30, 2018

Sales		$72,000
Less: Sales returns and allowances		(2,000)
Net sales		70,000
Cost of goods sold		
Opening inventory	$ 6,000	
Purchases	35,000	
Purchase returns and allowances	(2,000)	
Transportation-in	1,000	
Cost of goods available for sale	40,000	
Less: Ending inventory	(10,000)	
Cost of goods sold		30,000
Gross profit		40,000
Selling expenses		
Advertizing	1,500	
Commissions	4,000	
Delivery	1,000	
Insurance	1,000	
Rent	2,500	
Salaries	5,000	15,000
Net income		$25,000

2. Gross profit percentage = $40,000/70,000 = 57.1%

CP 5–12

(a)

Dec. 31	Merchandize Inventory (ending)	150	10,000	
	Sales	500	72,000	
	Purchase Returns and Allowances	558	2,000	
	Income Summary	360		84,000
	To close all income statement accounts with credit balances to the Income Summary account and record ending inventory balance.			

(b)

Dec. 31	Income Summary	360	59,000	
	Merchandize Inventory (opening)	150		6,000
	Advertizing Expense	610		1,500
	Commissions Expense	615		4,000
	Delivery Expense	620		1,000
	Insurance Expense	631		1,000
	Purchases	550		35,000
	Rent Expense	654		2,500
	Salaries Expense	656		5,000
	Sales Returns and Allowances	508		2,000
	Transportation-In	560		1,000
	To close all income statement accounts with debit balances to the Income Summary and remove opening inventory from the Merchandize Inventory account.			

(c)

Dec. 31	Income Summary	360	15,000	
	Retained Earnings	340		15,000
	To close the Income Summary account to the Retained Earnings account.			

CP 5–13

1. Sherman Stores Ltd:

Oct.	8	Purchases	2,800	
		Accounts Payable		2,800
	12	Accounts Payable	800	
		Purchase Returns and Allowances		800

a. Paid on Oct. 8:

Oct.	8	Accounts Payable	2,800	
		Purchase Discounts		28
		Cash		2,772

b. Paid on Oct. 25:

Oct.	25	Accounts Payable	2,000	
		Cash		2,000

2. Morris Wholesalers Corp.:

Oct.	8	Accounts Receivable	2,800	
		Sales		2,800
	12	Sales Returns and Allowances	800	
		Accounts Receivable		800

a. Received payment on Oct. 18:

Oct.	18	Cash	2,772	
		Sales Discounts	28	
		Accounts Receivable		2,800

b. Received payment on Oct. 25:

Oct.	25	Cash	2,000	
		Accounts Receivable		2,000

P 5–1

1.

Salem Corp.
General Journal
Page 1

Date 2018	Description	F	Debit	Credit
Jul. 2	Cash	101	5,000	
	Share Capital	320		5,000
	To record the issue of shares to George Salem.			
2	Merchandize Inventory	150	3,500	
	Accounts Payable	210		3,500
	To record purchases on credit 2/10, n/30, from Blic Pens, Ltd.			
2	Accounts Receivable	110	2,000	
	Sales	500		2,000
	Cost of Goods Sold	570	1,200	
	Merchandize Inventory	150		1,200
	To record sale to Spellman Chair Rentals, Inc. 2/10, n/30.			
3	Rent Expense	654	500	
	Cash	101		500
	To record July rent payment.			
5	Equipment	183	1,000	
	Cash	101		1,000
	To record purchase of equipment from Easton Furniture Ltd.			
8	Cash	101	200	
	Sales	500		200
	Cost of Goods Sold	570	120	
	Merchandize Inventory	150		120
	To record sale and receipt of cash from Ethan Matthews Furniture Ltd.			
8	Merchandize Inventory	150	2,000	
	Accounts Payable	210		2,000
	To record purchases on credit 2/15, n/30, from Shaw Distributors, Inc.			
9	Cash	101	1,960	
	Sales Discount	509	40	
	Accounts Receivable	110		2,000
	To record receipt of amount due from Spellman Chair Rentals, Inc.			
10	Accounts Payable	210	3,500	
	Cash	101		3,430
	Merchandize Inventory	150		70
	To record payment to Blic Pens Ltd.			
10	Merchandize Inventory	150	200	
	Accounts Payable	210		200
	To record purchases on credit n/30, from Peel Products, Inc.			

P 5–1 continued

Salem Corp.
General Journal

Page 2

Date 2018	Description	F	Debit	Credit
July 15	Accounts Receivable	110	2,000	
	Sales	500		2,000
	Cost of Goods Sold	570	1,300	
	Merchandize Inventory	150		1,300
	To record sale to Eagle Products Corp. 2/10, n/30.			
15	Merchandize Inventory	150	1,500	
	Accounts Payable	210		1,500
	To record purchases on credit 2/10, n/30, from Bevan Door, Inc.			
15	Accounts Payable	210	100	
	Merchandize Inventory	150		100
	To record credit note from Shaw Distributors Inc.			
16	Sales Returns and Allowances	508	200	
	Accounts Receivable	110		200
	Merchandize Inventory	150	150	
	Cost of Goods Sold	570		150
	To record credit note issued to Eagle Products Corp.			
20	Accounts Receivable	110	3,500	
	Sales	500		3,500
	Cost of Goods Sold	570	2,700	
	Merchandize Inventory	150		2,700
	To record sale to Aspen Promotions, Ltd. 2/10, n/30.			
20	Accounts Payable	210	950	
	Cash	101		931
	Merchandize Inventory	150		19
	To record payment of half of the amount due to Shaw Distributors Inc.			
24	Cash	101	882	
	Sales Discounts	509	18	
	Accounts Receivable	110		900
	To record receipt of half of the amount due from Eagle Products Corp.			
24	Accounts Payable	210	1,500	
	Cash	101		1,470
	Merchandize Inventory	150		30
	To record payment made to Bevan Door, Inc.			
26	Accounts Receivable	110	600	
	Sales	500		600
	Cost of Goods Sold	570	400	
	Merchandize Inventory	150		400
	To record sale to Longbeach Sales, Ltd. for terms 2/10, n/30.			

P 5–1 continued

Salem Corp.
General Journal
Page 3

Date 2017	Description	F	Debit	Credit
26	Merchandize Inventory	150	800	
	Accounts Payable	210		800
	To record purchase from Silverman Co. for terms 2/10, n/30.			
31	Merchandize Inventory	150	350	
	Cash	101		350
	To record payment to Speedy Transport Co. for July.			

2. The unadjusted ending inventory balance at July 31 is $2,561, calculated as follows:

Merchandize Inventory

July 2	3,500	1,200	July 2
8	2,000	120	8
10	200	70	10
15	1,500	1,300	15
16	150	100	15
26	800	2,700	20
31	350	19	24
		30	24
		400	26
	8,500	5,939	
Unadj. Bal.	**2,561**		
		161	Adj. needed
Adj. Bal.	2,400		

Salem Corp.
General Journal
Page 3

Date 2018	<u>Adjusting Entry</u>	F	Debit	Credit
July 31	Cost of Goods Sold	570	161	
	Merchandize Inventory	150		161
	To record shrinkage and adjust ending inventory to July 31 count.			

P 5–2

1. Randall Sales Corp.
General Journal — Page 1

Date 2018	Description	F	Debit	Credit
May 1	Cash	101	2,000	
	Share Capital	320		2,000
	To record the issue of shares to Harry Randall.			
1	Cash	101	10,000	
	Bank Loan	201		10,000
	To record receipt of a demand loan from First Chance Bank.			
1	Prepaid Rent	162	1,500	
	Cash	101		1,500
	To record payment of rent for May, June, and July to Viva Corp.			
1	Equipment	183	5,000	
	Cash	101		5,000
	To record payment to Avanti Equipment, Ltd.			
1	Merchandize Inventory	150	5,000	
	Accounts Payable	210		5,000
	To record purchases from Renaud Wholesalers, Ltd. for terms 2/10, n/30.			
1	Accounts Receivable	110	2,500	
	Sales	500		2,500
	Cost of Goods Sold	570	1,700	
	Merchandize Inventory	150		1,700
	To record sale to North Vancouver Distributors for terms 2/10, n/30.			
2	Merchandize Inventory	150	1,800	
	Accounts Payable	210		1,800
	To record purchase from Lilydale Products, Ltd. for terms n/30.			
2	Accounts Receivable	110	2,000	
	Sales	500		2,000
	Cost of Goods Sold	570	1,400	
	Merchandize Inventory	150		1,400
	To record sale to Tarrabain Sales, Inc. for terms 2/10, n/30.			
3	Cash	101	500	
	Sales	500		500
	To record sale to Smith Weston Ltd.			
5	Prepaid Insurance	161	1,200	
	Cash	101		1,200
	To record payment to All West Insurance, Inc. for a one–year policy.			
5	Accounts Receivable	110	1,000	
	Sales	500		1,000
	Cost of Goods Sold	570	700	
	Merchandize Inventory	150		700
	To record sale to Trent Stores Corporation for terms 2/10, n/30.			

P 5–2 continued

Randall Sales Corp.
General Journal
Page 2

Date 2018	Description	F	Debit	Credit
May 6	Sales Returns and Allowances	508	500	
	Accounts Receivable	110		500
	Merchandize Inventory	150	300	
	Cost of Goods Sold			300
	To record the issue of a credit note to Tarrabain Sales Inc..			
8	Accounts Payable	210	300	
	Merchandize Inventory	150		300
	To record credit memo received from Renaud Wholesalers Ltd. for defective merchandize returned.			
8	Merchandize Inventory	150	2,800	
	Accounts Payable	210		2,800
	To record purchases from Pinegrove Novelties, Ltd. for terms 2/15, n/30.			
9	Cash		101	2,450
	Sales Discounts	509	50	
	Accounts Receivable	110		2,500
	To record amount received from North Vancouver Distributors.			
9	Accounts Payable	210	1,700	
	Cash	101		1,666
	Merchandize Inventory	150		34
	To record payment to Renaud Wholesaler Corp. (2,000 - 300 = 1,700)			
10	Accounts Receivable	110	400	
	Sales	500		400
	Cost of Goods Sold	570	250	
	Merchandize Inventory	150		250
	To record sale to Eastern Warehouse for terms 2/10, n/30.			
11	Cash		101	1,470
	Sales Discounts	509	30	
	Accounts Receivable	110		1,500
	To record receipt from Tarrabain Sales Inc. after 2% discount taken.			
13	Merchandize Inventory	150	100	
	Cash	101		100
	To record payment to Fast Delivery Corporation.			
15	Merchandize Inventory	150	1,500	
	Accounts Payable	210		1,500
	To record purchase from James Bay Distributors Inc. for terms 2/10, n/30.			

P 5–2 continued

Randall Sales Corp.
General Journal
Page 3

Date 2018	Description	F	Debit	Credit
May 15	Accounts Receivable	110	1,500	
	Sales	500		1,500
	Cost of Goods Sold	570	1,100	
	Merchandize Inventory	150		1,100
	To record sale to Ransom Outlets Inc. for terms 2/10, n/30.			
15	Commissions Expense	615	500	
	Cash	101		500
	To record payment to Yvonne Smith for sales invoices 1, 2, and 3.			
19	Accounts Payable	210	1,800	
	Cash	101		1,800
	To record payment to Lilydale Products Inc.			
19	Merchandize Inventory	150	1,200	
	Accounts Payable	210		1,200
	To record purchase from Midlife Stores Corp. for terms 1/10, n/30.			
22	Merchandize Inventory	150	600	
	Accounts Payable	210		600
	To record purchase from Speedy Sales Co. for terms n/30.			
22	Accounts Payable	210	2,800	
	Cash	101		2,744
	Merchandize Inventory	150		56
	To record payment to Pinegrove Novelties Inc.			
24	Merchandize Inventory	150	150	
	Cash	101		150
	To record payment to In Transit Corporation.			
25	Accounts Receivable	110	900	
	Sales	500		900
	Cost of Goods Sold	570	650	
	Merchandize Inventory	150		650
	To record sale to Timmins Centres Ltd. for terms 2/10, n/30.			
26	Cash		101	1,000
	Accounts Receivable	110		1,000
	To record receipt from Trent Stores Corporation.			
27	Delivery Expense	620	200	
	Cash	101		200
	To record payment to Intown Deliveries Ltd.			

P 5–2 continued

Randall Sales Corp.
General Journal

Page 4

Date 2018	Description	F	Debit	Credit
May 28	Cash	101	300	
	Sales	500		300
	Cost of Goods Sold	570	250	
	Merchandize Inventory	150		250
	To record sale to Betty Regal.			
28	Purchases	500	200	
	Cash	101		200
	To record purchase from Joe Balla Sales Inc.			
28	Accounts Receivable	110	900	
	Sales	500		900
	Cost of Goods Sold	570	700	
	Merchandize Inventory	150		700
	To record sale to Sault Rapids Corp. for terms 2/10, n/30.			
29	Merchandize Inventory	150	100	
	Accounts Payable	210		100
	To record purchase from Amigos Inc.			
29	Delivery Expense	620	300	
	Cash	101		300
	To record payment to Intown Deliveries Ltd.			
29	Advertizing Expense	610	400	
	Cash	101		400
	To record payment for May to Main Force Advertizing Agency.			
29	Utilities Expense	676	100	
	Cash	101		100
	To record payment to State Hydro for electricity.			
29	Commissions Expense	615	350	
	Cash	101		350
	To record payment to Yvonne Smith for sales invoices 4, 5, 6, and 7.			
30	Cash	101	1,000	
	Accounts Receivable	110		1,000
	To record payment received from Ransom Outlets Inc.			
31	Accounts Payable	210	700	
	Cash	101		700
	To record payment to Midlife Stores Corp.			

P 5–2 continued

Randall Sales Corp.
General Journal

Page 5

2018	Adjusting Entries		Debit	Credit
May 31	Rent Expense	165	500	
	Prepaid Rent	162		500
	To record expiration of May prepaid rent.			
31	Insurance Expense	631	100	
	Prepaid Insurance	161		100
	To record expiration of May prepaid insurance.			
31	Cost of Goods Sold	570	110	
	Merchandize Inventory	150		110*
	To record shrinkage and ending inventory at May 31 per physical count as follows:			

Merchandize Inventory

May 1	5,000	1,700	May 1
2	1,800	1,400	2
6	300	700	5
8	2,800	300	8
13	100	34	9
15	1,500	250	10
19	1,200	1,100	15
22	600	56	22
24	150	650	25
28	200	250	28
29	100	700	28
	13,750	7,140	
Unadj. Bal.	6,610		
		110	*Adj. needed
Adj. Bal.	6,500		

P 5–3

1.

Whirlybird Products Inc.
General Ledger

Retained Earnings *No. 340*

		(c)	5,000

Sales *No. 510*

(a)	37,800		37,800
Bal.	-0-		

Income Summary *No. 360*

(b)	32,800	(a)	37,800
(c)	5,000		
Bal.	-0-		

Sales Returns & Allowances *No. 508*

	690	(b)	690
Bal.	-0-		

Sales Discounts *No. 509*

	310	(b)	310
Bal.	-0-		

Cost of Goods Sold *No. 570*

	26,800	(b)	26,800
Bal.	-0-		

Salaries Expense *No. 656*

	5,000	(b)	5,000
Bal.	-0-		

2. Gross profit = $37,800 – 690 – 310 – 26,800 = $10,000.

P 5–4

1.

Southern Cross Corporation
Income Statement
For the Year Ended December 31, 2018

Sales		$100,000
Less: Sales returns and allowances		10,000
Net sales		90,000
Cost of goods sold		70,000
Gross profit		20,000
Other expenses		
Delivery	$2,000	
Office supplies	7,000	
Salaries	4,000	13,000
Net income		$ 7,000

2.

Southern Cross Corporation
General Journal

Date 2018	Closing Entries	F	Debit	Credit
	(a)			
Dec. 31	Sales	500	100,000	
	Income Summary	360		100,000
	To close accounts with credit balances to the Income Summary.			
	(b)			
Dec 31	Income Summary	360	93,000	
	Sales Returns and Allowances	508		10,000
	Cost of Goods Sold	570		70,000
	Delivery Expense	620		2,000
	Office Supplies Expense	650		7,000
	Salaries Expense	656		4,000
	To close accounts with debit balances to the Income Summary.			
	(c)			
Dec. 31	Income Summary	360	7,000	
	Retained Earnings	340		7,000
	To close Income Summary account to the Retained Earnings account.			

P 5–5

1.

Acme Automotive Inc.
General Journal

	Date 2017	Description	F	Debit	Credit
a.	Dec. 31	Accounts Receivable	110	1,000	
		Sales	500		1,000
		Cost of Goods Sold	570	700	
		Merchandize Inventory	150		700
		To accrue amounts receivable at year-end.			
b.	31	Unused Office Supplies	170	100	
		Office Supplies Expense	650		100
		To adjust supplies still on hand at year-end to count.			
c.	31	Telephone Expense	669	460	
		Accounts Payable	210		460
		To accrue amount owing at year-end.			
d.	31	Cost of Goods Sold	570	2,300	
		Merchandize Inventory	150		2,300
		To record shrinkage and adjust ending inventory balance to physical count as follows:			

Merchandize Inventory

Unadj. Bal.	56,000	700	(a)
	55,300		
		2,300	Adj. needed
Adj. Bal.	53,000		

P 5–5 continued

2.

Acme Automotive Inc.
Income Statement
For the Year Ended December 31, 2017

Sales		$101,000
Less: Sales returns and allowances		(1,500)
Sales discounts		(500)
Net sales		99,000
Cost of goods sold		37,000
Gross profit		62,000
Operating expenses		
Selling		
Advertizing	$1,700	
Commissions	4,800	
Delivery	650	
Rent	1,950	
Total selling	9,100	
General and administrative		
Insurance	450	
Office supplies	150	
Telephone	760	
Utilities	290	
Total general and administrative	1,650	
Total operating expenses		10,750
Income from operations		51,250
Interest		600
Income before income taxes		50,650
Income taxes		2,400
Net income		$48,250

Acme Automotive Inc.
Statement of Changes in Equity
For the Year Ended December 31, 2017

	Share capital	*Retained earnings*	*Total equity*
Balance, Jan. 1	$2,000	$ 600	$ 2,600
Net income		48,250	48,250
Balance, Dec. 31	$2,000	$48,850	$50,850

P 5–5 continued

Acme Automotive Inc.
Statement of Financial Position
At December 31, 2017

Assets		
Current		
Cash		$ 750
Accounts receivable		13,000
Merchandize inventory		53,000
Unused supplies		100
Total current		66,850
Equipment		4,400
Total assets		$71,250
Liabilities		
Current		
Bank loan		$ 5,000
Accounts payable		13,000
Income taxes payable		2,400
Total liabilities		20,400
Shareholders' Equity		
Share capital	2,000	
Retained earnings	48,850	50,850
Total liabilities and share. equity		$71,250

P 5–5 continued

3.

Acme Automotive Inc.
General Journal

Date 2017		Description	F	Debit	Credit
		Closing Entries			
e.	Dec. 31	Sales	500	101,000	
		Income Summary	360		101,000
		To close all credit balance accounts to the Income Summary account.			
f.	31	Income Summary	360	52,750	
		Sales Returns and Allowances	508		1,500
		Sales Discounts	509		500
		Cost of Goods Sold	570		37,000
		Advertizing Expense	610		1,700
		Commissions Expense	615		4,800
		Delivery Expense	620		650
		Insurance Expense	631		450
		Interest Expense	632		600
		Office Supplies Expense	650		150
		Rent Expense	654		1,950
		Telephone Expense	669		760
		Utilities Expense	676		290
		Income Taxes Expense	830		2,400
		To close all debit balance accounts to the Income Summary account.			
g.	31	Income Summary	360	48,250	
		Retained Earnings	340		48,250
		To close the Income Summary account to the Retained Earnings account.			

P 5–6

Providence Corp.
General Journal
Page 1

Date 2018	Description	F	Debit	Credit
Jul. 2	Cash	101	5,000	
	Share Capital	320		5,000
	To record the issue of shares to Pam Providence.			
2	Purchases	550	3,500	
	Accounts Payable	210		3,500
	To record Purchases on credit 2/10, n/30, from Blic Pens Ltd.			
2	Accounts Receivable	110	2,000	
	Sales	500		2,000
	To record sale to Spellman Chair Rentals Inc. 2/10, n/30.			
3	Rent Expense	654	500	
	Cash	101		500
	To record July rent payment.			
5	Equipment	183	1,000	
	Cash	101		1,000
	To record purchase of equipment.			
8	Cash	101	200	
	Sales	500		200
	To record receipt of cash from Ethan Matthews Furniture Ltd.			
8	Purchases	550	2,000	
	Accounts Payable	210		2,000
	To record Purchases on credit 2/15, n/30, from Shaw Distributors Inc.			
9	Cash	101	1,960	
	Sales Discount	509	40	
	Accounts Receivable	110		2,000
	To record receipt of amount due from Spellman Chair Rentals Inc.			
10	Accounts Payable	210	3,500	
	Cash	101		3,430
	Purchase Discounts	559		70
	To record payment to Blic Pens Ltd.			
10	Purchases	550	200	
	Accounts Payable	210		200
	To record Purchases on credit n/30, from Peel Products Inc.			
15	Accounts Receivable	110	2,000	
	Sales	500		2,000
	To record sale to Eagle Products Corp. 2/10, n/30.			

P 5–6 continued

Providence Corp.
General Journal
Page 2

Date 2018	Description	F	Debit	Credit
July 15	Purchases	550	1,500	
	Accounts Payable	210		1,500
	To record purchases on credit 2/10, n/30, from Bevan Door Inc.			
15	Accounts Payable	210	100	
	Purchase Returns and Allowances	558		100
	To record credit note from Shaw Distributors Inc.			
16	Sales Returns and Allowances	508	200	
	Accounts Receivable	110		200
	To record credit note issued to Eagle Products Corp.			
20	Accounts Receivable	110	3,500	
	Sales	500		3,500
	To record sale to Aspen Promotions Ltd. 2/10, n/30.			
20	Accounts Payable	210	950	
	Cash	101		931
	Purchase Discounts	559		19
	To record payment of half of the amount due to Shaw Distributors Inc.			
24	Cash		101	882
	Sales Discounts	509	18	
	Accounts Receivable	110		900
	To record receipt of half of the amount due from Eagle Products Corp.			
24	Accounts Payable	210	1,500	
	Cash	101		1,470
	Purchase Discounts	559		30
	To record payment made to Bevan Door Inc.			
26	Accounts Receivable	110	600	
	Sales	500		600
	To record sale to Longbeach Sales Ltd. for terms 2/10, n/30.			
26	Purchases	550	800	
	Accounts Payable	210		800
	To record purchase from Silverman Co. for terms 2/10, n/30.			
31	Transportation-In	560	350	
	Cash	101		350
	To record payment to Speedy Transport Co. for July.			
31	No entry is made to record inventory on hand until closing entries are made.			

P 5–7

Robert Sales Corp.
General Journal
Page 1

Date 2018	Description	F	Debit	Credit
May 1	Cash	101	2,000	
	Share Capital	320		2,000
	To record the issue of shares to Rob Robert.			
1	Cash	101	10,000	
	Bank Loan	201		10,000
	To record receipt of a demand loan from First Chance Bank.			
1	Prepaid Rent	162	1,500	
	Cash	101		1,500
	To record payment of rent for May, June, and July.			
1	Equipment	183	5,000	
	Cash	101		5,000
	To record payment to Avanti Equipment Ltd.			
1	Purchases	550	5,000	
	Accounts Payable	210		5,000
	To record purchases from Renaud Wholesalers Ltd. for terms 2/10, n/30.			
1	Accounts Receivable	110	2,500	
	Sales	500		2,500
	To record sale to North Vancouver Distributors for terms 2/10, n/30.			
2	Purchases	550	1,800	
	Accounts Payable	210		1,800
	To record purchase from Lilydale Products Ltd. for terms n/30.			
2	Accounts Receivable	110	2,000	
	Sales	500		2,000
	To record sale to Tarrabain Sales Inc. for terms 2/10, n/30.			
3	Cash	101	500	
	Sales	500		500
	To record sale to Smith Weston Ltd.			
5	Prepaid Insurance	161	1,200	
	Cash	101		1,200
	To record payment to All West Insurance Inc. for a one–year policy.			
5	Accounts Receivable	110	1,000	
	Sales	500		1,000
	To record sale to Trent Stores Corporation for terms 2/10, n/30.			

P 5–7 continued

Robert Sales Corp.
General Journal
Page 2

Date 2018	Description	F	Debit	Credit
May 6	Sales Returns and Allowances	508	500	
	Accounts Receivable	110		500
	To record the issue of a credit note to Tarrabain Sales Inc. for merchandize returned.			
8	Accounts Payable	210	300	
	Purchase Returns and Allowances	558		300
	To record credit memo received from Renaud Wholesalers Corp. for defective merchandize returned.			
8	Purchases	550	2,800	
	Accounts Payable	210		2,800
	To record purchases from Pinegrove Novelties Ltd. for terms 2/15, n/30.			
9	Cash	101	2,450	
	Sales Discounts	509	50	
	Accounts Receivable	110		2,500
	To record amount received from North Vancouver Distributors.			
9	Accounts Payable	210	1,700	
	Cash	101		1,666
	Purchase Discounts	559		34
	To record payment to Renaud Wholesalers Ltd. (2,000 - 300 = 1,700)			
10	Accounts Receivable	110	400	
	Sales	500		400
	To record sale to Eastern Warehouse for terms 2/10, n/30.			
11	Cash	101	1,470	
	Sales Discounts	509	30	
	Accounts Receivable	110		1,500
	To record receipt from Tarrabain Sales Inc. after 2% discount taken.			
13	Transportation-In	560	100	
	Cash	101		100
	To record payment to Fast Delivery Corporation.			
15	Purchases	550	1,500	
	Accounts Payable	210		1,500
	To record purchase from James Bay Distributors Inc. for terms 2/10, n/30.			
15	Accounts Receivable	110	1,500	
	Sales	500		1,500
	To record sale to Ransom Outlets Inc. for terms 2/10, n/30.			

P 5–7 continued

Robert Sales Corp.
General Journal

Page 3

Date 2018	Description	F	Debit	Credit
May 15	Commissions Expense	615	500	
	Cash	101		500
	To record payment to Yvonne Smith for sales invoices 1, 2, and 3.			
19	Accounts Payable	210	1,800	
	Cash	101		1,800
	To record payment to Lilydale Products Inc.			
19	Purchases	550	1,200	
	Accounts Payable	210		1,200
	To record purchase from Midlife Stores Corp. for terms 1/10, n/30.			
22	Purchases	550	600	
	Accounts Payable	210		600
	To record purchase from Speedy Sales Co. for terms n/30.			
22	Accounts Payable	210	2,800	
	Cash	101		2,744
	Purchase Discounts	559		56
	To record payment to Pinegrove Novelties Inc.			
24	Transportation-In	560	150	
	Cash	101		150
	To record payment to In Transit Corporation.			
25	Accounts Receivable	110	900	
	Sales	500		900
	To record sale to Timmins Centres Ltd. for terms 2/10, n/30.			
26	Cash	101	1,000	
	Accounts Receivable	110		1,000
	To record receipt from Trent Stores Corporation.			
27	Delivery Expense	620	200	
	Cash	101		200
	To record payment to Intown Deliveries Ltd.			
28	Cash	101	300	
	Sales	500		300
	To record sale to Betty Regal.			
28	Purchases	500	200	
	Cash	101	200	
	To record purchase from Joe Balla Sales Inc.			

P 5–7 continued

Robert Sales Corp.
General Journal

Page 4

Date 2018	Description	F	Debit	Credit
May 28	Accounts Receivable	110	900	
	Sales	500		900
	To record sale to Sault Rapids Corp. for terms 2/10, n/30.			
29	Purchases	550	100	
	Accounts Payable	210		100
	To record purchase from Amigos Inc.			
29	Delivery Expense	620	300	
	Cash	101		300
	To record payment to Intown Deliveries Ltd.			
29	Advertizing Expense	610	400	
	Cash	101		400
	To record payment for May to Main Force Advertizing Agency.			
29	Utilities Expense	676	100	
	Cash	101		100
	To record payment to State Hydro for electricity.			
29	Commissions Expense	615	350	
	Cash	101		350
	To record payment to Yvonne Smith for sales invoices 4, 5, 6, and 7.			
30	Cash	101	1,000	
	Accounts Receivable	110		1,000
	To record payment received from Ransom Outlets Inc.			
31	Accounts Payable	210	700	
	Cash	101		700
	To record payment to Midlife Stores Corp.			
31	No entry is made to record inventory on hand until closing entries are made.			
	Adjusting Entries			
31	Rent Expense	165	500	
	Prepaid Rent	162		500
	To record expiration of May prepaid rent.			
31	Insurance Expense	631	100	
	Prepaid Insurance	161		100
	To record expiration of May prepaid insurance.			

P 5–8

Zenith Products Inc.
General Ledger

Merchandize Inventory — No. 150

Op. Bal.	4,000	(b)	4,000
(a)	6,000		
End. Bal.	6,000		

Retained Earnings — No. 340

		(c)	5,000

Purchases — No. 550

	22,500	(b)	22,500
Bal.	-0-		

Income Summary — No. 360

(b)	32,800	(a)	37,800
(c)	5,000		
Bal.	-0-		

Purchase Returns & Allowances — No. 558

(a)	575		575
Bal.	-0-		

Sales — No. 510

(a)	31,000		31,000
Bal.	-0-		

Purchase Discounts — No. 559

(a)	225		225
Bal.	-0-		

Sales Returns & Allowances — No. 508

	690	(b)	690
Bal.	-0-		

Transportation – In — No. 560

	300	(b)	300
Bal.	-0-		

Sales Discounts — No. 509

	310	(b)	310
Bal.	-0-		

Salaries Expense — No. 656

	5,000	(b)	5,000
Bal.	-0-		

P 5–8 continued

2.

Zenith Products Inc.
Partial Income Statement
For the Year Ended December 31, 2018

Sales		$31,000
Less: Sales returns and allowances		(690)
Sales discounts		(310)
Net sales		30,000
Cost of goods sold		
Opening inventory	$ 4,000	
Purchases	22,500	
Less: Purchase returns and allowances	(575)	
Purchase discounts	(225)	
Add: Transportation-in	300	
Cost of goods available for sale	26,000	
Less: Ending inventory	(6,000)	
Cost of goods sold		20,000
Gross profit		$10,000

P 5–9

1.

Northern Lights Corporation
Partial Income Statement
For the Year Ended December 31, 2018

Sales		$100,000
Less: Sales returns and allowances		(10,000)
Net sales		90,000
Cost of goods sold		
Opening inventory	$ 12,000	
Purchases	70,000	
Less: Purchase returns and allowances	(6,000)	
Purchase discounts	(4,000)	
Add: Transportation-in	3,000	
Cost of goods available for sale	75,000	
Less: Ending inventory	(15,000)	
Cost of goods sold		60,000
Gross profit		$ 30,000

P 5–9 continued

2. Northern Lights Corporation

General Journal

Date 2018	Closing Entries	F	Debit	Credit
a. Dec. 31	Merchandize Inventory	150	15,000	
	Sales	500	100,000	
	Purchase Returns and Allowances	558	6,000	
	Purchase Discounts	559	4,000	
	Income Summary	360		125,000
	To close all income statement accounts with credit balances to Income Summary and record ending inventory balance in the Merchandize Inventory account.			
b. Dec 31	Income Summary	360	104,000	
	Merchandize Inventory	150		12,000
	Sales Returns and Allowances	508		10,000
	Purchases	550		70,000
	Transportation-In	560		3,000
	Delivery Expense	620		2,000
	Office Supplies Expense	650		7,000
	To close all income statement accounts with debit balances to Income Summary and eliminate opening inventory balance in the Merchandize Inventory account.			
c. Dec. 31	Income Summary	360	21,000	
	Retained Earnings	340		21,000
	To close the Income Summary account to Retained Earnings.			

3. Net income is $21,000, the amount credited to retained earnings in closing entry *c.*

P 5–10

1. Tom's Trucks Inc.
General Journal

	Date 2017	Description	F	Debit	Credit
a.	Dec. 31	Telephone Expense	669	60	
		Accounts Payable	210		60
		To accrue amount owing at year-end.			
b.	31	Accounts Receivable	110	600	
		Sales	500		600
		To accrue amounts receivable at year-end.			
c.	31	Unused Office Supplies	170	100	
		Office Supplies Expense	650		100
		To adjust supplies still on hand at year-end to count.			
d.		No entry is made. The correct merchandize inventory balance at year-end is recorded when the closing entries are posted.			

P 5–10 continued

2.

Tom's Trucks Inc.
Income Statement
For the Year Ended December 31, 2017

Sales		$100,600
Less: Sales returns and allowances		(1,500)
Sales discounts		(500)
Net sales		98,600
Cost of goods sold		
Opening inventory	$56,000	
Purchases	35,000	
Less: Purchase returns and allows.	(1,700)	
Purchase discounts	(300)	
Transportation-in	1,000	
Cost of goods available for sale	90,000	
Less: Ending inventory	(58,000)	
Cost of goods sold		32,000
Gross profit		66,600
Operating expenses		
Selling		
Advertizing	1,700	
Commissions	4,800	
Delivery	650	
Insurance	450	
Rent	1,950	
Total selling	9,550	
General and administrative		
Supplies	150	
Telephone	360	
Utilities	290	
Total general and administrative	800	
Total operating expenses		10,350
Income from operations		56,250
Interest		600
Income before income taxes		55,650
Income taxes		2,400
Net income		$53,250

Tom's Trucks Inc.
Statement of Changes in Equity
For the Year Ended December 31, 2017

	Share capital	*Retained earnings*	*Total equity*
Balance, Jan. 1	$2,000	$600	$ 2,600
Net income		53,250	53,250
Balance, Dec. 31	$2,000	$53,850	$55,850

P 5–10 continued

Tom's Trucks Inc.
Statement of Financial Position
At December 31, 2017

Assets		
Current		
Cash		$ 750
Accounts receivable		13,000
Merchandize inventory		58,000
Unused supplies		100
Total current		71,450
Equipment		4,400
Total assets		$75,850
Liabilities		
Current		
Accounts payable		$12,600
Income taxes payable		2,400
Total current		15,000
Bank loan		5,000
Total liabilities		20,000
Shareholders' Equity		
Share capital	2,000	
Retained earnings	53,850	55,850
Total liabilities and share. equity		$75,850

P 5–10 continued

3. Tom's Trucks Inc.

General Journal

Date 2017		Closing Entries	F	Debit	Credit
f.	Dec. 31	Merchandize Inventory	150	58,000	
		Sales	500	100,600	
		Purchase Returns and Allowances	558	1,700	
		Purchase Discounts	559	300	
		Income Summary	360		160,600
		To close all credit balance accounts to the Income Summary account and record ending inventory.			
g.	31	Income Summary	360	107,350	
		Merchandize Inventory	150		56,000
		Sales Returns and Allowances	508		1,500
		Sales Discounts	509		500
		Purchases	550		35,000
		Transportation-In	560		1,000
		Advertizing Expense	610		1,700
		Commissions Expense	615		4,800
		Delivery Expense	620		650
		Insurance Expense	631		350
		Interest Expense	632		600
		Office Supplies Expense	650		250
		Rent Expense	654		1,950
		Telephone Expense	669		360
		Utilities Expense	676		290
		Income Taxes Expense	830		2,400
		To close all debit balance accounts to Income Summary account and expense opening inventory.			
h.	31	Income Summary	360	53,250	
		Retained Earnings	340		53,250
		To close the Income Summary account to the Retained Earnings account.			

CHAPTER SIX

Assigning Costs to Merchandize

Concept Self-check

1. The three inventory cost flow assumptions that are allowed under GAEB are first-in, first out (FIFO), weighted average, and specific identification.

2. There is no effect on financial statements of using different inventory cost flow assumptions, unless purchase prices are changing.

3. When prices are rising, FIFO costing yields the highest ending inventory and the highest net income, while weighted average costing produces the lowest ending inventory and the lowest net income.

4. In a period of rising prices, the FIFO inventory cost flow assumption would maximize net income and thus management's year-end bonus. Assume a gadget is acquired on January 1 for $10 and one on July 1 for $16. On December 1, one gadget is sold for $20. Gross profit calculations under each cost flow assumption would be:

	FIFO	*Wtd. avg.*
Sales	$20	$20
Cost of Goods Sold	10	12 *
Gross Profit	$10	$ 8

*($10 + 16)/2 = $12

If prices were falling, the choice would be the opposite. The weighted average inventory cost flow assumption yields the higher net income.

5. If the ending inventory is overstated at the end of 2017, then cost of goods sold is understated; therefore, the 2017 net income is overstated by $5,000. In 2018, the opening inventory would be overstated and cost of goods sold would be overstated; therefore, the net income would be understated by $5,000.

6. The laid-down cost of inventory is the invoice price of the goods less purchase discounts, plus transportation-in, insurance while in transit, and any other expenditure made by the purchaser to get the merchandize to the place of business and ready for sale.

7. Inventory must be evaluated at each fiscal year-end to determine whether the net realizable value (NRV) is lower than cost. Net realizable value is the expected selling cost of inventory, less any applicable costs related to the sale.

8. The primary reason for the use of the LCNRV method of inventory valuation is prudence. If the likely value of inventory has declined below cost, it is prudent to recognize the loss immediately, rather than when the goods are eventually sold to better inform investors and creditors of estimated future cash flows.

Concept Self-check continued

9. Estimating inventory is useful for two reasons:

   a. It is useful for inventory control. When a total inventory amount is calculated under a periodic inventory system through physical count and valuation, an estimate can help check the accuracy.

   b. It is useful for the preparation of interim financial statements. Under a periodic inventory system, inventory on hand at any point in time is not readily available. To take a physical count often would be costly and inconvenient. An estimate offers a way of determining a company's inventory at any point in time in a cost-effective manner.

10. Under the gross profit method, the percentage of profit remaining after accounting for cost of goods sold (the gross profit percentage) is assumed to remain the same from year to year. By applying the rate to sales, gross profit and then cost of goods sold can be estimated. Opening inventory and purchases will be known from the accounting records, so cost of goods available for sale can be determined. The difference between the cost of goods sold and cost of goods available for sale is the ending inventory amount.

    Under the retail inventory method, mark-up on goods purchased then sold is considered to be constant. Both cost and selling prices of goods acquired are then valued at retail by using the mark-up amount. From this, the ending inventory at retail is calculated. By applying the cost percentage (cost of goods available for sale divided by retail cost of goods available for sale) to the retail ending inventory, its value at cost can be calculated.

    i. Example — gross profit method:

Sales		$100
Cost of Goods Sold:		
Opening Inventory (from records)	80	
Purchases (from records)	70	
Cost of Goods Available for Sale	150	
Ending Inventory	(a)?	(b)?
Gross Profit		$(c)?

If the gross profit percentage average is 25%, the following can be estimated:

(c) Gross profit	= 25% x $100	= $25
(b) Cost of goods sold	= $100 – $25 (c)	= $75
(a) Ending inventory	= $150 – $75 (b)	= $75

Ending inventory (a) would be $75.

Concept Self-check continued

ii. Example — retail inventory method; assumed mark-up = 200%:

	At Retail		*At Cost*	
Sales		$500		$500
Cost of Goods Sold:				
Opening Inventory (records)	$(b)		$ 80	
Purchases (records)	(b)		300	
Cost of Goods Available for Sale	(c)		380	
Ending Inventory	(d)?		(e)?	
Cost of Goods Sold		(a)?		(f)?
Gross Profit (same as Sales)		$-0-		(g)?

(a) Cost of Goods restated at retail to equal sales = $500

(b) Opening Inventory and Purchases re-stated at retail
= $300 x 200% = $600; 80 x 200%
= $160

(c) Cost of Goods Available at retail = $600 (b) + 160 (b)
= $760

(d) Ending Inventory at retail

= Cost of Goods Available at retail – Cost of Goods Sold at retail
= $760 (c) – 500 (a)
= $260

(e) Inventory at cost = Inventory at retail/200%
= $260 (c)/200%
= $130

(f) Cost of Goods Sold at cost = $380 – 130(e) = $250

(g) Gross Profit at cost = $500 – $250(e) = $250

11. The gross profit method is particularly useful in cases where goods have been stolen or lost in a fire; in such cases it is not possible to determine the balance in the ending inventory by a physical count when the periodic inventory system is used.

12. The retail inventory method assumes an average inventory cost flow assumption because the cost percentage used to calculate ending inventory and cost of goods sold is based on a constant mark-up.

Concept Self-check continued

13. Under the periodic inventory system, purchased inventory is recorded in the general ledger Purchases account; under a perpetual inventory system, it is recorded under Merchandize Inventory.

    When inventory is sold under the periodic inventory system, there is no entry to cost of goods sold; this is determined at the end of the period. Under the perpetual inventory system, an entry is recorded in the Cost of Goods Sold account and an offsetting decrease is recorded under Merchandize Inventory when each sale transaction occurs.

CP 6–1

1. FIFO

	Purchased			*Sold*			*Balance in Inventory*		
Date	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*
Jan. 1							100	$1	$100
7	10	$2	$20				100 10	$1 $2	$120
9				80	$1	$80	20 10	$1 $2	$40
21	20	$3	$60				20 10 20	$1 $2 $3	$100
24				20 10 10	$1 $2 $3	$70	10	$3	**$30**

2. Weighted average (answers may differ depending on rounding assumptions)

	Purchased			*Sold*			*Balance in Inventory*		
Date	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*
Jan. 1							100	$1.00	$100.00
7	10	$2	$20				110	$1.09[1]	$120.00
9				80	$1.09	$87.20	30	$1.09[3]	$32.80[2]
21	20	$3	$60				50	$1.86[4]	$92.80
24				40	$1.86	$74.40	10	$1.84[6]	**$18.40**[5]

[1] ($100 + 20)/(100+10) = $1.09 (rounded)
[2] $120.00 – 87.20 = $32.80 (This eliminates rounding errors. Remember, cost of goods available – cost of goods sold = ending inventory.)
[3] $32.80/30 units = $1.09 per unit (rounded)
[4] ($32.80 + 60.00)/(30 + 20) = $1.86 per unit (rounded)
[5] $92.80 – 74.40 = $18.40
[6] $18.40/10 = $1.84 per unit

CP 6–2

1. FIFO

Date	Purchased			Sold			Balance in Inventory		
	Units	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*
Jan. 1							2,000	$.50	$1,000
5				1,200	$.50	$600	800	$.50	$400
6	1,000	$2	$2,000				800 1,000	$.50 $2.00	$2,400
10	500	$1	$500				800 1,000 500	$.50 $2.00 $1.00	$2,900
16				800 1,000 200	$.50 $2.00 $1.00	$2,600	300	$1.00	$300
21	1,000	$2.50	$2,500				300 1,000	$1.00 $2.50	**$2,800**

a.	Jan. 5	Accounts Receivable	110	6,000	
		Sales	550		6,000
		Cost of Goods Sold	570	600	
		Merchandize Inventory	150		600
		To record Jan. 5 sales; COGS at FIFO.			
b.	Jan. 16	Accounts Receivable	110	12,000	
		Sales	550		12,000
		Cost of Goods Sold	570	2,600	
		Merchandize Inventory	150		2,600
		To record Jan. 16 sales; COGS at FIFO.			

c. Per the above table, there are 1,300 units on hand: 300 @ $1; 1,000 @ $2.50, for a total ending inventory cost of $2,800.

2. Weighted average (answers may differ depending on rounding assumptions)

Date	Purchased			Sold			Balance in Inventory		
	Units	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*
Jan. 1							2,000	$.50	$1,000
5				1,200	$.50	$600	800	$.50	$400
6	1,000	$2	$2,000				1,800	$1.33[1]	$2,400
10	500	$1	$500				2,300	$1.26[2]	$2,900
16				2,000	$1.26	$2,520	300	$1.27[4]	$380[3]
21	1,000	$2.50	$2,500				1,300	$2.22[5]	**$2,880**

[1] ($400 + $2,000)/(800 + 1,000) = $1.33 per unit (rounded)
[2] ($2,400 + $500)/(1,800 + 500) = $1.26 per unit (rounded)
[3] $2,900 – 2,520 = $380 (This eliminates rounding errors. Remember, cost of goods available – cost of goods sold = ending inventory.)
[4] $380/300 = $1.27 per unit (rounded)
[5] $2,880/1,300 = $2.22 per unit (rounded)

CP 6–2 continued

a.	Jan. 5	Accounts Receivable	110	6,000	
		Sales	550		6,000
		Cost of Goods Sold	570	600	
		Merchandize Inventory	150		600
		To record Jan. 5 sales; COGS at weighted average.			
b.	Jan. 16	Accounts Receivable	110	12,000	
		Sales	550		12,000
		Cost of Goods Sold	570	2,520	
		Merchandize Inventory	150		2,520
		To record Jan. 16 sales; COGS at weighted average.			

c. Per the above table, there are 1,300 units on hand @ $2.22 (rounded), for a total ending inventory cost of $2,880. This should be calculated as the inventory balance of $380 on January 16 plus the January 21 purchase of $2,500, *not* 1,300 units x wtd. avg. cost of $2.22.

CP 6–3

1. a. FIFO

	Purchased			*Sold*			*Balance in Inventory*		
Date	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*
May 1							100	$1	$100
5				80	$1	$80	20	$1	$20
6	200	$2	$400				20 200	$1 $2	$420
12	125	$3	$375				20 200 125	$1 $2 $3	$795
13				20 200 80	$1 $2 $3	$660	45	$3	$135
19	350	$2	$700				45 350	$3 $2	$835
29	150	$1	$150				45 350 150	$3 $2 $1	$985
30				45 350 5	$3 $2 $1	$840	145	$1	**$145**
	Total COGS					**$1,580**			

CP 6–3 continued

1. b. Specific identification

	Purchased			Sold			Balance in Inventory		
Date	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*
May 1							100	$1	$100
5				80	$1	$80	20	$1	$20
6	200	$2	$400				20 200	$1 $2	$420
12	125	$3	$375				20 200 125	$1 $2 $3	$795
13				125 175	$3 $2	$725	20 25	$1 $2	$70
19	350	$2	$700				20 25 350	$1 $2 $2	$770
29	150	$1	$150				20 25 350 150	$1 $2 $2 $1	$920
30				20 300 80	$1 $2 $1	$700	25[1] 50[2] 70[3]	$2 $2 $1	**$220**
	Total COGS					**$1,505**			

[1] May 6 purchase
[2] May 19 purchase
[3] May 29 purchase

CP 6–3 continued

1. c. Weighted average

	Purchased			Sold			Balance in Inventory		
Date	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*
May 1							100	$1.00	$100
5				80	$1	$80	20	$1.00	$20
6	200	$2	$400				220	$1.91[1]	$420
12	125	$3	$375				345	$2.30[2]	$795
13				300	$2.30	$690	45	$2.30	$105[3]
19	350	$2	$700				395	$2.04[4]	$805
29	150	$1	$150				545	$1.75[5]	$955
30				400	$1.75	$700	145	$1.76[7]	**$255**[6]
	Total COGS					**$1,470**			

[1] $420/220 units = $1.91 per unit (rounded)
[2] $795/345 units = $2.30 per unit (rounded)
[3] $795 – 690 = $105 (This eliminates rounding errors. Remember, cost of goods available – cost of goods sold = ending inventory.)
[4] $805/395 units = $2.04 per unit (rounded)
[5] $955/545 units = $1.75 per unit (rounded)
[6] $955 – 700 = $255
[7] $255/145 units = $1.76 per unit (rounded)

2.

	FIFO	*Spec. ident.*	*Wtd. avg.*
Sales	$3,900	$3,900	$3,900
Cost of goods sold	(1,580)	(1,505)	(1,470)
Gross profit	$2,320	$2,395	$2,430

3. The weighted average inventory cost flow assumption maximizes net income ($2,430) and ending inventory ($253.75).

CP 6–4

3	Matches actual flow of goods with actual flow of costs in all cases
1	Matches old costs with new sales prices
1	Results in the lowest net income in periods of falling prices
2,3	Does not assume any particular flow of goods
1	Best suited for situations in which inventory consists of perishable goods
1	Values inventory at approximate replacement cost

CP 6–5

	2017 Statements				2018 Statements			
Errors	*Open. invent.*	*End. invent.*	*2017 Total assets*	*2017 Net income*	*Open. invent.*	*End. invent.*	*2018 Total assets*	*2018 Net income*
1. Goods purchased in 2017 were included in December 31 inventory, but the transaction was not recorded until early 2018.	*0*	*0*	*0*	+	*0*	*0*	*0*	-
2. Goods purchased in 2018 were included in December 31, 2017 inventory, and the transaction was recorded in 2017.	*0*	+	+	*0**	+	*0*	*0*	*0*
3. Goods were purchased in 2017 and the transaction recorded in that year; however, the goods were not included in the December 31 inventory as they should have been.	*0*	-	-	-	-	*0*	*0*	+
4. Goods purchased in 2017 were excluded from December 31 inventory, and the transaction was recorded early in 2018.	*0*	-	-	*0*	-	*0*	*0*	*0*

* The effects of this error cancel each other out, so net income is not affected in either 2017 or 2018.

CP 6–6

1. a. Ending inventory for 2019 was understated by $2,000. Instead of being $5,000, it should have been $7,000. Thus, cost of goods sold should have been $18,000 and gross profit, $12,000. Because of this mistake, the 2020 opening inventory was also understated by $2,000, causing cost of goods sold to be understated by $2,000 and gross profit overstated by $2,000 It should have been $15,000.

   b. The 2021 ending inventory was overstated by $5,000. It should have been $10,000. Thus, cost of goods sold should have been $30,000 and gross profit, $20,000.

2. For 2019, the merchandize inventory on the statement of financial position was understated by $2,000. Thus, the total assets were $2,000 less than they should have been. For 2020, there is no effect on the statement of financial position, as the error is in opening inventory. For 2021, the ending inventory in the statement of financial position is overstated by $5,000, which means that total assets were overstated by $5,000.

CP 6–7

1. LCNRV on a unit–by–unit basis:
   (2 x $50) + (3 x $75) + (4 x $20) = $405

2. LCNRV on a group inventory basis:
   (2 x $50) + (3 x $150) + (4 x $25) = $650
   (2 x $60) + (3 x $75) + (4 x $20) = $425

   Therefore, LCNRV = $425

CP 6–8

1.

Sales		$300,000	100%
Cost of goods sold			
Opening inventory	$ 80,000		
Purchases	150,000		
Cost of goods available	230,000		
Ending inventory (estimated)	(c)		
Cost of goods sold		(b)	66 2/3%
Gross profit		(a)	33 1/3%

(a) Gross profit = 33 1/3% of Sales
= 33 1/3% x $300,000
= $100,000

(b) Cost of goods sold = Sales – gross profit
= $300,000 – 100,000
= $200,000

(c) Estimated ending inventory
= Cost of goods available – cost of goods sold
= $230,000 – $200,000
= $30,000

2. Balton lost about $30,000 of inventory in the fire and is claiming $45,000. This does not seem reasonable.

CP 6–9

1.

	At retail				*At cost*			
Sales			$ 276,000				$ 276,000	
Cost of goods sold								
Opening inventory	$ 78,000				$ 26,000			
Purchases	282,000				90,000			
Transportation-in	—				4,000			
Cost of goods available for sale	360,000	(a)			120,000			
Less: Ending inventory	(84,000)	(c)			(28,000)	(d)		
Cost of goods sold			276,000	(b)			92,000	(e)
Gross Profit			$ 0				$ 184,000	(f)

2. Mark-up = $276,000/92,000 = 300%.

CP 6–10

The estimated ending inventory at cost is $25,000, calculated as follows:

	At retail			*At cost*		
Sales (given)		$ 250,000			$ 250,000	
Cost of goods sold						
Opening inventory	$ 20,000			$ 10,000		
Purchases	280,000			140,000		
Cost of goods available for sale	300,000 (a)			150,000		
Less: Ending inventory	(50,000) (c)			**(25,000)** (d)		
Cost of goods sold		250,000	(b)		125,000	
Gross profit		$ 0			$ 125,000	

CP 6–11

	1	2	3	4
Opening inventory	$ 0	$3,000	$1,000	$2,000
Purchases	5,000	5,000	5,000	5,000
Ending inventory	(2,000)	(4,000)	(1,500)	(0)
Cost of goods sold	$3,000	$4,000	$4,500	$7,000

CP 6–12

	FIFO		*Spec. ident.*		*Wtd. Avg.*	
Sales		$1,200		$1,200		$1,200
Cost of goods sold						
Opening inventory	$100		$100		$100	
Purchases	550[1]		550		550	
Goods avail. for sale[2]	650		650		650	
Less: Ending inv.	(250)[3]		(140)[4]		(130)[5]	
Cost of goods sold		400		510		520
Gross profit		$800		$690		$680

[1] ($10 + $40+ $90 + $160 + $250) = $550

[2] Total units available

(100 + 10 + 20 + 30 + 40 + 50)	250	units
Total units sold (given)	(200)	units
Ending inventory	50	units

[3] 50 units @ $5 = $250

[4] Purchase

#1	10 @ $1	$10
#2	20 @ $2	40
#4	10 @ $4	40
#5	10 @ $5	50
	50	$140

[5] $650/250 units = $2.60 per unit x 50 units = $130

CP 6–13

1. Specific identification ending Inventory:

1,200	units @ $0.50 =	$ 600
1,000	units @ $2.00 =	2,000
300	units @ $1.00 =	300
2,500	units	$2,900

2. FIFO ending inventory:

1,000	units @ $2.00 =	$2,000
500	units @ $1.00 =	500
1,000	units @ $2.50 =	2,500
2,500		$5,000

3. Weighted average ending inventory:

2,000	units @ $0.50 =	$1,000
1,000	units @ $2.00 =	2,000
500	units @ $1.00 =	500
1,000	units @ $2.50 =	2,500
4,500		$6,000

Weighted average cost = $6,000/4,500 units = $1.33/unit x 2,500 units = $3,333 (rounded)

4. Specific identification cost of goods sold:

800	units @ $.50 =	$ 400
200	units @ $1.00 =	200
1,000	units @ $2.50 =	2,500
2,000		$3,100

5. FIFO cost of goods sold: 2,000 units @ $0.50 = $1,000

6. Weighted average cost of goods sold:

2,000	units @ $0.50 =	$1,000
1,000	units @ $2.00 =	2,000
500	units @ $1.00 =	500
1,000	units @ $2.50 =	2,500
4,500		$6,000

Weighted average cost = $6,000/4,500 units = $1.33/unit x 2,000 units = $2,667 (rounded)

CP 6–14

1. a. FIFO ending inventory = (150 x $3) + (50 x $2) = $550

   b. Specific identification ending inventory = (100 x $1) + (100 x $3) = $400

   c. Weighted average = (100 x $1) + (200 x $1) + (125 x $2) + (350 x $2) + (150 x $3)
   = $1,700/925 = $1.84/unit (rounded)

   Weighted average ending inventory = $1.84 x 200 = $368

2. Units sold = 925 – 200 = 725 units x $2 = $1,450 total sales.

	FIFO		*Spec. ident*		*Wtd. avg.*	
Sales		$1,450		$1,450		$1,450
Cost of goods sold						
Opening inventory	$ 100		$ 100		$ 100	
Purchases	1,600		1,600		1,600	
Cost of goods available for sale	1,700		1,700		1,700	
Less: Ending inventory	(550)		(400)		(368)	
Cost of goods sold		1,150		1,300		1,332
Gross profit		$ 300		$ 150		$ 118

P 6–1

1. The COGS calculation is the same for all three methods:

	Purchased			*Sold*			*Balance in Inventory*		
Date	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*
Jan. 1							50	$1	$50
Apr. 15	200	$2	$400				50 200	$1 $2	$450
Apr. 25				50 200	$1 $2	$450	-0-	$-0-	$-0-
Oct. 15	600	$5	$3,000				600	$5	$3,000
Oct. 25				500	$5	$2,500	100	$5	**$500**
	Total COGS					**$2,950**			

2. Cost of goods sold is $2,950 under all three alternatives. Therefore gross profit and net income will also be the same.

3. You should advize the president that all of the alternatives have the same effect. However, once an inventory cost flow assumption is adopted, it must be used consistently in future years. This minimizes the ability to manipulate net income through accounting policy changes, if that is the president's plan.

P 6–2

1. a. FIFO

	Purchased			*Sold*			*Balance in Inventory*		
Date	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*
Jan. 1							25	$1	$25
Feb. 15	15	$2	$30				25 15	$1 $2	$55
Feb. 28				25 5	$1 $2	$35	10	$2	$20
Mar. 14	10	$3	$30				10 10	$2 $3	$50
Apr. 9				10 5	$2 $3	$35	5	$3	$15
Oct. 28	35	$4	$140				5 35	$3 $4	$155
Dec. 4	40	$5	$200				5 35 40	$3 $4 $5	$355
Dec. 21				5 35 10	$3 $4 $5	$205	30	$5	**$150**
	Total COGS					**$275**			

P 6–2 continued

The journal entry would be:

Dec. 21	Accounts Receivable	110	300	
	Sales	550		300
	Cost of Goods Sold	570	205	
	Merchandize Inventory	150		205
	To record Dec. 21 sales; COGS at FIFO.			

1. b. Weighted average

	Purchased			*Sold*			*Balance in Inventory*		
Date	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*
Jan. 1							25	$1.00	$25.00
Feb. 15	15	$2	$30				40	$1.38[1]	$55.00
Feb. 28				30	$1.38	$41.40	10	$1.36[3]	$13.60[2]
Mar. 14	10	$3	$30				20	$2.18[4]	$43.60
Apr. 9				15	$2.18	$32.70	5	$2.18	$10.90
Oct. 28	35	$4	$140				40	$3.77[5]	$150.90
Dec. 4	40	$5	$200				80	$4.39[6]	$350.90
Dec. 21				50	$4.39	$219.50	30	$4.38[8]	**$131.40**[7]
	Total COGS					**$293.60**			

[1] $55/40 units = $1.38 per unit (rounded)
[2] $55.00 – 41.40 = $13.60 (This eliminates rounding errors. Remember, cost of goods available – cost of goods sold = ending inventory.)
[3] $13.60/10 units = $1.36 per unit (rounded)
[4] $43.60/29 units = $2.18 per unit (rounded)
[5] $150.90/40 units = $3.77 per unit (rounded)
[6] $350.90/80 units = $4.39 per unit (rounded)
[7] $350.90 – 219.50 = $131.40
[8] $131.40/30 units = $4.38 per unit (rounded)

The journal entry would be:

Dec. 21	Accounts Receivable	110	300.00	
	Sales	550		300.00
	Cost of Goods Sold	570	219.50	
	Merchandize Inventory	150		219.50
	To record Dec. 21 sales; COGS at weighted average.			

2.

	FIFO	*Wtd. avg.*
Sales	$420[1]	$420.00
COGS	275	293.60
Gross Profit	$145	$126.40

[1] (30 x $2) + (15 x $4) + (50 x $6) = $420

P 6–2 continued

Weighted average more closely matches cost of goods sold with sales because it uses more recent purchase prices to calculate cost of goods sold.

3. More income taxes would be paid under FIFO because gross profit is higher using FIFO in a period of rising prices. Weighted average minimizes income taxes in a period of rising prices so that accounting policy should be adopted.

P 6–3

1.

Product A									
	Purchased			*Sold*			*Balance in Inventory*		
Date	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*
Jan. 1							4,000	$11.90	$47,600
Jan. 7	8,000	$12.00	$96,000				12,000	$11.97[1]	$143,600
Mar. 30				9,000	$11.97	$107,730	3,000	$11.96[3]	$35,870[2]
May 10	12,000	$12.10	$145,200				15,000	$12.07[4]	$181,070
Jul. 4				14,000	$12.07	$169,000	1,000	$12.07	**$12,070**

[1] ($47,600 + 96,000)/12,000 units = $11.97 per unit (rounded)
[2] $143,600 – 107,730 = 35,870 (This eliminates rounding errors. Remember, cost of goods available – cost of goods sold = ending inventory.)
[3] $35,870/3,000 units = 11.96 per unit (rounded)
[4] ($35,870 + 145,200)/15,000 units = $12.07 per unit (rounded)

Product B									
	Purchased			*Sold*			*Balance in Inventory*		
Date	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*
Jan. 1							2,000	$13.26	$26,520
Jan. 13	5,000	$13.81	$69,050				7,000	$13.65[1]	$95,570
Jul. 15				1,000	$13.65	$13,650	6,000	$13.65[3]	$81,920[2]
Oct. 13	7,000	$14.21	$99,470				13,000	$13.95[4]	$181,390
Dec. 14				8,000	$13.95		5,000	$13.99[5]	**$69,970**

[1] ($26,520 + 69,050)/7,000 units = $13.65 per unit (rounded)
[2] $95,570 – 13,650 = 81,920 (This eliminates rounding errors. Remember, cost of goods available – cost of goods sold = ending inventory.)
[3] $81,920/6,000 units = 13.65 per unit (rounded)
[4] ($81,920 + 99,470)/13,000 units = $13.95 per unit (rounded)
[5] $69,970/5,000 units = 13.99 per unit (rounded)

2. Total ending inventory at December 31, 2018:

Product A	$12,070
Product B	69,970
Total	$82,040

P 6–3 continued

3. Computerized accounting software would do most of the calculations otherwise done manually. Even calculating only two products' transactions by hand is tedious and time-consuming.

4. If only two products are sold by Southern Cross and there are only a handful of inventory sales and purchases, the company should consider using the simpler periodic inventory system.

P 6–4

1. a. FIFO

	Purchased			*Sold*			*Balance in Inventory*		
Date	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*
Jan. 1							100	$1	$100
3	100	$1	$100				100 100	$1 $1	$200
8	200	$2	$400				200 200	$1 $2	$600
10				200	$1	$200	200	$2	$400
15	300	$3	$900				200 300	$2 $3	$1,300
20				200 200	$2 $3	$1,000	100	$3	$300
27	400	$1	$400				100 400	$3 $1	**$700**
	Total COGS					**$1,200**			

P 6–4 continued

1. b. Specific identification

	Purchased			*Sold*			*Balance in Inventory*		
Date	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*
Jan. 1							100	$1	$100
3	100	$1	$100				100 100	$1 $1	$200
8	200	$2	$400				100 100 200	$1 $1 $2	$600
10				50 150	$1 $2	$350	50 100 50	$1 $1 $2	$250
15	300	$3	$900				50 100 50 300	$1 $1 $2 $3	$1,150
20				100 300	$1 $3	$1,000	50 50	$1 $2	$150
27	400	$1	$400				50 50 400	$1 $2 $1	**$550**
	Total COGS					**$1,350**			

1. c. Weighted Average

	Purchased			*Sold*			*Balance in Inventory*		
Date	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*	*Units*	*Unit Cost*	*Total $*
Jan. 1							100	$1.00	$100
3	100	$1	$100				200	$1.00	$200
8	200	$2	$400				400	$1.50[1]	$600
10				200	$1.50	$300	200	$1.50	$300
15	300	$3	$900				500	$2.40[2]	$1,200
20				400	$2.40	$960	100	$2.40	$240
27	400	$1	$400				500	$1.28[3]	**$640**
	Total COGS					**$1,260**			

[1] ($200 + 400)/400 units = $1.50 per unit
[2] ($300 + 900)/500 units = $2.40 per unit
[3] ($240 + 400)/500 units = $1.28 per unit

P 6–4 continued

2. FIFO journal entries

Jan. 3	Merchandize Inventory	100	
	Accounts Payable		100
8	Merchandize Inventory	400	
	Accounts Payable		400
10	Accounts Receivable	600	
	Sales		600
	Cost of Goods Sold	200	
	Merchandize Inventory		200
	(200 units X $1)		
15	Merchandize Inventory	900	
	Accounts Payable		900
20	Accounts Receivable	2,000	
	Sales		2,000
	Cost of Goods Sold	1,000	
	Merchandize Inventory		1,000
	[(200 units X $2) + (200 units X $3)]		
27	Merchandize Inventory	400	
	Accounts Payable		400

3.

	FIFO	*Spec. ident.*	*Wtd. Avg.*
COGS	$1,200	$1,350	$1,260
Ending Inv.	700	550	640
Total	$1,900	$1,900	$1,900

All the totals are the same. Different inventory cost flow assumptions merely change the amount of cost of goods available for sale allocated to either cost of goods sold and ending inventory.

P 6–5

1. Ending inventory for 2017 was overstated by $2,000. Thus, cost of goods sold should have been $2,000 higher, or $22,000 and gross profit $2,000 lower, or $28,000. Because of this mistake, the 2018 opening inventory was also overstated by $2,000, causing cost of goods sold to be overstated by $2,000 and gross profit to be understated by $2,000. Gross profit should have been $29,000.

2. 2017 total and net assets were overstated by $2,000. 2018 total assets and net assets were correct.

P 6–6

Item	*Cost*	*Market*	*Unit LCNRV*	*Group LCNRV*
A	$ 60	$ 63	$ 60	
B	40	40	40	
C	80	78	78	
D	50	42	42	
	$230	$223	$220	$223*

*Lower of total cost or total market value is used; in this case, total market

P 6–7

1.

	2018				2019			
Item	*Cost*	*Net realizable value*	*Unit basis (LCNRV)*		*Cost*	*Nets realizable value*	*Unit basis (LCNRV)*	
Product X	$14,000	$15,000	$14,000		$15,000	$16,000	$15,000	
Product Y	12,500	12,000	12,000		12,000	11,500	11,500	
Product Z	11,000	11,500	11,000		10,500	10,000	10,000	
Total	$37,500 (3)	$38,500	$37,000	(1)	$37,500 (4)	$37,500	$36,500	(2)

2.

2018	*Unit basis (LCNRV)*		*Group basis (LCNRV)*		*Cost basis*	
Sales		$240,000		$240,000		$240,000
Cost of goods sold						
Opening inventory	$ 20,000		$20,000		$20,000	
Purchases	240,000		240,000		240,000	
Cost of goods available	260,000		260,000		260,000	
Ending inventory	37,000 (1)		37,500 (3)		37,500 (3)	
Total cost of goods sold		223,000		222,500		222,500
Gross profit		$17,000		$17,500		$17,500

P 6–7 continued

3.

2019	*Unit basis (LCNRV)*		*Group basis (LCNRV)*		*Cost basis*	
Sales		$ 280,000		$ 280,000		$ 280,000
Cost of goods sold						
Opening inventory	$ 37,000		$37,500		$37,500	
Purchases	260,000		260,000		260,000	
Cost of goods available	297,000		297,500		297,500	
Ending inventory	36,500 (2)		37,500 (4)		37,500 (4)	
Cost of goods sold		260,500		260,000		260,000
Gross profit		$ 19,500		$ 20,000		$ 20,000

4. b. (2018:$17,500; 2019:$20,000)

5. Using LCNRV/group basis and using the cost basis yield the same maximum profit ($20,000).

P 6–8

1.

Sales		$305
Less: Sales returns		5
Net sales		300
Cost of goods sold:		
Opening inventory	$ 25	
Purchases	175	
Less: Purchases returns	(5)	
Transportation-in	3	
Cost of goods available	198	
Ending inventory	15 (c)	
Cost of goods sold		183 (b)
Gross profit		$117 (a)

(a) Net sales = 39% x $300 = $117

(b) Cost of goods sold = Net sales – gross profit = $300 – $117 = $183

(c) Ending inventory = Goods available for sale – cost of goods sold
= $198 – $183 = $15

P 6–9

1. Retail inventory method

		At retail			At cost, should be
Sales		$ 160,000			$ 160,000
Less: Sales returns		10,000			10,000
Net sales		$150,000			150,000
Cost of goods sold					
Opening inventory	$ 20,000			$ 11,000	
Purchases	164,000			80,000	
Less: Purchases returns	(4,000)			(2,000)	
Transportation-in				1,000	
Cost of goods available for sale	180,000			90,000	
Ending inventory	(30,000) (b)			(15,000) (c)	
Cost of goods sold		150,000 (a)			75,000
Gross profit		$ 0			$ 75,000

(a) Cost of goods sold = Net sales
(b) Estimating ending inventory at retail
= Cost of goods available for sale – cost of goods sold
= $180,000 – $150,000
= $30,000
(c) Estimated ending inventory at cost= $30,000/200% = $15,000

2. Inventory lost = Estimated ending inventory – actual inventory on hand
= $15,000 – 5,000
= $10,000

3. Some of the inventory may have been stolen or sold for less than the assumed mark-up.

4. Adopting a perpetual inventory system might be cost-effective, given the amount of the discrepancy ($10,000 out of $180,000 of goods available for sale). A perpetual inventory system would enable staff to compare actual amounts of goods in ending inventory to the accountings records to determine where the discrepancies arose, as well as possible solutions (for example, more physical safeguards for high-value goods).

P 6–10

a.

Specific identification	*2018*	*2019*	*2020*
Sales	$1,000	$1,200	$1,150
COGS			
Op. inv.	0	360	400
Purchases	1,280	1,100	1,010
End. inv.	(360)	(400)	(320)
Cost of goods sold	920	1,060	1,090
Gross profit/net income	$ 80	$ 140	$ 60

b.

FIFO	*2018*	*2019*	*2020*
Sales	1,000	1,200	1,150
COGS			
Op. inv.	0	300	320
Purchases	1,280	1,100	1,010
End. inv.	(300)	(320)	(280)
Cost of goods sold	980	1,080	1,050
Gross profit/net income	$ 20	$ 120	$ 100

c.

Weighted average	*2018*	*2019*	*2020*
Sales	$1,000	$1,200	$1,150
COGS			
Op. inv.	0	340	420
Purchases	1,280	1,100	1,010
End. inv.	(340)	(420)	(300)
Cost of goods sold	940	1,020	1,130
Gross profit/net income	$ 60	$ 180	$ 20

P 6–11

1.

	Units	*FIFO*	*Spec. ident.*	*Weighted average*
Opening inventory	50	$ 50	$ 50	$ 50
Purchases	800	2,800	2,800	2,800
Cost of goods available	850	$2,850	$2,850	$2,850

2.

FIFO: 200 @ $5	=	$1,000		
Sp. ident: (50 @ $1) + (150 @ $2)	=		$ 350	
Wtd. avg.: $2,850/850 = $3.35/unit (rounded) x 200 units				$670

3.

	Units	*FIFO*	*Spec. ident.*	*Weighted average*
Cost of goods avail. for sale	850	$2,850	$2,850	$2,850
Ending inventory	200	1,000	350	671
Cost of goods sold	650	$1,850	$2,500	$2,179

P 6–11 continued

4. Based on response 3 above:
   a. Weighted average income is less than specific identification by $321 ($2,179-2,500)
   b. Specific identification income is greater than FIFO income by $650 ($2,500-1,850)
   c. No difference

5. Cost of purchases are rising. Specific identification costing is more realistic with respect to income measurement in a period of rising prices (in this case) as it more closely matches current costs with current revenue.

P 6–12

1. Ending inventory (FIFO) = $1 x 25 = $25

2. Ending inventory (wtd. avg.) = $5 x 25 = 65 *
   Difference $ 40
   *(25 x $5) + (15 x $4) + (10 x $3) + (35 x $2) + (40 x $1) = $325/125 units = $2.60/unit x 25 units = $65.

3.

	FIFO		*Wtd. avg.*	
Sales		$360[1]		$360
Cost of goods sold				
Opening inventory	$125		$125	
Purchases	200		200	
Cost of goods available	325		325	
Less: Ending inventory	(25)	300	(65)	260
Gross profit		$ 60		$100

[1] (30 x $6) + (20 x $4) + (50 x $2) = $360

In a period of decreasing prices (as in this example), weighted average produces a higher net income than FIFO because more-recent costs are matched against recent sales, thus producing a better matching of costs with revenues.

4. Under FIFO in a period of decreasing prices, less income taxes would be payable, since income would be lower than under weighted average.

   Therefore in a period of rising prices, more taxes would be payable using FIFO, since income would be higher than under weighted average. Over the life of the company, though, the same amount of taxes would be paid. The chosen inventory valuation method affects only the timing of cost of goods sold recognition.

P 6–13

1. Total purchases

Jan.	7	8,000 units @ $12.00 = $ 96,000
Mar.	30	9,000 units @ $12.40 = $111,600
May	10	12,000 units @ $12.00 = $144,000
Jul.	4	16,000 units @ $12.60 = $201,600
Sept.	2	6,000 units @ $12.80 = $ 76,800
Dec.	14	7,000 units @ $12.70 = $ 88,900
Total purchases		$**718,900**

Ending inventory

FIFO					Spec. ident				
	Quantity	*Unit cost*	*Total cost*			*Quantity*	*Unit cost*	*Total cost*	
Dec. 14	7,000	$12.70	$88,900		Jan. 1	4,000	$11.90	$ 47,600	
Sep. 2	6,000	12.80	76,800		Jan. 7	8,000	12.00	96,000	
Jul. 4	2,000	12.60	25,200		Mar. 30	3,000	12.40	37,200	
	15,000		$**190,900**	(1)		15,000		$**180,800**	(2)

Weighted average			
	Quantity	*Unit cost*	*Total cost*
Jan. 1	4,000	$11.90	$ 47,600
Jan. 7	8,000	12.00	96,000
May 30	9,000	12.40	111,600
May 10	12,000	12.00	144,000
Jul. 4	16,000	12.60	201,600
Sept. 2	6,000	12.80	76,800
Dec. 14	7,000	12.70	88,900
	62,000		$766,500

Average cost per unit: $\frac{\$766,500}{62,000 \text{ units}}$ = $12.36 (rounded)

Ending inventory: 15,000 units x 12.36 = **$185,400** (3)

P 6–13 continued

2.

	Income Statement					
	FIFO		*Sp. ident.*		*Wtd. avg.*	
Sales						
(47,000 units @ $16 per unit)		$752,000		$752,000		$752,00
Cost of goods sold						
Opening inventory	$ 47,600		$ 47,600		$47,600	
Purchases	718,900		718,900		718,900	
Cost of goods available	766,500		766,500		766,500	
Ending inventory	190,900 (1)		180,800 (2)		185,400 (3)	
Cost of goods sold		575,600		585,700		581,100
Gross profit		$176, 400		$166,300		$170,900

3. Specific identification inventory valuation best matches revenue with costs in this case, because recent higher prices are matched against relatively recent selling prices.

P 6–14

1. to 3.

	Rising prices				Falling prices			
	FIFO		*Wtd. avg.*		*FIFO*		*Wtd. avg.*	
Sales		$5,000		$5,000		$5,000		$5,000
Cost of goods sold								
Opening inventory	$1,000		$1,000		$1,000		$1,000	
Purchases	6,000		6,000		4,000		4,000	
Cost of goods available	7,000		7,000		5,000		5,000	
Less: Ending inventory	3,000		2,917[1]		2,000[2]		2,083[3]	
Cost of goods sold		4,000		4,083		3,000		2,917
Gross profit		$1,000		$ 917		$2,000		$2,083

[1] Weighted average/rising: ($1,000 + 6,000)/600 units x 250 units = $2,917 (rounded)
[2] FIFO/falling: 250 units x $8 = $2,000
[3] Weighted average/falling: [$1,000 + (500 x $8)]/600 units x 250 units = $2,083 (rounded)

4. Less taxes would be payable under weighted average in a period of rising prices (gross profit is lower). More taxes would be payable under weighted average in a period of falling prices. However, there would be no difference in total over the life of the company.

CHAPTER SEVEN
Cash and Receivables

Concept Self-check

1. Internal control is the system, plan, or organization established to ensure, as far as practical, the orderly and efficient conduct of business. In part, it is used to ensure accurate record-keeping and the timely preparation of financial statements, safeguard the assets of the business, and promote efficiency.

2. An imprest petty cash system reimburses petty cash for an amount equal to the amounts disbursed when the fund has been depleted.

3. When a petty cash fund is established, a regular cheque is written for the amount to be held in the petty cash fund. The general ledger account Petty Cash is debited and Cash is credited. The cheque is cashed and the funds are held by the petty cash fund custodian.

   When the balance of cash in the funds held by the custodian is low, a cheque is written to reimburse the fund for the amount of all receipts held. The cheque is recorded as a debit to the applicable expense accounts and a credit to the Petty Cash account in the general ledger.

4. A bank reconciliation is a comparison of the items shown on the bank statement with the entries made in the records of the entity. A reconciliation leads to the update of the accounting records and the correction of errors, if any. Thus, control over cash is enhanced.

5. Different reconciling items that may appear in a bank reconciliation are as follows:

Book Reconciling Items	*Bank Reconciling Items*
Book errors	Outstanding deposits
NSF cheques	Outstanding cheques
Bank charges	Bank errors

6. The steps in preparing a bank reconciliation are:

   Step 1

   List the ending general ledger cash balance on the bank reconciliation as the unreconciled general ledger Cash balance.

   Step 2

   List the ending cash balance on the bank statement on the bank reconciliation as the unreconciled bank statement balance.

   Step 3

   Compare clearing cheques shown on the bank statement with cheques recorded as cash disbursements in the company's records, including outstanding cheques shown on the prior month's bank reconciliation.

Concept Self-check continued

Step 4

Identify other disbursements made by the bank but not recorded in the company records.

Step 5

Compare the deposits shown on the bank statement with the amounts recorded in the company general ledger Cash account.

Step 6

Review the prior month's bank reconciliation for outstanding deposits.

Step 7

Rectify any errors in the company records or in the bank statement that become apparent during the reconciliation process.

Step 8

Total both sides of the bank reconciliation. The result should be that the reconciled general ledger Cash balance and the bank statement balances are equal.

Step 9

The adjusted balance calculated in the bank reconciliation must be reflected in the company's general ledger Cash account by means of adjusting entries.

7. A cheque received from trade customers that has been deposited but cannot be cleared by the bank because the customer's own bank balance is less than the amount of the cheque is an NSF (not sufficient funds) cheque.

8. Allowance for doubtful accounts is a contra accounts receivable account showing the estimated amount that will not be collected. To set it up, bad debt expense is debited and the allowance is credited for the estimated amount. In this way, the bad debt expenses for the period are matched with revenues for that period.

9. The income statement method for calculating the estimated amount of doubtful accounts assumes that a certain percentage of sales made on account will become uncollectible. The percentage is applied to credit sales and is chosen on the basis of bad debt experience of previous years. The estimated bad debt expense is calculated independently of any current balance in the Allowance for Doubtful Accounts general ledger account.

10. Ageing of accounts receivable is the detailed analysis of trade accounts receivable based on time that has elapsed since the creation of the receivable. An estimated loss percentage is applied to each time category to estimate an uncollectible amount. The estimated bad debt expense consists of the difference between the current balance in the Allowance for Doubtful Accounts general ledger account and the amount required to be set up based on this analysis.

Concept Self-check continued

11. The usual balance in the Accounts Receivable general ledger account is a debit. Occasionally, as a result of double payments, merchandize returns, or allowances granted for example, a credit balance occurs in some accounts. Theoretically, the credit balance should be transferred to liabilities. In practice, the net amount of accounts receivable is reported on the statement of financial position unless the credits would materially distort the numbers reported.

12. An example entry would be:

Dr.	Notes Receivable – Customer A	$xxxx	
Cr.	Sales (or, e.g., Service Revenue)		$xxx

    If the note is created as a result of an outstanding account receivable, the entry would be:

Dr.	Notes Receivable – Customer A	$xxxx	
Cr.	Accounts Receivable – Customer A		$xxx

CP 7–1

2017				
Mar.	1	Petty Cash	200	
		Cash		200
		To establish petty cash fund.		
	12	Office Supplies Expense	60	
		Maintenance Expense	35	
		Miscellaneous Selling Expense	25	
		Cash		120
		To reimburse petty cash.		
	18	Petty Cash	200	
		Cash		200
		To increase petty cash balance to $400.		
	25	Office Supplies Expense	75	
		Delivery Expense	30	
		Cash		105
		To reimburse petty cash.		
	28	Cash	50	
		Petty Cash		50
		To reduce petty cash fund balance to $350.		

CP 7–2

Ferguson Corp.
Bank Reconciliation
At December 31, 2017

Cash per general ledger, Dec. 31		$5,005	Cash per bank statement, Dec. 31		$7,000
Add:	Note collected by bank	1,300	*Add:*	Error Fluet Inc. cheque	200
	Interest on note	25		Outstanding deposit	700
Less:	Bank service charges	(30)	*Less:*	Outstanding cheques	(1,600)
Adjusted Cash balance, Dec. 31		$6,300	Adjusted Cash balance, Dec. 31		$6,300

2017 adjusting entries:				
Dec.	31	Cash	1,325	
		Note Receivable		1,300
		Interest Earned		25
		To record the note collected by the bank.		
	31	Bank Charges Expense	30	
		Cash		30
		To record service charges from the bank.		

CP 7–3

Gladstone Ltd.
Bank Reconciliation
At March 31, 2017

Cash per general ledger, Mar. 31		$2,531	Cash per bank statement, Mar. 31		$1,500
Add:	Error cheque No. 4302	27	*Add:*	Outstanding deposit	1,000
	Note receivable	250		Error re. Global	250
	Interest on note	50			
Less:	Service charges—March	(20)	*Less:*	Outstanding cheques	(622)
	Service charges—note	(10)			
	NSF cheque	(700)			
Adjusted cash balance, Mar. 31		$2,128	Adjusted cash balance, Mar. 31		$2,128

2017 adjusting entries:

Mar. 31	Cash	27	
	Office Supplies Expense		27
	To correct ck. no. 4302		
	Cash	290	
	Note Receivable		250
	Interest Earned		50
	Bank Charges Expense	10	
	To record note collected by the bank.		
	Bank Charges Expense	20	
	Cash		20
	To record service charges for March.		
	Accounts Receivable	700	
	Cash		700
	To record NSF cheque returned.		

CP 7–4

1.

2017			
Dec. 31	Bad Debt Expense	5,000	
	Allowance for Doubtful Accounts		5,000
2018			
Apr. 15	Allowance for Doubtful Accounts	700	
	Accounts Receivable		700
Aug. 8	Allowance for Doubtful Accounts	3,000	
	Accounts Receivable		3,000
Dec. 31	Bad Debt Expense	4,000	
	Allowance for Doubtful Accounts		4,000
2019			
Mar. 6	Accounts Receivable	200	
	Allowance for Doubtful Accounts		200
Sept. 4	Allowance for Doubtful Accounts	4,000	
	Accounts Receivable		4,000
Dec. 31	Bad Debt Expense	4,500	
	Allowance for Doubtful Accounts		4,500

2. Both methods are estimates and attempt to match expenses with revenues. Over time, the allowance for doubtful accounts under either method should be approximately the same. If not, management should review the percentage estimates under each method to ensure that they are reasonable.

CP 7–5

1. Allowance for doubtful accounts = 5% x $125,000 = $6,250

2. The Allowance for Doubtful Accounts general ledger account has a balance of $3,000 but the balance should be $6,250. The difference is the amount of the bad debt expense.

   Bad debt expense = ($6,250 - $3,000) = $3,250

3. Impulse Inc.
   Partial Statement of Financial Position
   At December 31, 2017

Assets		
Accounts receivable	$125,000	
Less: Allowance for doubtful accounts	6,250	$118,750
OR		
Accounts receivable (net of $6,250 AFDA)		$118,750

CP 7–6

1. | | |
|---|---|
| Allowance for doubtful accounts, Dec. 31, 2017 | $8,000 |
| Written off in 2018 | (2,400) |
| | 5,600 |
| Allowance for doubtful accounts, Dec. 31, 2018 | (9,000) |
| Bad debt expense for 2018 | $3,400 |

2. | | |
|---|---|
| Allowance for doubtful accounts, Dec. 31, 2018 | $ 9,000 |
| Written off in 2019 | (1,000) |
| Recovered in 2019 | 300 |
| | 8,300 |
| Allowance for doubtful accounts, Dec. 31, 2019 | (10,000) |
| Bad debt expense for 2019 | $ 1,700 |

CP 7–7

1. a. | | | |
|---|---|---|
| Bad Debt Expense | 15,000 | |
| Allowance for Doubtful Accounts | | 15,000 |

(2% x $750,000 = $15,000)

   b. Allowance for Doubtful Accounts = $3,000 + $15,000 = $18,000

2. a. | | | |
|---|---|---|
| Bad Debt Expense | 11,700 | |
| Allowance for Doubtful Accounts | | 11,700 |

[10% x ($150,000 - 3,000)] = 14,700 - 3,000 = $11,700

   b. Allowance for Doubtful Accounts = $3,000 + $11,700 = $14,700
   (or 10% x ($150,000-3,000))

3. There is a difference in the estimates because different methods are used. The first method is based on a percentage of sales; the second on aging of accounts receivable.

CP 7–8

1. a. Bad debt expense = 2% x $200,000 = $4,000
   b. Allowance for doubtful accounts = $1,000 debit - $4,000 credit = $3,000 credit

2. a. Bad debt expense = (5% x $50,000) + $1,000 debit = $3,500
   b. Allowance for doubtful accounts = (5% x $50,000) = $2,500

3. The calculation made in question 1 above better matches revenue and expenses. The revenue (sales) is directly related to the amount that is written off as bad debt expense.

   The calculation made in question 2 above better matches accounts receivable to allowance for doubtful accounts and thus produces a better statement of financial position valuation.

CP 7–9

1\.

2017			
Nov. 1	Note Receivable – Smith Co.	12,000	
	Account Receivable – Smith Co.		12,000

To record conversion of account receivable to 3-month, 6% note receivable.

2\.

2017			
Dec. 31	Interest Receivable	120	
	Interest Earned		120

To record accrued interest on note receivable – Smith Co. ($12,000 x 6% x 2/12 mos. = $120)

3\.

2018			
Feb. 1	Cash	12,180	
	Note Receivable – Smith Co.		12,000
	Interest Receivable		120
	Interest Earned		60

To record collection of Smith Co. note receivable ($12,000 x 6% x 1/12 mos. = $60)

P 7–1

1\.

2017			
Dec. 1	Petty Cash	200	
	Cash		200
	To establish petty cash fund.		
14	Office Supplies Expense	30	
	Maintenance Expense	20	
	Cash Over/short Expense	4	
	Cash		54
	To reimburse petty cash and record shortage.		
29	Office Supplies Expense	10	
	Delivery Expense	20	
	Cash Over/short Expense		2
	Cash		28
	To reimburse petty cash and record overage.		
31	Cash	50	
	Petty Cash		50
	To reduce petty cash fund balance to $50.		

2\. The fund is small but adequate. Overage/shortages are not large. These are good indicators. The manager could consider reviewing the reimbursed receipts occasionally to ensure they are reasonable and petty cash disbursements are adequately supported.

P 7–2

1.

a	The company has received a $3,000 loan from the bank, that was deposited into its bank account but was not recorded in the books of the company.
e	A $250 cheque was not returned with the bank statement though it was paid by the bank.
d	Cheques amounting to $4,290 shown as outstanding on the November reconciliation still have not been returned by the bank.
a	A collection of a note receivable for $1,000 made by the bank has not been previously reported to Goertzen. This includes interest earned of $50.
c	The bank has erroneously charged Goertzen with an $1,100 cheque which should have been charged to Gagetown Ltd.
b	A $350 cheque made out by Fynn Company and deposited by Goertzen has been returned by the bank marked NSF; this is the first knowledge Goertzen has of this action.
a	A cheque for $840 was erroneously recorded as $730 in the company records.
c	A $600 bank deposit of December 31 does not appear on the bank statement.
b	Bank service charges amounting to $75 were deducted from the bank statement but not yet from the company records.

2.

Goertzen Ltd.
Bank Reconciliation
At December 31, 2017

Cash per general ledger, Dec. 31			$84,293	Cash per bank statement, Dec. 31			$90,568
Add:	Bank loan not recorded	$3,000		*Add:*	Cheque charged to wrong account	$1,100	
	Bank collection not recorded on books	950			Outstanding deposit	600	1,700
	Interest earned on note	50					92,268
	Error in recording cheque	110	4,110				
			88,403				
Less:	NSF cheque	350					
	Bank charge	75	425	*Less:*	Outstanding cheques		4,290
Adjusted Cash balance, Dec. 31			$87,978	Adjusted Cash balance, Dec. 31			$87,978

P 7–2 continued

3.

Dec.31	Cash	3,000	
	Bank Loan		3,000
	To record proceeds of bank loan.		
31	Cash	1,000	
	Notes Receivable		950
	Interest Earned		50
	To record collection of notes receivable by bank.		
31	Cash	110	
	Accounts Receivable		110
	To record correction of cheque deposited as $730, should have been $840.		
31	Bank Charges Expense	75	
	Cash		75
	To record monthly bank charges.		
31	Accounts Receivable	350	
	Cash		350
	To record NSF cheque from Fynn Company returned by the bank.		

P 7–3

1.

Gibson Energy Ltd.
Bank Reconciliation
At November 30, 2018

Cash per general ledger, Nov. 30			$4,213	Cash per bank statement, Nov. 30			$4,440
Add:	Error on cheque No. 1042	$ 54		*Add:*	Outstanding deposit		611
	Note collected	500	554				
			4,767				5,051
Less:	NSF cheque	130		*Less:*	Outstanding cheques		
	Service charge	10			No. 1014	$152	
	Note collection fee	6	146		1054	32	
					1192	54	
					1193	83	
					1194	109	430
Adjusted cash balance, Nov. 30			$4,621		Adjusted cash balance, Nov. 30		$4,621

P 7–3 continued

2.	Nov.	30	Cash	54	
			Office Supplies Expense		54
			To adjust for error in recording cheque no. 1042.		
		30	Accounts Receivable	130	
			Cash		130
			To record NSF cheque.		
		30	Bank Charges Expense	10	
			Cash		10
			To record bank charges for the month.		
		30	Cash	494	
			Bank Charges Expense	6	
			Notes Receivable		500
			To record a collection made by the bank.		

P 7–4

1. Accounts receivable = balance + credits = $74,460 + 3,200 + 1,800 = $79,460

2. The $5,000 credit balance could be shown as a current liability on the statement of financial position, unless it is considered immaterial. In that case, it would be netted against accounts receivable with debit balances and $74,460 would be shown in the asset section of the statement of financial position.

P 7–5

1.	2017			
	Dec.31	Allowance for Doubtful Accounts	2,000	
		Bad Debt Expense		2,000
		To adjust balance to 3% of $100,000 A/R.		
	2018			
	a.	Allowance for Doubtful Accounts	9,000	
		Accounts Receivable		9,000
	b.	Accounts Receivable	800,000	
		Sales		800,000
	c.	Cash	700,000	
		Accounts Receivable		700,000
	d.	Accounts Receivable	2,000	
		Allowance for Doubtful Accounts		2,000
		Cash	2,000	
		Accounts Receivable		2,000

P 7–5 continued

e. Bad Debt Expense 14,000
    Allowance for Doubtful Accounts 14,000

Allowance for Doubtful Accounts

Dr	Cr	
	5,000	Balance at Dec. 31, 2017
2,000		Write-offs and recovery
9,000	2,000	
4,000		Balance before adjustment
	14,000	Adjustment needed
	10,000	Balance at Dec. 31, 2018

2. Allowance for Doubtful Accounts

Dr	Cr	
	5,000	Balance at Dec. 31, 2017
	6,000	1% of $600,000 sales
	11,000	Adjusted bal. Dec. 31, 2017
9,000		Transaction (a)
	8,000	1% of $800,000 sales
	2,000	Transaction (d)
	12,000	Balance at Dec. 31, 2018

P 7–6

Part A: 2017

1. Dec. 31 Allowance for Doubtful Accounts 1,000
    Accounts Receivable 1,000

2. Calculation of uncollectible amount at December 31, 2017

Age (days)	*Accounts receivable*	*Estimated loss percentage*	*Estimated uncollectible amount*
1-30	$ 50,000	2%	$1,000
31-60	27,000	4%	1,080
61-90	40,000	5%	2,000
91-120	30,000	10%	3,000
Over 120	2,000 *	50%	1,000
	$149,000		$8,080

* net of R. Laws' balance

AFDA adjusting entry = (starting balance – accounts written off) – ending balance
= ($1,500 Cr – 1,000 Dr) – 8,080 Cr.
= $7,580 Cr. needed

2017
Dec. 31 Bad Debt Expense 7,580
    Allowance for Doubtful Accounts 7,580

P 7–6 continued

Part B: 2018

Accounts Receivable	700,000	
Sales		700,000
Cash	599,000	
Accounts Receivable		599,000
Allowance for Doubtful Accounts	10,000	
Accounts Receivable		10,000

Calculation of uncollectible amount at December 31, 2018

Age (days)	*Accounts receivable*	*Estimated loss percentage*	*Estimated uncollectible amount*
1-30	$170,000	2%	$ 3,400
31-60	35,000	3%	1,050
91-120	27,000	25%	6,750
Over 120	8,000	50%	4,000
	$240,000		$15,200

AFDA adjusting entry = (starting balance- accounts written off) – ending balance required

= ($8,080 Cr. – 10,000 Dr.) - $15,200 Cr.

= $17,120 Cr. needed

2018			
Dec. 31	Bad Debt Expense	17,120	
	Allowance for Doubtful Accounts		17,120

P 7–7

1\. a. Allowance for Doubtful Accounts 25,000
   Accounts Receivable 25,000

b. Accounts Receivable 15,000
   Allowance for Doubtful Accounts 15,000
   Cash 15,000
   Accounts Receivable 15,000

2\. Allowance for doubtful accounts = ($15,000 Cr. - $25,000 Dr.) (1a) + $15,000 Cr. (1b)
= $5,000 Cr. balance

3\. a. Balance required = 3% of credit sales
= 3% x 70% x $1,000,000
= $21,000

Bad Debt Expense 16,000
   Allowance for Doubtful Accounts 16,000
To record the proper balance: $21,000 Cr. required; $5,000 Cr. is already in the account.

b. Bad Debt Expense 7,500
   Allowance for Doubtful Accounts 7,500
To record the proper balance: $12,500 Cr. required, $5,000 Cr. is already in the account.

P 7–7 continued

c. Calculation of uncollectible amount at December 31, 2018

Age (days)	*Accounts receivable*	*Estimated loss percentage*	*Estimated uncollectible amount*
1-30	$100,000	2%	$ 2,000
31-60	50,000	4%	2,000
61-90	25,000	5%	1,250
91-120	60,000	10%	6,000
Over 120	15,000	50%	7,500
	$250,000		$18,750

Bad Debt Expense	13,750	
Allowance for Doubtful Accounts		13,750

To record the proper balance: $18,750 Cr. required, $5,000 Cr. already in the account.

P 7–8

1. 2017

AFDA adjusting entry = (starting balance-accounts written off)-ending balance required

= ($1,500 Cr. - $600Dr.) - $3,900 Cr.

= $3,000 Cr. needed

Bad Debt Expense	3,000	
Allowance for Doubtful Accounts		3,000

To record adjustment needed ($3,900 - [$1,500 - $600])

2. 2018

AFDA adjusting entry = (starting balance – accounts written off + accounts recovered) – ending balance required

= ($3,900Cr. - $300Dr. + $400Cr)

Bad Debt Expense	3,200	
Allowance for Doubtful Accounts		3,200

To record adjustment needed ($7,200 - [$3,900 - $300 + $400])

3. 2018

Jun. 5	Accounts Receivable	400	
	Allowance for Doubtful Accounts		400
5	Cash	400	
	Accounts Receivable		400

P 7–9

1\.

2019

	Accounts Receivable	8,540,000	
	Sales		8,540,000
	To record sales for 2019.		
	Accounts Receivable (Huron Supplies)	15,600	
	Allowance for Doubtful Accounts		15,600
	To reinstate account of Huron Supplies previously written off as uncollectible.		
	Cash	8,262,560	
	Accounts Receivable		8,262,560
	To account for collections during year.		
	Allowance for Doubtful Accounts	33,660	
	Accounts Receivable		33,660
	To write off bad debts.		
	Notes Receivable (12%, 6 months)	520,000	
	Accounts Receivable		520,000
	To record receipt of note (assumes cash is included in the $8,262,560 above).		
2. a. Dec. 31	Bad Debt Expense	21,870	
	Allowance for Doubtful Accounts		21,870(2)
	To record bad debt expense provision:		
	10% on $200,580 — $20,058		
	2% on $807,600 (1) — 16,152		
	Required allowance — $36,210		
b. Dec. 31	Interest Receivable	10,400	
	Interest Earned		10,400
	To record accrued interest on note receivable ($520,000 x 12% x 2/12 mos. = $10,400)		

(1) Accounts receivable not past due
= $1,268,800 + 8,540,000 - 8,262,560 + 15,600 - 33,660 - 200,580 - 520,000
= $807,600 x 2% = $16,152

(2) AFDA adjusting entry
= (starting balance – accounts written off + accounts recovered) - ending balance required)
= ($32,400 Cr. - $33,660 Dr + $15,600 Cr.) - $36,210 Cr.
= $21,870 Cr. needed

3\. Amount of bad debt expense on income statement = $21,870

4\. Allowance for doubtful accounts = $36,210

P 7–10

1. Ageing of Accounts Receivable
December 31, 2017
Age (days)

	1-30	31-60	61-90	91-120	121-150	+150
Greenwood						600
Granville					335	
Kutcher	275	720				
Lamb						445
Grimm			822			
Fehr		250		465		922
Golden	500					
	$775	$970	$822	$465	$335	$1,967

2. Calculation of Uncollectible Amount
December 31, 2017

Age (days)	*Accounts receivable*	*Estimated loss percentage*	*Uncollectible amount*
1-30	$775	0.5%	$ 3.90
31-60	970	1.0%	9.70
61-90	822	3.0%	24.66
91-120	465	10.0%	46.50
121-150	335	25.0%	83.75
Over 150	1,967	50.0%	983.50
Totals	$5,334		$1,152.01

3. Dec. 31	Bad Debt Expense	952.01	
	Allowance for Doubtful Accounts		952.01
	To record the proper balance: $1,152.01 Cr. required, $200.00 Cr. already in the account.		

P 7–11

1.	Feb. 15	Allowance for Doubtful Accounts	200	
		Accounts Receivable		200
	Apr. 30	Accounts Receivable	100	
		Allowance for Doubtful Accounts		100
		Cash	100	
		Accounts Receivable		100
	Jun. 26	Cash	300	
		Allowance for Doubtful Accounts	400	
		Accounts Receivable		700
	Sep. 7	Allowance for Doubtful Accounts	350	
		Accounts Receivable		350
	Dec. 31	Allowance for Doubtful Accounts	800	
		Accounts Receivable		800

2.

Calculation of Uncollectible Amount
December 31, 2018

Age (days)	*Accounts receivable*	*Estimated Loss percentage*	*Estimated uncollectible amount*
1-30	$20,000	2%	$ 400
31-60	12,000	4%	480
61-90	5,000	5%	250
91-120	3,000	10%	300
Over 120	10,000	50%	5,000
Totals	$50,000		$6,430

Allowance for
Doubtful Accounts

Debit	Credit	
	1,735	Balance at Dec. 31, 2017
200	100	Write-offs and recovery
400		
350		
800		
	85	Balance before adjustment
	6,345	Adjustment needed
	6,430	Balance needed at Dec. 31, 2018

Dec. 31	Bad Debt Expense	6,345	
	Allowance for Doubtful Accounts		6,345

P 7–12

1.	Note Receivable – Baron Cabinet Ltd.	12,000	
	Account Receivable – Baron Cabinet Ltd.		12,000
	To record conversion of account receivable to 12-month, 12% note receivable.		

2. No entry is required. Accrued interest was paid on December 31.

3.	Cash	10,600	
	Note Receivable – Baron Cabinet Ltd.		10,000
	Interest Earned		600
	To record collection of the February portion of Baron Cabinet Ltd. note receivable and interest for one month ($60,000 x 12% x 1/12 mo. = $600)		

CHAPTER EIGHT
Long-lived Assets

Concept Self-check

1. To capitalize a cost means to record an expenditure as a long-lived asset.

2. An expenditure is a cash disbursement. A capital expenditure is one that
   a. benefits more than the current accounting period, and these benefits are reasonably assured;
   b. enhances service potential or makes an asset more valuable, and
   c. is significant in amount.

   A revenue expenditure does not have these characteristics.

3. The purchase of a computer for business use qualifies as a capital expenditure when it benefits more than one accounting period. However, its purchase price may be immaterial, depending on the company's capitalization policy. The annual maintenance or repairs made to the computer to keep it running are revenue expenditures if the cash disbursements are frequent, small, and do not extend the life of the computer. Purchase of a part that significantly enhances performance or extends the useful life of the computer might be capitalized, again depending on materiality.

4. Purchasing land and buildings for a lump sum means that no distinction is made between the two items at the time the purchase price is negotiated. The purchase price must be apportioned between the Land and Building accounts because buildings are subject to depreciation. The purchase price, therefore, is allocated on the basis of relative fair values of the land and the buildings.

5. As a matter of expediency, companies usually set a dollar limit to help determine whether a disbursement is to be treated as a revenue or a capital expenditure because efforts required to capitalize and amortize an inexpensive item are so much greater than the benefits to be derived. The concept of materiality is used to determine the amount at which an expenditure is considered capital in nature.

6. The three criteria to capitalize a replacement part are:
   a. whether it is a material amount;
   b. whether the cost can be reliably measured; and
   c. whether it will enhance the future economic benefit of the asset.

Concept Self-check continued

7. When one asset is exchanged for another, the cost of the asset acquired is determined by the fair value of the asset given up.

8. Depreciation is the process of allocating the cost of a tangible, long-lived asset to each accounting period that will benefit from its use. The amount to be allocated depends on the estimate of the asset's useful life and residual value, and method of depreciation to be used.

9. As time elapses, the economic benefits provided by an asset may decrease, so that the efficiency of the asset is greater during its initial years and less later on. If a car is free from initial defect, it should not require any repairs in its first year of use, but it will need regular maintenance (e.g., oil changes). Eventually, it will likely require repairs, such as a replacement battery or new valves. The annual maintenance costs will increase, costing the user more to use the car. Therefore, the value of the car or the value of its services each year will decrease, so depreciation should likely be lower in subsequent years.

10. A usage method of depreciation is useful when the use of an asset varies from period to period and when wear and tear is the major cause of depreciation. A time–based method, such as straight–line depreciation, assumes that each period receives services of equal value from the use of the asset; time–based methods ignore asset usage. The preferable method is a matter of judgement.

    The sports car may wear out in two ways. The distance travelled has a large bearing on the value of the car; however, the passage of time also does, as an older model generally sells for less than its original cost. In terms of the useful life of the car, it will only last for a certain number of kilometres and it only renders services if it is driven. A usage method is likely best to measure depreciation, since the car is not necessarily driven for equal times during each period; the less it is driven, the more periods it will last.

11. Under the declining balance method, a constant depreciation rate is applied in each accounting period to the remaining carrying amount (cost less accumulated depreciation). Carrying amount declines more quickly in earlier years. Under the straight–line method, the carrying amount declines by the same amount over the useful life of the asset.

12. If an asset is expected to have a 10-year life, then, each year 10 per cent of its life is over (100%/10 years = 10%). The double-declining balance is double this rate or 20% per year applied to the carrying amount of the asset at the end of the previous year.

13. Partial year depreciation is calculated in the year in which a long-lived asset is purchased or disposed. It can be calculated by several means – for example, using the half-year rule or by pro-rating depreciation expense over the number of months that the asset was in use.

Concept Self-check continued

14. Either changes in estimated residual value or useful life may affect the calculation of depreciation expense. In both cases, no change is made to depreciation expense already recorded. The effects of the changes are spread over the remaining future periods.

15. Subsequent capital expenditures affect depreciation calculations in the same manner as changes in accounting estimates. The effects are accounted for prospectively (over the remaining future periods).

16. At the end of each reporting period, the recoverable amount (fair value less estimated costs of disposal) of an asset must be compared to its carrying value. If the recoverable amount is lower, the carrying value must be adjusted downward (a credit to the asset account) and an impairment loss must be recorded (a debit to an expense account). Subsequent years' depreciation expense calculations must also be adjusted.

17. Estimates of future events are commonplace in accounting, and is deemed necessary to provide more meaningful information to financial statement users, within reason. Depreciation is one example. The benefits of matching the use of a capital asset to the revenue of future periods that it helps to produce is considered useful information under GAEB. To facilitate this, depreciation methods rely on estimates of future events, and these are subject to error. Accounting is intended to produce financial information that is not precise but rather a fair representation of the activities of the entity. If the estimates used subsequently prove to be incorrect, they are adjusted.

18. Significant parts may have different estimated usage patterns, useful lives, and residual values. They may be replaced at different points in the useful life of the long-lived asset. Separate accounting for significant parts allows for these differences to be reflected in the financial statements.

19. A gain or loss on disposal does not occur if the carrying amount of an asset is the same as the proceeds of disposition. This rarely occurs.

20. A trade-in involves acquiring a long-lived asset by giving up a similar asset to the one being acquired (i.e., exchanging it) as part of the purchase price. It is not quite the same as an outright sale, which involves giving up a long-lived asset and receiving another type of asset like cash for it.

21. The trade-in allowance may be higher or lower than the fair value of the used asset on the open market. Dealers often give more trade-in allowance on a used car than it is actually worth to make purchasers think that they are getting a better deal on the new car.

22. The cost of the new asset is calculated as the sum of cash paid plus the fair value of the trade-in.

Concept Self-check continued

23. Intangible assets, unlike property, plant, and equipment, cannot be touched or otherwise sensed. They are the same as PPE in that they represent future economic benefits to an entity over more than one accounting period, and so are similarly capitalized.

24. A patent is an exclusive right granted by the state to an inventor to produce and sell an invention for a specified period of time. A patent's useful life may be affected by economic factors based on demand and competition. The 20–year life may be excessive; a shorter life may be more realistic. For example, if a company develops a unique computer and patents it, even though it cannot be reproduced by other firms for 20 years, nothing stops a competitor from studying it, improving it, and patenting this improved computer. Although the "unique" computer may be useful for many years, it may be technologically obsolete before the patent expires.

25. A copyright is the exclusive right granted by the state to publish a literary or artistic work. It exists for the lifetime of the author and for a specific period of time after death. Similarly, a trademark is a legal right granted by the state, in this case for an entity to use a symbol or a word as a trademark to identify one of its products or services. A copyright would be granted for a piece of music or a novel. Examples of trademarks are the word "Coke"® on soft drink bottles and the stylized 'M'® of the McDonald's® logo.

26. Intangible assets are generally measured and recorded at cost. The measurement basis should be disclosed, along with
    a. the type of amortization method for each class of intangible asset;
    b. opening and ending balances for cost, accumulated amortization, and carrying value, and disclosure of any changes;
    c. whether they are internally generated; and
    d. whether they have finite or indefinite lives.

27. Goodwill is a long-lived asset that represents the capitalized value of superior earnings obtained by purchasing the net assets of another company. Such factors as favourable customer relations, loyal and competent employees, possession of valuable patents or copyrights, high-quality products, or effective management help create goodwill. Goodwill differs from an intangible asset. It cannot be separately identified. It relates to the totality of the future benefits acquired. The useful life of goodwill is considered indefinite. Goodwill can only be purchased in an arms-length transaction because it is otherwise difficult to attach a value to it.

CP 8–1

h	Battery purchased for truck[1]
c	Cash discount received on payment for equipment
a	Commission paid to real estate agent to purchase land
c	Cost of equipment test runs
b	Cost to remodel building
b	Cost to replace manual elevator with automatic elevator
a	Cost of sewage system
c	Equipment assembly expenditure
c	Expenditures for debugging equipment
e	Installation of air–conditioner in automobile
b	Insurance paid during construction of building
a	Legal fees associated with court case to defend title to land purchased
h	Oil change for truck[1]
a	Payment for landscaping
a	Payment to demolish a derelict building on land purchased
a	Expenditures for removal of derelict structures
h	Repair made to building after moving in[1]
h	Repair of collision damage to truck[1]
h	Repair of torn seats in automobile[1]
h	Replacement of rusted fender on automobile[1]
e	Replacement of transmission on automobile
c	Special floor foundations for installation of equipment
h	Tires purchased for truck[1]
c	Transportation expenditures to bring equipment to plant.

[1]Assumed to be immaterial in amount. All others assumed to be material, estimable, and to benefit future periods, and therefore capitalized.

Alternate answers are acceptable if plausible.

CP 8–2

1. Cost = $3,250 + $100 +$300 + $50 + (10% x $3,250) = $4,025. Answers may vary. The table may be recorded as a separate asset. Also, all or some of the expenditures may be considered immaterial.

2. Straight–Line Method:

		Straight–line	*Double–declining balance*	
Year	1	$378*	$4,025 x 40%** =	$1,610
	2	$755	2,415 x 40% =	966
	3	$755	1,449 x 40% =	580
	4	$755	869 x 40% =	348
	5	$755	521 x 40% =	208

*($4,025 – 250) x ½ = $378 (rounded)
5 years

**(100%/5yrs. = 20% x 2 = 40%)

Under the straight-line method, each period is assumed to receive equal benefits from the use of the asset. Under the double-declining balance method, each period is charged a diminishing amount. The straight-line method would be more appropriate if the economic benefits would be used about equally over the years. The double-declining balance method would be better to use if the economic benefits were used up more in the first few years. The DDB method Is likely the better choice, given the probability of technological obsolescence of this type of asset.

CP 8–3

1. Journal entries to record the sale on the books of:

a. Freeman:

April 30, 2018		
Equipment	200,000	
Land		125,000
Gain on Disposal		75,000

The equipment is valued at the fair value of the asset given up.

b. The developer:

April 30, 2018		
Land	240,000	
Equipment		325,000
Accumulated Depreciation – Equipment	80,000	
Loss on Disposal	5,000	
Calculated as:		
Cost		$325,000
Accumulated depreciation		(80,000)
Carrying amount		245,000
Proceeds (fair value of equipment)		240,000
Loss on disposal		$ 5,000

CP 8–3 continued

2. The land may have been zoned as agricultural land. The appraiser may have valued the land assuming no change in use would occur. The developer may anticipate that the land could be rezoned to commercial land, which should increase its value.

CP 8–4

1. Straight–line method:

$\frac{(\$110{,}000 - 10{,}000)}{10 \text{ years}} = \$10{,}000$ per year

2018 depreciation = $10,000 x ½ = $5,000
2019 depreciation = $10,000

2. Double–declining balance method:

$\frac{100\%}{10 \text{ years}} \times 2 = 20\%$

2018 depreciation = $110,000 x 20% x ½ = $11,000
2019 depreciation = ($110,000 – 11,000) x 20% = $19,800

CP 8–5

1. Straight–line method:

$\frac{(\$25{,}000 - 5{,}000)}{5 \text{ years}} = \$4{,}000$ per year

2018 depreciation = $4,000 x ½ = $2,000
2019 depreciation = $4,000

2. Usage method:

$\frac{(\$25{,}000 - 5{,}000)}{500{,}000 \text{ km.}} = \$.04/\text{km.}$

2018 depreciation = 120,000 km. x $.04 = $4,800
2019 depreciation = 150,000 km. x $.04 = $6,000

The ½ year rule does not apply under usage methods of calculating depreciation.

3. Double–declining balance method:

$\frac{100\%}{5 \text{ years}} = 20\% \times 2 = 40\%$ per year

2018 depreciation = $25,000 x 40% = $10,000 x ½ yr. = $5,000
2019 depreciation = ($25,000 – 5,000) x 40% = $8,000

CP 8–6

1. Jan. 31, 2018

Computer	3,000	
Cash		3,000

March 1, 2018

Computer	1,000	
Cash		1,000

Apr. 1, 2019

Computer	2,000	
Cash		2,000

Alternate interpretations are acceptable, with adequate explanation.

2. Dec. 31, 2018

Depreciation Expense	667	
Accumulated Depreciation – Equipment		667

To record 2018 depreciation: ($3,000 + 1,000) x 1/3 yrs. X 1/2 yr.).

Dec. 31, 2019

Depreciation Expense	2,667	
Accumulated Depreciation – Equipment		2,667

To record 2019 depreciation:
($3,000 + 1,000 + 2,000 - 667) x 1/2 yrs. $2,667

CP 8–7

1. Straight–line method:

   Balance at end of 2019 = $110,000 – 5,000 – 10,000 = $95,000

   $$\frac{\$95{,}000}{4 \text{ years}} = \$23{,}750 \text{ per year}$$

   2020 depreciation = $23,750

2. Double–declining balance method:
   Balance at end of 2019 = $110,000 – 11,000 – 19,800 = $79,200

   $$\frac{100\%}{4 \text{ years}} \times 2 = 50\% \text{ per year}$$

   2020 depreciation = $79,200 x 50% = $39,600

CP 8–8

1. Equipment sold for $50,000:

Cash	50,000	
Accumulated Depreciation	50,625	
Loss on Disposal	9,375	
Equipment		110,000
To record loss on disposal		

Cost	$110,000
Acc. dep'n. ($5,000 + 10,000 + 23,750 +11,875*)	(50,625)
Carrying amount	59,375
Proceeds of disposal	(50,000)
Loss on disposal	$ 9,375

*2021 depreciation expense = $23,750 x 1/2 = $11,875.

2. Equipment sold for $85,000:

Cash	85,000	
Accumulated Depreciation	50,625	
Equipment		110,000
Gain on Disposal		25,625
To record gain on disposal		

Cost of old asset	$110,000
Acc. dep'n. ($5,000 + 10,000 + 23,750 + 11,875)	(50,625)
Carrying amount	59,375
Proceeds of disposal (fair value)	(85,000)
Gain on disposal	$(25,625)

3. Equipment sold for $59,375:

Cash	59,375	
Accumulated Depreciation	50,625	
Equipment		110,000
To record disposal. No gain or loss resulted.		

Cost of old asset	$110,000
Acc. dep'n. ($5,000 + 10,000 + 23,750 + 11,875)	(50,625)
Carrying amount	59,375
Proceeds of disposal (fair value)	(59,375)
Gain on disposal	$ -0-

CP 8–9

Equipment*	145,000[3]	
Accumulated Depreciation	50,625	
Equipment		110,000
Cash		50,000[2]
Gain on Disposal		35,625

To record gain on disposal

Cost of old asset	$110,000
Acc. dep'n. ($5,000 + 10,000 + 23,750 + 11,875[1])	(50,625)
Carrying amount	59,375
Proceeds of disposal (fair value)	(95,000)
Gain on disposal	$(35,625)

[1] 2021 depreciation expense = $23,750 x 1/2 = $11,875

List price	150,000
Trade-in allowance	(100,000)
Cash paid	$50,000[2]

Cost of new asset = Cash paid[2]+ fair value of asset traded in
= $50,000 + 95,000
= $145,000[3]

CP 8–10

1.

Depreciation Method	*Calculation*	*Year 1*	*Year 2*	*Year 3*
A: Straight–Line	$30,000/5 = $6,000	$3,000[1]	$6,000	$6,000
B: Declining Balance	40%[2] x $30,000	$6,000[3]		
	40% x $24,000		$9,600	
	40% x $14,400			$5,760

[1]$6,000 x ½ year rule

[2](100%/5 yrs.) = 20% x 2 = 40%

[3]12,000 x ½ year rule

2. The chief financial officer may be correct in asserting that depreciation is an arbitrary allocation method based on unreliable estimates. On the other hand, some general methods of a) recognising future benefits, and b) allocating these benefits over future periods in which they are used to earn revenue seems necessary to present the financial position and results of operations of an entity. Capitalizing certain non-current assets and deprecating them over their estimated useful lives is likely the best option. Although there are many specific techniques for calculating and allocating depreciation over future periods, the need for consistency and reliability within financial statements under GAEB requires that the technique, once chosen, should be applied in a similar manner from year to year unless circumstances change, and disclosed in the notes.

3. The method of depreciation chosen should be the one that best allocates the cost of the asset over its estimated useful life and over the accounting periods expected to receive benefits from its use (to best match costs with revenues earned).

CP 8–11

1. 2020

		Debit	Credit
Jan. 1	Accumulated Depreciation — Machine 1	7,500	
	Cash	500	
	Gain on Disposal		500
	Machine 1		7,500
	To record gain on disposal		

Cost — machine 1	$7,500
Acc. dep'n. ($750* + 1,500 + 1,500 + 1,500 + 1,500 + 750*)	(7,500)
Carrying amount	-0-
Proceeds of disposal	(500)
Gain on disposal	$ (500)

* ½ year rules applies

2. 2020

		Debit	Credit
Dec. 31	Depreciation Expense — Machine 2	788	
	Accumulated Depreciation — Machine 2		788

$$\text{Revised depreciation} = \frac{\text{Remaining carrying amount} - \text{residual value}}{\text{Revised remaining useful life}}$$

$$= \frac{\$2,775^{1} - 1,200}{2 \text{ years}}$$

$$= \$788 \text{ (rounded)}$$

Cost machine 2		$7,500
Acc. dep'n.		
2015: [($7,500 – 1,200) x 1/6 yrs. = 1,050 x 1/2 yr.]	$ 525	
2016 through 2019: ($1,050/yr. x 4 yrs.)	4,200	(4,725)
Carrying amount at December 31, 2019		$2,775[1]

3. 2020

		Debit	Credit
Dec. 31	Depreciation Expense — Machine 3	690	
	Accumulated Depreciation — Machine 3		690

$$\text{Revised depreciation} = \frac{\text{Remaining carrying amount} - \text{residual value}}{\text{Revised remaining useful life}}$$

$$= \frac{\$3,450^{*} - 0}{5 \text{ years}}$$

$$= \$690$$

Cost machine 3		$7,500
Acc. dep'n.		
2015: [($7,500 – 300) x 1/8 yrs. = 900 x 1/2 yrs.]	$ 450	
2016 through 2019: ($900/yr. x 4 yrs.)	3,600	(4,050)
Carrying amount at December 31, 2019		$3,450*

CP 8–12

1. Equipment cost $15,000
   Less: Acc. depreciation to Dec. 31, 2018 3,750

   Carrying amount (Jan. 1, 2019) $11,250

   ($11,250 – 0)/4 yrs. = $2,813 (rounded) depreciation expense each year of remaining useful life

2. 2019

Dec. 31	Depreciation Expense—Equipment	2,813	
	Accumulated Depreciation—Equipment		2,813

3. Accumulated Depreciation—Equipment *No. 193*

Date 2018	Description	F	Debit	Credit	DR or CR	Balance
	Bal. Fwd.				Cr	2,250
Dec. 31	Depreciation for 2018			1,500	Cr	3,750
2019						
Dec. 31	Depreciation for 2019			2,813	Cr	6,563

4. If the estimated useful life of five years was known at the time of purchase, depreciation expense would have been $1,500 in 2016 ($15,000/5 yrs. X ½ yr.) and $3,000 each subsequent year until the equipment was fully depreciated or disposed.

5. Depreciation was calculated correctly in all years based on reasonable information available at the time. The estimates were updated when more accurate information was available. As such, the financial statement information would be deemed to be reasonable even though the depreciation expense varies between 2018 and subsequent years. The amounts also may be immaterial, so differences would not affect the usefulness of the financial statements.

CP 8–13

1. a. Jan. 1, 2018

Truck	10,500	
Cash		10,500
To record the purchase of the truck.		

b. Dec. 31, 2018

Depreciation Expense	2,100	
Accumulated Depreciation—Truck		2,100

To record 2018 depreciation expense as follows:
(100%/5yrs. = 20% x 2 = 40% DDB; $10,500 x 40% x 1/2 = $2,100

c. March 1, 2019

Truck	4,000	
Truck Operating Expense	3,500	
Cash		7,500
To record truck expenditures.		

d. Dec. 31, 2019

Depreciation Expense	4,160	
Accumulated Depreciation—Truck		4,160
To record 2019 depreciation expense		

2019 depreciation expense is calculated as:

Year	*Carrying amount*	*DDB rate*	*Depreciation expense*
2018	$10,500	40% x ½ yr.	$2,100
2019	$12,400*	40%	4,960

*($10,500 + 4,000 – 2,100) = $12,400

2.a. March 3, 2020

Depreciation Expense — Truck	1,488	
Accumulated Depreciation — Truck		1,488

To record depreciation to date of disposal [($12,400 – 4,960) x 40% x ½ yr)] = $1,488.

b. March 3, 2020

Accumulated Depreciation — Truck	8,548	
Cash	8,000	
Gain on Disposal		2,048
Truck		14,500

To record gain on disposal, as follows:

Cost — truck (10,500 + 4,000)	$14,500
Acc. dep'n. ($2,100 + 4,960 + 1,488)	(8,548)
Carrying amount	5,952
Proceeds of disposal	(8,000)
Gain on disposal	$ 2,048

CP 8–14

1. Jan. 1, 2018

Land	300,000	
Buildings	200,000	
Patents	100,000	
Machinery	250,000	
Goodwill	50,000	
Cash		900,000

To record purchase of Coffee Company assets.

2. Dec. 31, 2018

Depreciation Expense – Building	20,000[1]	
Depreciation Expense – Machinery	37,500[2]	
Amortization Expense – Patents	2,500[3]	
Accumulated Depreciation – Building		20,000
Accumulated Depreciation – Machinery		37,500
Patents		2,500

To record 2018 depreciation and amortization expense on assets acquired from Coffee Company as follows:

[1.] DDB rate: $\frac{100\%}{10 \text{ yrs.}} \times 2 = 20\%$

2018 building depreciation = \$200,000 x 20% x ½ yr. = \$20,000

[2.] 2018 machinery depreciation

$= (\$250{,}000 - 25{,}000) \times \frac{10{,}000}{60{,}000}$

= \$37,500

[3.] 2018 patent amortization = $\frac{\$100{,}000}{20 \text{ yrs.}} \times$ ½ yr. = \$2,500

3. Dec. 31, 2019

Impairment Loss	12,500	
Patents		12,500

To write-down patents to estimated value at December 31, 2019 as follows:

Cost	100,000
Accumulated amortization	(7,500)*
Carrying amount	92,500
Fair value	(80,000)
Impairment loss	\$12,500

*2018: (\$100,000/20 yrs. x ½ yr) =	\$2,500
2019: (\$100,000/20 yrs.) =	5,000
Total	\$7,500

CP 8–14 continued

4.

a. Dec. 2, 2020

Depreciation Expense – Machinery	75,000	
Accumulated Dep'n. – Machinery		75,000

To record depreciation in year of disposal as:
(250,000 – 25,000) x 20,000/60,000 units = $75,000

b. Dec. 2, 2020

Cash	100,000	
Accumulated Depreciation – Machinery	168,750	
Gain on Disposal		18,750
Machinery		250,000

To record sale of machinery as follows:

Cost		$250,000
Accumulated depreciation		
2018	37,500[1]	
2019	56,250[2]	
2020	75,000	(168,750)
Carrying amount		81,250
Proceeds of disposal		(100,000)
Loss on disposal		$ 18,750

[1] $(\$250,000 – 25,000) \times \frac{20,000}{60,000} \times ½$ yr. = $37,500

[2] $(\$250,000 – 25,000) \times \frac{15,000}{60,000}$ = $56,250

P 8–1

Cost of lots:		
Cheque to Jones		$140,000
Bank loan assumed by Arrow		100,000
Razing of barns		6,000
Legal, accounting, and brokerage fees		20,000
Clearing and levelling costs		10,000
Total outlays		$276,000
Less: Contra items:		
Proceeds from crops	$6,000	
Proceeds from house	1,600	
Proceeds from lumber	4,400	12,000
Net cost of 500 lots		$264,000
Net cost per lot ($264,000/500)		$528

P 8–2

1	Invoice price of new machine, net of cash discount offered
1	Cash discount on the above, which has not yet been taken (assumes the company follows this treatment)
5[1]	Anticipated first year's savings in operating costs from use of new machine
3[2]	Two–year service contract on operations of new machine paid in full
1	Cost of materials used while testing new machine
1	Cost of installing sound insulation in wall near machine so that nearby office employees will not be disturbed by it
1	Cost of removing machine that new machine replaces.

[1] No need to record; will be reflected as less operating costs in the first year
[2] Will be recorded as prepaid expense and written off over the two years in question

P 8–3

1.

Jul. 1	Amusement Ride	20,000	
	Accounts Payable		20,000
	To record acquisition of new amusement ride.		
4	Amusement Ride	4,000	
	Cash		4,000
	To record cost of base for new ride.		
5	Amusement Ride	520	
	Cash		520
	To record cost of transporting ride to park.		
5	Prepaid Insurance	90	
	Cash		90
	To record three years prepayment of insurance.		
5	Amusement Ride	675	
	Accounts Receivable	225	
	Cash		900
	To record payment for ride alterations and set up receivable from vendor.		
6	Amusement Ride	188	
	Cash		188
	To record cost of installation.		
15	Accounts Payable	20,000	
	Amusement Ride		200
	Cash		19,575
	Accounts Receivable		225
	To record payment of ride invoice less 1% discount and less account receivable re. alterations.		

2. The carrying value of the asset is $25,183 ($20,000 + 4,000 + 520 + 675 + 188 – 200)

P 8–4

1. Depreciation per unit = $\dfrac{\text{Cost}}{\text{Expected production}} = \dfrac{\$90{,}000}{9{,}000 \text{ units}} = \$10$ per unit

Depreciation Based on Usage		
Year	*Units*	*Depreciation*
2017	2,000	$20,000
2018	3,000	$30,000

2. Accumulated depreciation at the end of 2019 is $50,000.

3. Carrying amount of the machine at the end of 2019 is $40,000 ($90,000 – 50,000).

4. Janz Corporation
Partial Statement of Financial Position
At December 31

	2019	*2018*
Assets		
Machinery	$90,000	$90,000
Less: Accumulated depreciation	50,000	20,000
Carrying amount	$40,000	$70,000

P 8–5

1. Depreciation Expense:

Year	*Straight–line*[1]	*Double–declining balance*[2]	*Usage*[3]
2018	$ 500	$1,250	$ 800
2019	1,000	1,875	1,200
2020	1,000	875[2]	1,600
2021	1,500	-0-	400[3]
Totals	$4,000	$4,000	$4,000

[1] 2018: ($5,000 – 1,000) x ¼ yrs. x ½ yr. = $500
2019: ($5,000 – 1,000) x ¼ yrs. = $1,000
2020: ($5,000 – 1,000) x ¼ yrs. = $1,000
2021: $1,500*
*Since the printer has reached the end of its estimated useful life, the carrying amount should be reduced to the estimated residual value of $1,000.

[2] DDB rate: $\frac{100\%}{4 \text{ yrs.}} \times 2 = 50\%$

Year	*Carrying Amount*	*DDB Rate*	*Depreciation Expense*
2018	$5,000	50% x ½ yr.	$1,250
2019	3,750	50%.	$1,875
2020	1,875	50%	875*

*Limited to the amount that reduces carrying amount to estimated residual value.

[3] 2018: [($5,000 – 1,000) x 10,000/50,000 units] = $800
2019: [($5,000 – 1,000) x 15,000/50,000 units] = $1,200
2020: [($5,000 – 1,000) x 20,000/50,000 units] = $1,600
2021: $400*
*Limited to the amount that reduces carrying amount to estimated residual value.

2. Technological obsolescence is the most likely factor affecting estimated residual value and useful life of the printer. Deprecation rates and residual value estimates need to be reviewed annually. Any effects on depreciation expense that result from these changes are accounted for prospectively. Prior fiscal years' amounts are not changed.

3. When choosing between alternatives, management must take several factors into account. In this case, since significant changes are likely in printer technology, the double–declining balance method may be more suitable since it produces greater depreciation expense in the first few years. On the other hand, depreciation based on usage may more accurately represent the decline in value of the machine.

P 8–6

1. a. Usage $\frac{(\$11,000 - 2,000)}{75,000 \text{ units}} \times 20,000 \text{ units} = \$2,400$

   The ½ year rule does not apply to usage-based depreciation methods.

   b. Straight–line $\frac{(\$11,000 - 2,000)}{4 \text{ yrs.}} \times ½ \text{ yr.} = \$1,125$

   c. Double–declining balance 50%* x $11,000 x ½ yr = $2,750

   *100%/4 yrs. X 2 = 50% DDB rate

2.

	Depreciation expense	*Carrying amount*
a. Usage	$2,400	$8,600
b. Straight–line	$1,125	$9,875
c. Double–declining balance	$2,750	$8,250

3. The straight-line method should be adopted, since it produces the least depreciation expense and hence the highest 2018 net income.

P 8–7

1. a. Straight-line method

Purchase of machinery	$23,000
Transportation charges	600
Installation charge	1,400
	25,000
Less: Residual value	1,000
Depreciable cost of machinery	$24,000

b. Double-declining balance method

Purchase of machinery	$23,000
Transportation charges	600
Installation charge	1,400
	25,000

2. a. Straight-line depreciation for each year ($24,000 x 1/3 years):

Depreciation Expense	8,000	
Accumulated Depreciation—Machine		8,000

b. Declining balance method:

2018 Depreciation Expense	16,750[1]	
Accumulated Depreciation		16,750
2019 Depreciation Expense	5,528[2]	
Accumulated Depreciation		5,528
2020 Depreciation Expense	1,722[3]	
Accumulated Depreciation		1,722

[1] $\frac{100\%}{3 \text{ yrs.}}$ = 33 1/3% x 2 = 67% (rounded)

$25,000 x 67% = $16,750

[2] ($25,000 – 16,750) x 67% = $5,528 (rounded)

[3] ($25,000 – 16,750 – 5,528) x 67% = $1,824 (rounded), but limited to $1,722 to reduce carrying amount to estimated residual value

3.

Depreciable cost of machine	$24,000
Depreciation recorded in 2018	(8,000)
Depreciable amount for remaining four years	$16,000

Annual depreciation for the remaining four years of life: $16,000/4 yrs. = $4,000 per year

P 8–8

1.

Cost (Jan. 1, 2013)	$30,000
Less: Estimated residual value (10%)	3,000
Depreciable amount	$27,000
Annual depreciation = $27,000/20 yrs. =	$1,350
2013 depreciation ($1,350 x ½)	$ 675
2014 – 2019 deprecation ($1,350 x 6 yrs.)	8,100
Total depreciation to Dec. 31, 2019	$8,775
Cost	$30,000
Less: Accumulated depreciation	(8,775)
Carrying amount (Dec. 31, 2019)	$21,225

2.

Carrying amount (above)	$21,225
Less: New estimated residual value	(6,000)
Undepreciated cost (Jan. 1, 2020)	$15,225

3. Annual depreciation = $15,225/8 years = $1,903 (rounded)

Dec. 31, 2020		
Depreciation Expense	1,903	
Accumulated Depreciation		1,903
To record depreciation for year.		

4.

March 31, 2021		
Depreciation Expense	952	
Accumulated Depreciation		952
To record depreciation to date of disposal ($1,903 x ½).		
March 31, 2021		
Cash	22,000	
Accumulated Depreciation – Machine	11,630	
Gain on Disposal		3,630
Machine		30,000
To record gain on disposal as follows:		

Cost		$30,000
Accumulated depreciation		
2013	$ 675	
2014–2019	8,100	
2020	1,903	
2021	952	(11,630)
Carrying amount		18,370
Proceeds of disposal		(22,000)
Gain on disposal		$ (3,630)

P 8–9

Part A

1. 2018

Date	Account	Debit	Credit
May 1	Equipment	130,000	
	Cash		130,000
	To record the purchase of equipment.		

2. 2021

Date	Account	Debit	Credit
Jan. 1	Equipment—New	200,000[2]	
	Accumulated Depreciation—Old Equipment	74,400[1]	
	Equipment—Old		130,000
	Cash		140,000
	Gain on Disposal		4,400
	To record the trade-in of equipment as follows:		
	Cost		$ 130,000
	Accum. dep'n: 2018-18		(74,400)[1]
	Carrying amount		55,600
	Proceeds of disposal		(60,000)
	Gain on disposal		$ (4,400)
	*$300,000/50 yrs. = $6,000 per year		

[1] Accumulated depreciation = $\frac{\$130,000 - 10,000}{100,000 \text{ units}} \times 62,000 \text{ units} = \$74,400$

[2] Cost of new asset = $140,000 + 60,000 = $200,000

Part B

1. 2019

Date	Account	Debit	Credit
Jan. 1	Land	50,000	
	Building	300,000	
	Bank Loan		320,000
	Cash		30,000
	To record the purchase of a warehouse.		

2. 2023

Date	Account		Debit	Credit
Jul. 31	Account Receivable – Insurance Proceeds		270,000	
	Accumulated Depreciation—Building		24,000[1]	
	Loss on disposal		6,000[2]	
	Building			300,000
	To record settlement of fire loss by insurance company as follows:			
	Cost			$ 300,000
	Accum. dep'n: 2019 ($6,000* x 1/2 yr.)	$ 3,000		
	2020-20 ($6,000* x 3 yrs.)	18,000		
	2023 ($6,000* x 1/2 yr.)	3,000		(24,000)[1]
	Carrying amount at June 28			276,000
	Proceeds of disposal			(270,000)
	Loss on disposal			$ 6,000[2]
	*$300,000/50 yrs. = $6,000 per year			

P 8–10

1. a. 2018

Sept. 30	Land	300,000	
	Buildings	100,000	
	Computer Software	75,000	
	Goodwill	25,000	
	Cash		500,000
	To record purchase of assets from Marine Company.		

b. 2018

Dec. 31	Depreciation Expense – Building	1,125[1]	
	Amortization Expense – Computer Software	25,000[2]	
	Accumulated Depreciation – Building		1,125
	Accumulated Amortization – Computer Software		25,000

To record 2018 depreciation and amortization expense on assets acquired from Marine Company

[1] (\$100,000 – 10,000)/40 yrs. X ½ = \$1,125

[2] $\frac{100\%}{3 \text{ yrs.}}$ x 2 = 67% x \$75,000 x ½ = \$25,000 (rounded)

c. No journal entry is required. Only impairment losses are recorded.

d. 2020

Sept. 15	Amortization Expense – Computer Software	5,583[1]	
	Computer Software		5,583

To record amortization expense on computer software to date of sale.

[1] 2019 amortization:
(\$75,000 – 25,000) x 67% (rounded) = \$33,333
2020 amortization to date of disposal:
(\$75,000 – 25,000 – 33,333) x 67% x ½ yr. = \$5,583

Sept. 15	Cash	65,000	
	Gain on Disposal		53,916
	Computer Software		11,084[1]

To record sale of computer software as follows:

Cost		\$ 75,000
Accumulated amortization		
2018	\$25,000	
2019	33,333	
2020	5,583	(63,916)
Carrying amount		11,084[1]
Proceeds of disposal		(65,000)
Gain on disposal		\$(53,916)

P 8–10 continued

2.

Land		$300,000
Building	$100,000	
Accum. dep'n		
($1,125 + 2,250 + 2,250)	(5,625)	94,375
Goodwill		25,000
Total carrying amount		$419,375

CHAPTER NINE
Debt Financing: Current and Non-current Liabilities

Concept Self-check

1. A current liability is a debt that is expected to be paid within one year of the statement of financial position date or the next operating cycle, whichever is longer. A non-current liability is expected to be paid beyond one year of the statement of financial position date or the next operating cycle, whichever, is longer.

2. Examples of known current liabilities include accounts payable, salaries and wages payable, income taxes payable, unearned revenues, sales taxes payable, short-term bank loans, and the portion of long-term debt that will be paid within one year of the statement of financial position date.

3. An estimated current liability is a liability that is certain to exist, though the amount is somewhat uncertain and therefore can only be reasonably estimated. This usually occurs when a supplier invoice has not been received by the time the financial statements are prepared.

4. Two common examples of estimated current liabilities are warranty reserves and professional fees related to preparation or audit of year-end financial statements.

5. A contingent liability's existence is uncertain and improbable. Alternately, it is probable but its amount is unknown at the date financial statements are issued.

6. A loan, like a bond issue, is a means for an entity to raise investment capital through creditors. Both can be secured, and generally have fixed rates of interest and specified terms of repayment. However, loans are usually repaid with blended payments of interest and principal over the life of the liability. While the total payment on a loan is constant, the relative portion of interest decreases with each payment because loan principal is being reduced with each preceding payment. The portion of principal repayment increases. Bonds usually pay interest only to investors at regular intervals over the life of the issue plus a payment for the face value of the bond when it matures. They are usually issued to many investors as public offerings.

Concept Self-check continued

7. A loan and a finance lease are both long-term debt instruments. They are repaid with blended principal and interest payments over a specified period of time. However, proceeds from a long-term loan are usually obtained from a financial institution like a bank, and then used to purchase a long-lived asset from a third party like an equipment manufacturer. Title passes to the purchaser from the seller.

   Under a finance lease, the leasing company is usually the same as or closely associated with the company that owns the specific asset that is subject to the lease agreement. Title may not pass from the leasing company to the lessee. However, the rights and responsibilities of ownership are transferred to the lessee as well as beneficial ownership. As a result, a finance lease is essentially a purchase. The related assets is reported as an item of property, plant, and equipment, and the finance lease is reported as a liability on the statement of financial position.

CP 9–1

2018				
Dec. 31	Interest Expense	632	340	
	Interest Payable	222		340
	To adjust interest payable [($12,000 x 6% x 9/12 mos.) – 200].			

CP 9–2

Selby Corp.
General Journal

	Date 2018	Description	F	Debit	Credit
		<u>Adjusting Entries</u>			
a.	Dec. 31	Supplies Expense		40	
		Unused Office Supplies			40
		To record additional accounts payable at year-end.			
b.	31	Interest Expense		100	
		Interest Payable			100
		To adjust interest payable for the year.			
c.	31	Unearned Rent Revenue		500	
		Rent Earned			500
		To adjust rent revenue at year-end.			

CP 9–3

1.

2018			
Dec. 31	Salaries Expense	2,000	
	Employment Insurance Expense	56[1]	
	Government Pension Expense	80[2]	
	Employee Income Taxes Payable		500
	Employment Insurance Payable		96[3]
	Government Pension Payable		160[4]
	Salaries Payable		1,380
	To record unpaid salary and benefits re. J. Smith at December 31.		

[1] $2,000 x 2% = 40 x 1.4 times = $56
[2] $2,000 x 4% = $80
[3] $40 + 56 = $96
[4] $80 + 80 = $160

2.

	(1)		
2019			
Jan. 5	Salaries Payable	1,380	
	Cash		1,380
	To record payment of Dec. 31 salary payable to J. Smith.		

	(2)		
Jan. 5	Employee Income Taxes Payable	500	
	Employment Insurance Payable		96
	Government Pension Payable		160
	Cash		756
	To record payment of amounts owing at Dec. 31 to Government of Canada re. J. Smith.		

CP 9–4

1.

2018			
Jun. 20	Merchandize Inventory	4,000	
	GST Payable	200	
	Accounts Payable		4,200
	($4,000 x 5% = $200)		

2.

2018			
Jul. 5	Accounts Receivable	5,250	
	Sales		5,000
	GST Payable		250
	Cost of Goods Sold	4,000	
	Merchandize Inventory		4,000
	($50,000 x 5% = $250)		

CP 9–4 continued

3. 2018

Jul. 31	GST Payable	50	
	Cash		50

4. No expense is recorded on the income statement. The company merely passes on the GST collected from the final consumer to the government.

CP 9–5

1. 2018

Feb. 15	Corporate Income Taxes Payable	500	
	Cash		500

2. 2018

Dec. 31	Corporate Income Taxes Expense	6,000	
	Corporate Income Taxes Payable		6,000
	($15,000 x 40% = $6,000)		

3. 2019

Jan. 31	Corporate Income Taxes Payable	500	
	Cash		500

To record payment of 2018 corporate income taxes owing:

2018 expense	$ 6,000
Instalments paid (11 x $500)	(5,500)
Owing	$ 500

CP 9–6

1. 2018

Nov. 1	Accounts Payable	10,000	
	Note Payable		10,000

To record conversion of account payable owing to Tree Corp. to a 10% note payable due January 31, 2019.

2. 2018

Dec. 31	Interest Expense	167	
	Interest Payable		167

To record interest on note payable to Dec. 31 [$10,000 x 10% x 2/12 mos. = $167 (rounded)]

3. 2019

Jan. 31	Interest Expense	83	
	Interest Payable	167	
	Note Payable	10,000	
	Cash		10,250

To record payment of note payable and interest Jan. 1-31 [$10,000 x 10% x 1/12 mos. = $83 (rounded)].

CP 9–6 continued

4. a. 2018

Nov. 1	Note Receivable	10,000	
	Accounts Receivable		10,000
	To record conversion of account receivable due from Branch Corporation to a 10% note receivable due January 31, 2019.		

b. 2018

Dec. 31	Interest Receivable	167	
	Interest Earned		167
	To record interest earned to December 31 (see 2 above).		

c. 2019

Jan. 31	Cash	10,250	
	Interest Earned		83
	Interest Receivable		167
	Note Receivable		10,000
	To record collection of Branch note receivable and interest (see calculations above).		

CP 9–7

1. 2018

June 30	Estimated Warranty Liability	2,500	
	Parts Inventory		2,000
	Cash		500

2. 2018

Dec. 31	Warranty Expense	20,000	
	Estimated Warranty Liability		20,000
	($2M x 1% = $20,000)		

3.

Estimated warranty expense	$20,000	
2018 warranty claims	(22,000)	
Balance in Estimated Warr. Liab. account at Dec. 31	$ (2,000)	Debit

Claims have exceeded the estimated provision. Zebra management should monitor this to determine if the 1% estimate should be increased in the future. It is difficult to determine if a change is needed immediately, as this is only the first year of operation.

CP 9–8

Claim 1 would be neither recorded nor disclosed.

Claim 2 requires note disclosure.

Claim 3 needs to be recorded in the accounting records (Dr. Lawsuit Damages Expense; Cr. Estimated Current Liabilities)

CP 9–9

1. a. 2021			
Jan.1	Cash	50,000	
	Loan Payable		50,000
	To record loan from Second Capital Bank.		
b. Jan. 1	Equipment	48,000	
	Cash		48,000
	To record purchase of equipment.		

2.

Rosedale Corp.
Loan Repayment Schedule

	A	*B*	*C*	*D*	*E*
			(D – B)		*(A – C)*
Year ended Dec. 31	*Beginning loan balance*	*(A x 6%) Interest expense*	*Reduction of loan payable*	*Total loan payment*	*Ending loan balance*
2021	$50,000	$3,000	$15,705	$18,705	$34,295
2022	34,295	2,058	16,647	18,705	17,648
2023	17,648	1,057	17,648	18,705	-0-

3. 2021			
Dec. 31	Interest Expense	3,000	
	Loan Payable	15,705	
	Cash		18,705
	To record loan payment to Second Capital Bank.		

CP 9–10

1. 2018			
Jan. 1	Vehicle	80,000	
	Finance Lease		80,000
	To record assumption of lease with Night Leasing Ltd.		

2.

Day Corp.
Lease Repayment Schedule

	A	*B*	*C*	*D*	*E*
			(D – B)		*(A – C)*
Year ended Dec. 31	*Beginning lease balance*	*(A x 8%) Interest expense*	*Reduction of finance lease*	*Total lease payment*	*Ending lease balance*
2018	$80,000	$6,400	$17,754	$24,154	$62,246
2019	62,246	4,980	19,174	24,154	43,072
2020	43,072	3,446	20,708	24,154	22,364
2021	22,364	1,790	22,364	24,154	-0-

CP 9–10 continued

3. Day Corp.
Partial Statement of Financial Position
At December 31, 2018

Liabilities

Current	
Current portion of finance lease	$19,174
Non-current	
Finance lease (Note X)	43,072

Note X would disclose pertinent information including details of the lease repayment agreement (for example, interest rate, repayment terms, security) if just the carry amount is shown on the statement of financial position as above.

P 9–1

1.a.	2018			
	Jan. 1	Cash	20,000	
		Share Capital		20,000
b.	Jan. 1	Cash	30,000	
		Bank Loan		30,000
c.	Jan. 2	Merchandize Inventory	20,000	
		GST Payable	1,000	
		Accounts Payable		21,000
d.	Jan. 8	Accounts Receivable	8,400	
		Sales		8,000
		GST Payable		400
		Cost of Goods Sold	3,000	
		Merchandize Inventory		3,000
e.	Jan. 15	Salaries Expense	2,000	
		Employment Insurance Expense	56[1]	
		Government Pension Expense	100	
		Employee Income Taxes Payable		300
		Employment Insurance Payable		96
		Government Pension Payable		200
		Cash		1,560
		[1] ($40 x 1.4 = $56)		
2.f.	2018			
	Jan. 31	Interest Expense	100	
		Interest Payable		100
		($30,000 x 4% x 1/12 mos. =- $100)		

P 9–1 continued

g.	Jan. 31	Salaries Expense	2,000	
		Employment Insurance Expense	56	
		Government Pension Expense	100	
		Employee Income Taxes Payable		300
		Employment Insurance Payable		96
		Government Pension Payable		200
		Salaries Payable		1,560
h.	Jan. 31	Corporate Income Taxes Expense	118	
		Corporate Income Taxes Payable		118

Sales		$8,000	
COGS	$3,000		
Salaries	4,000		
Emp. Ins.	112		
Pension	200		
Interest	100	7,412	
Income before inc. taxes		$ 588	x 20% = $118 (rounded)

3. Current liabilities at January 31:

Bank loan	$30,000
Accounts payable	21,000
Interest payable	100
Salaries payable	1,560
Employee income taxes payable	600
Employment insurance payable	192
Government pension payable	400
Corporate income taxes payable	118
	$53,970

GST refundable is $600 ($1,000 – 400). This would be reported as a current asset.

P 9–2

1.

ASSETS

Cash			
a.	20,000	1,560	e.
b.	30,000		
Bal.	48,440		

Accounts Receivable			
d.	8,400		

Merchandize Inventory			
c.	20,000	3,000	d.
Ba.	17,000		

LIABILITIES

Bank Loan			
		30,000	b.

Corp. Inc. Tax. Pay.			
		118	h.

Accounts Payable			
		21,000	c.

Interest Payable			
		100	f.

Salaries Payable			
		1,560	g.

Emp'ee Inc. Tax Pay.			
		300	e.
		300	g.
		600	Bal.

Employ. Ins. Pay.			
		96	e.
		96	g.
		192	Bal.

Gov't Pension Pay.			
		200	e.
		200	g.
		400	Bal.

GST Payable			
c.	1,000	400	d.
Bal.	600		

SHAREHOLDERS' EQUITY

Share Capital			
		20,000	a.

Sales			
		8,000	d.

Cost of Goods Sold			
d.	3,000		

Salaries Expense			
e.	2,000		
g.	2,000		
Bal.	4,000		

Employ. Ins. Exp.			
e.	56		
g.	56		
Bal.	112		

Gov't Pension Exp.			
e.	100		
g.	100		
Bal.	200		

Interest Expense			
f.	100		

Corp. Inc. Taxes Exp.			
h.	118		

P 9–2 continued

2.

Latex Paint Corporation
Income Statement
For the Month Ended January 31, 2018

Sales	$8,000
Cost of goods sold	3,000
Gross profit	5,000
Operating Expenses	
Selling expenses	
Salaries and benefits	4,312
Income before interest and income taxes expense	688
Interest expense	100
Income before income taxes	588
Income taxes	118
Net income	$ 470

Latex Paint Corporation
Statement of Changes in Equity
For the Month Ended January 31, 2018

	Share capital	*Retained earnings*	*Total equity*
Balance at Jan. 1, 2018	$ -0-	$ -0-	$ -0-
Shares issued	20,000		20,000
Net income		470	470
Balance at Jan. 31, 2018	$20,000	$ 470	$20,470

P 9–2 continued

Latex Paint Corporation
Statement of Financial Position
At January 31, 2018

Assets	
Current	
Cash	$48,440
Accounts receivable	8,400
GST receivable	600
Merchandize inventory	17,000
Total assets	$74,440
Liabilities	
Current	
Borrowings (or Bank loan)	$30,000
Accounts payable	21,000
Interest payable	100
Salary and benefits payable	2,752
Corporate income taxes payable	118
Total liabilities	53,970
Shareholders' Equity	
Share capital	20,000
Retained earnings	470
Total equity	20,470
Total liabilities and shareholders' equity	$74,440

Other reasonable presentation formats are acceptable.

P 9–3

1.a.	2018				
	Dec. 31	Rent Earned	440	1,000	
		Unearned Rent Revenue	248		1,000
		To adjust rent earned to yearly amount ($12,000).			
b.	Dec. 31	Estimated Warranty Liability	213	600	
		Cost of Goods Sold	570		500
		Salaries Expense	65		100
		To reallocate warranty claim expenditures recorded in wrong accounts.			
c.	Dec. 31	Parts Inventory	151	4,000	
		GST Payable	238	200	
		Accounts Payable	210		4,200
		To record additional parts inventory.			

P 9–3 continued

d.	Dec. 31	Warranty Expense	678	7,919	4,000
		Estimated Warranty Liability	213	4,000	7,919
		To record estimated warranty expense ($791,900 x 1% = $7,919) Alternately, two entries could be made or just the net adjustment of $3,919.			
e.	Dec. 31	Salaries Expense	656	5,000	
		Employment Insurance Expense	658	100	
		Government Pension Expense	659	250	
		Company Health Insurance Expense	660	150	
		Salaries Payable	226		3,750
		Employee Income Taxes Payable	227		750
		Employment Insurance Payable	228		200
		Government Pension Payable	229		500
		Company Health Insurance Pay.	230		300
		To record salaries payable as follows:			

		Deductions						
	Gross pay	*Income taxes (15%)*	*Employ. insur. (2%)*	*Gov't pension (5%)*	*Comp. health (3%)*	*Total. deduct.*	*Net pay*
Employee	5,000	750	100	250	150	1,250	3,750
Employer		-0-	100	250	150		
		750	200	500	300		

f.	Dec. 31	Professional Fees	653	8,000	
		Estimated Liabilities	212		8,000
		To record estimated audit fees.			
g.	Dec. 31	Corporate Income Taxes Expense	830	19,895	16,500
		Corporate Income Taxes Payable	260	16,500	19,895
		To reallocate 2018 income tax instalments and record corporate income tax expense ($79,581 x 25% = $19,895).			

P 9–3 continued

2.

No.	*Account*	*Unadjusted TB*		*Adjustments*		*Adjusted TB*	
		Debit	*Credit*	*Debit*	*Credit*	*Debit*	*Credit*
101	Cash	12,000				12,000	
110	Accounts receivable	30,000				30,000	
150	Merch. inventory	70,000				70,000	
151	Parts inventory	10,000		c. 4,000		14,000	
210	Accounts payable		40,000		4,200 c.		44,200
212	Est. current liab.		-0-		8,000 f.		8,000
213	Est. warranty liab.	3,000		d. 4,000	7,919 d.		319
				b. 600			
226	Salaries payable		-0-		3,750 e.		3,750
227	Emp'ee inc. tax pay.		-0-		750 e.		750
228	Emp. insur. pay.		-0-		200 e.		200
229	Gov't pension pay.		-0-		500 e.		500
230	Co. health ins. pay.		-0-		300 e.		300
238	GST payable		1,000	c. 200			800
248	Unearn. rent rev.		-0-		1,000 a.		1,000
260	Corp. inc. tax pay.		-0-	g. 16,500	19,895 g.		3,395
320	Share capital		100				100
340	Retained earnings		3,000				3,000
440	Rent earned		13,000	a. 1,000			12,000
500	Sales		791,900				791,900
570	Cost of goods sold	263,500			500 b.	263,000	
653	Professional fees	-0-		f. 8,000		8,000	
656	Salaries expense	400,000		e. 5,000	100 b.	404,900	
658	Gov't emp. insur. ex.	8,000		e. 100		8,100	
659	Gov't pension exp.	20,000		e. 250		20,250	
660	Co. health insur. exp.	12,000		e. 150		12,150	
678	Warranty exp.	4,000		d. 7,919	4,000 d.	7,919	
830	Corp. inc. tax exp.	16,500		g. 19,895		19,895	
		849,000	849,000	67,614	67,614	870,214	870,214

P 9–3 continued

Mudryk Wholesalers Corporation
Income Statement
For the Year Ended December 31, 2018

Sales		$791,900
Cost of goods sold		263,000
Gross profit		528,900
Operating expenses		
Selling expenses		
Salaries	$404,900	
Employment insurance	8,100	
Government pension	20,250	
Company health insurance	12,150	
Warranty	7,919	
Total selling expenses	453,319	
General and administrative expenses		
Professional fees	8,000	
Total operating expenses		461,319
Income from operations		67,581
Other income		
Rent earned		12,000
Income before income taxes		79,581
Income taxes		19,895
Net income		$59,686

Mudryk Wholesalers Corporation
Statement of Changes in Equity
For the Year Ended December 31, 2018

	Share capital	*Retained earnings*	*Total equity*
Balance, Jan. 1, 2018	$ 100	$ 3,000	$ 3,100
Net income		59,686	59,686
Balance, Dec. 31, 2018	$ 100	$ 62,686	$ 62,786

P 9–3 continued

Mudryk Wholesalers Corporation
Statement of Financial Position
At December 31, 2018

Assets	
Current	
Cash	$ 12,000
Accounts receivable	30,000
Merchandize inventory	70,000
Parts inventory	14,000
Total assets	$126,000
Liabilities	
Current	
Accounts payable	$ 44,200
Estimated liabilities	8,000
Estimated warranty liabilities	319
Salaries payable	3,750
Employee income taxes payable	750
Employment insurance payable	200
Government pension payable	500
Company health insurance payable	300
GST payable	800
Unearned rent revenue	1,000
Corporate income taxes payable	3,395
Total liabilities	63,214
Shareholders' Equity	
Share capital	100
Retained earnings	62,686
Total equity	62,786
Total liabilities and shareholders' equity	$126,000

Other reasonable presentation formats are acceptable.

P 9–4

1.a. 2018

Dec. 31	Cash	100,000	
	Loan Payable		100,000
	To record loan from First National Bank.		

b. 2019

Jan. 2	Equipment	95,000	
	Cash		95,000
	To record purchase of equipment.		

2.

Zinc Corp.
Loan Repayment Schedule

	A	B	C	D	E
			(D – B)		*(A – C)*
Year ended Dec. 31	*Beginning loan balance*	*(A x 8%) Interest expense*	*Reduction of loan payable*	*Total loan payment*	*Ending loan balance*
2019	$100,000	$8,000	$22,192	$30,192	$77,808
2020	77,808	6,225	23,967	30,192	53,841
2021	53,841	4,307	25,885	30,192	27,956
2022	27,956	2,236	27,956	30,192	-0-

3. 2022

Dec. 31	Interest Expense	2,236	
	Loan Payable	27,956	
	Cash		30,192
	To record final loan payment to First National Bank.		

4.

Zinc Corp.
Partial Statement of Financial Position
At December 31, 2020

Liabilities

Current	
Current Portion of First National Bank Loan (Note X)	$25,885
Non-current	
First National Bank Loan (Note X)	27,956

Note X would disclose pertinent information including details of the loan repayment agreement (for example, interest rate, repayment terms, security) if just the carry amount is shown on the statement of financial position as above.

P 9–5

1\. 2018

Apr. 1	Equipment	200,000	
	Finance Lease		190,000
	Cash		10,000
	To record purchase of equipment from West Leasing Ltd. via lease and cash payment		

2\.

East Corp.
Lease Repayment Schedule

	A	B	C	D	E
			(D – B)		*(A – C)*
Year ended Dec. 31	*Beginning lease balance*	*(A x 6%) Interest expense*	*Reduction of finance lease*	*Total lease payment*	*Ending lease balance*
2019	$190,000	$11,400	$59,681	$71,081	$130,319
2020	130,319	7,819	63,262	71,081	67,057
2021	67,057	4,024	67,057	71,081	-0-

3\.

East Corp.
Partial Statement of Financial Position
At December 31, 2020

Liabilities

Current	
Lease Interest Payable	$1,006[1]
Finance Lease (Note X)	67,057

[1] Estimated accrued interest = $4,024 x 3/12 mos. = $1,006

Note X would disclose pertinent information including details of the lease repayment agreement (for example, interest rate, repayment terms, security) if just the carry amount is shown on the statement of financial position as above.

CHAPTER TEN
Debt Financing: Bonds

Concept Self-check

1. A bond is a debt security that requires periodic interest payments during its life as well as a future repayment of the borrowed amount. A bond indenture is the contract that binds the corporation to the bondholders; it specifies the terms with which the corporation must comply and may restrict further borrowing by the corporation. A trustee may be used to serve as an impartial intermediary between the corporation and the bondholders, and so better balance the rights and needs of these two groups.

2. A bondholder has the following rights:

   a. The right to receive the face value of the bond at a specified maturity date in the future, that is, the right to receive the amount of money that was invested;

   b. The right to receive periodic interest payments at a specified per cent of the bond's face value; this interest represents the bondholder's return on investment; and

   c. In some cases, the right to have the corporation pledge some assets to protect the bondholder's investment; this safeguard restricts excess borrowing and, in the event that interest or the face amount of the bonds cannot be paid, allows for the sale of these assets to generate the funds necessary for repayment.

3. Since bondholders claims on the net assets of a corporation take precedence over those of shareholders if liquidation occurs, shareholders must approve bond issues. Also, interest payments must be made to bondholders; these may affect cash flow, so that future dividends may be impaired during the life of the bond.

4. Bond issues with different characteristics are disclosed separately in the financial statements, or more usually, in a note. The interest rate, maturity date, and any restrictions imposed on the corporation in the bond indenture, together with any assets pledged, also must be disclosed.

5. Three main types of bond terminology can be identified:

   a. Terms relating to different types of bonds (secured, unsecured, registered, bearer).

Concept Self-check continued

b. Terms relating to other special features of corporate bonds (serial, callable, convertible, sinking).

c. The amount printed on the bond certificate (face or par value).

6. The different possibilities in the redemption of bonds before their maturity follow:

   a. The bonds can be repurchased on the open market if this option is financially advantageous to the issuer.

   b. The issuer may exercise a call provision if it is financially advantageous. A call provision, sometimes included in a bond indenture, permits early redemption at a specified price, usually higher than the face value.

   c. The bondholder or issuer may exercise a conversion feature if provided for in the bond indenture, whereby the bonds can be converted into corporate shares.

7. If the bond contract interest rate is the same as the prevailing market interest rate, the bond will sell "at par". If the bond contract interest rate is higher than the prevailing market interest rate, the bond will sell at a premium. Prospective bondholders will bid up the price of the bonds because the bonds pay a rate of interest higher than other securities with similar features and risks. This creates a premium over the face value of the bonds. If the bond contract interest rate is lower than the prevailing market interest rate, the bond will sell at a discount because prospective bondholders will not be willing to pay the face value of the bonds. The issuer will have to accept a lower price so the effective interest rate will equal that of other securities with similar features and risks.

8. Under GAAP, an unamortized premium (discount) is added to (deducted from) the face value of the bond so that the liability is recorded at its carrying amount on the statement of financial position.

9. If the bond contract interest rate is greater than that required in the market, then the bonds are sold at a premium. If the investment market operates efficiently, investor should earn only the market rate of interest. By paying a premium over the face value, the overall return to the investor is reduced from the bond contract rate to the market rate in effect at the issue date.

Concept Self-check continued

10. There are two different methods to amortize a premium or a discount. The *straight–line method* allocates an equal amount of amortization to each interest period. The *effective interest method* of amortization calculates different amounts of amortization from one period to another. This method uses an amortization table, in which the interest expense on the carrying amount of the bond is calculated using the market rate of interest at the date of bond issue. The difference between this amount and the actual bond contract interest paid is the amortization amount applicable to the current period. Under this method, interest expense recorded in the accounts varies, but the effective interest rate is constant.

11. Interest accumulates from the previous interest payment date and is paid semi–annually, regardless of when the bond is actually sold. Interest paid is always calculated on the face value of the bond, regardless of premium or discount. Whenever a bond is issued, a six–month interest payment is made to the bondholder. Therefore, if a bond is sold between interest payment dates, it is sold for a price that includes accrued interest. The purchaser pays the seller for the interest from the previous interest payment date to the date of sale. When the purchaser receives the six–month interest payment, the net amount is what is earned while the bond was held by the investor.

12. The amortization of a bond premium is achieved through credits to the Interest Expense general ledger account and offsetting debits to the Bond Premium account, a statement of financial position contra account. A discount is amortized by periodic debits to the Interest Expense account and credits to the Bond Discount account.

13. If money is borrowed today for one year, at the end of that year the money to be repaid is increased by the amount of interest charged. The future value is therefore the principal plus interest. If a certain sum must be repaid in one year, the value in today's money would exclude the interest to be earned in the future. This is its present value. The time value of money is represented by interest. Interest is added to the principal to obtain the future value, and it is removed from a future sum to arrive at the present value.

14. The price of a bond is determined by combining the present value of the following future cash flows associated with the bond: (a) a single amount, the face value, to be paid at maturity, and (b) semi–annual interest payments made during the bond's life.

    Assume a $50,000 12–per cent bond is issued when the prevailing market interest rate is 8 per cent. Interest is payable semi–annually on June 30 and December 31 and the bond matures in three years. We need to compute

Concept Self-check continued

a. The present value of the face value of $50,000 in 3 years at 8 per cent. The present value factor is based on 6, six-month interest payment periods or 4 per cent. The PV factor is 0.79032 (see Table A in Appendix 1 of text).

b. The present value of 6 interest payments of ½ of 12% = 6% x$50,000 = $3,000. The present value factor is based on 6 interest payment periods using 4 per cent, that is 5.242137 (see Table B in Appendix 1).

The present value of the bond is $55,242, the total of (a) and (b):

i.	$50,000 x 0.79032	= $39,516
ii.	$3,000 x 5.242137	= 15,726
		$55,242

15. Amortization under the effective interest method is calculated by applying the market rate of interest to the carrying amount of the bonds. The difference between this interest and the actual bond contract interest paid is the amortization applicable to the current period.

    For example, assume a bond with a face value of $50,000 and a contract rate of 12 per cent is issued on January 1, 2018 at $55,242 (see above) when the market rate of interest is 8 per cent. The bond earns interest semi-annually on June 30 and December 31 and will mature in 3 years.

Issue of $50,000 Bonds Payable for $55,242
Amortization Table
Using Market Interest Rate of 8 Per Cent

		A	*B*	*C*	*D*	*E*
Year	*Six month period ending*	*Beginning bond carrying amount*	*(½ x 8%) = 4% x A Using 8% market rate to calculate 6-month interest expense*	*Actual cash interest paid*	*(B – C) Periodic premium amort.*	*(A – D) Ending bond carrying amount*
2018	Jun. 30	$55,242	4% x $55,242 = $2,210	$3,000	$790	$54,452
	Dec. 31	54,452	4% x 54,452 = 2,178	3,000	822	53,630
2019	Jun. 30	53,360	4% x 53,360 = 2,145	3,000	855	52,775
	Dec. 31	52,775	4% x 52,775 = 2,111	3,000	889	51,886
2020	Jun. 30	51,886	4% x 51,886 = 2,075	3,000	925	50,961
	Dec. 31	50,961	4% x 50,961 = 2,039	3,000	961	50,000

16. The effective interest method produces a constant interest rate equal to the market rate of interest on the date the bonds were issued. From a theoretical perspective, this is more appropriate, since it reflects market reality. The simpler straight-line amortization method may be preferred when the amounts of premiums or discounts are immaterial, due to cost/benefit considerations.

CP 10–1

1. discount
2. premium
3. discount
4. premium
5. premium
6. discount

CP 10–2

1. a. The issuance of bonds:

Cash = $100,000 x 94% = $94,000
Discount = $100,000 – $94,000 = $6,000

2017				
Jan.	1	Cash	94,000	
		Discount on Bonds	6,000	
		Bonds Payable		100,000

b. The interest payment:

Jun.	30	Interest Expense	6,000	
		Cash		6,000

c. The amortization of the discount:
Discount = $6,000/3 years x 6/12= $1,000

Jun.	30	Interest Expense	1,000	
		Discount on Bonds		1,000

2. Interest paid in cash = $100,000 x 12% = $12,000
Interest expense for 2017 = Interest + amortization for the year
= $12,000 + $2,000 = $14,000

3. Nevada Inc.
Partial Statement of Financial Position
At December 31, 2017

Liabilities

*Non-current**

Bonds payable (Note X)	$100,000
Discount on bonds	(4,000)
Carrying amount	$ 96,000

Note X would disclose pertinent information of the bond indenture including details of the face value and unamortized bond discount if (as here) just the carry amount is shown on the statement of financial position.

* If it was likely that the bonds would be called on January 1, 2018, they would be classified as current liabilities. If so, details of the redemption should be disclosed in a note to the December 31, 2017 financial statements.

CP 10–2 continued

4. Retirement of the bonds:

2019			
Dec. 31	Bonds Payable	100,000	
	Cash		100,000

5. Calling of the bonds:

2019			
Jan. 1	Bonds Payable	100,000	
	Discount on Bonds		4,000
	Cash		102,000
	Loss on Bond Retirement	6,000	
	To record retirement of bonds at 102 as follows:		

Face value	$100,000
Unamortized discount	(4,000)
Carrying amount	96,000
Cash paid	102,000
Loss on retirement	($6,000)

CP 10–3

1. a. The issuance of the bonds:
Cash = $200,000 x 112% = $224,000

2019			
Jan. 1	Cash	224,000	
	Premium on Bonds		24,000
	Bonds Payable		200,000

b. The interest payment:
Interest = $200,000 x 12% x 6/12 = $12,000

Jun. 30	Interest Expense	12,000	
	Cash		12,000

c. The amortization of the premium:
Premium = ($24,000/3 years) x 6/12 = $4,000

Jun. 30	Premium on Bonds	4,000	
	Interest Expense		4,000

2. Interest paid in cash = $200,000 x 12% = $24,000
Interest expense for 2019 = Interest – amortization for the year
= $24,000 – ($24,000/3 years)
= $24,000 – $8,000
= $16,000

These amounts are different because the amortization of the premium, which reduces Interest Expense, does not require cash.

CP 10–3 continued

3. Sydney Corp.
Partial Statement of Financial Position
At December 31, 2019

Liabilities

Non-current	
Bonds payable	$200,000
Premium on bonds	16,000
Carrying amount	$216,000

4. Calling of the bonds:
Cash paid = $200,000 x 106% = $212,000

2022			
Jan. 1	Bonds Payable	200,000	
	Premium on Bonds	8,000	
	Cash		212,000
	Loss on Bond Retirement	4,000	
	To record retirement of bonds at 106 as follows:		

Face value	$200,000
Unamortized premium	(8,000)
Carrying amount	208,000
Cash paid	212,000
Loss on retirement	($4,000)

CP 10–4

Discount = $500 x 12/6 x 3 years = $3,000
Bonds payable = ($16,500 x 12/6 months)/12% = $275,000

2020			
Jan. 1	Discount on Bonds	3,000	
	Cash	272,000	
	Bonds Payable		275,000

CP 10–5

Premium = $100 x 12/6 x 3 years = $600
Bonds payable = ($18,000 x 12/6 months)/12% = $300,000

2018			
Jan. 1	Cash	300,600	
	Premium on Bonds		600
	Bonds Payable		300,000

CP 10–6

	CASE A	CASE B	CASE C
	A. Investors purchase the bonds at par	*B. Investors purchase the bonds at a premium*	*C. Investors purchase the bonds at a discount*
1.	The corporation receives $100,000 cash for the bonds.	The corporation receives $112,000 cash for the bonds.	The corporation receives $88,000 cash for the bonds.
2.	The corporation pays $12,000 annual interest on the $100,000 face value of the bonds.	The corporation pays $12,000 annual interest on the $100,000 face value of the bonds.	The corporation pays $12,000 annual interest on the $100,000 face value of the bonds.
3.	The following journal entry records the sale of the bonds. Cash 100,000 Bonds Payable 100,000	The following journal entry records the sale of the bonds. Cash 112,000 Premium on Bonds 12,000 Bonds Payable 100,000	The following journal entry records the sale of the bonds. Cash 88,000 Discount on Bonds 12,000 Bonds Payable 100,000
4.	June 30, 2017 The interest payment is recorded as follows: Interest Expense 6,000 Cash 6,000	June 30, 2017 The interest payment is recorded as follows: Interest Expense 6,000 Cash 6,000 Amortization is recorded as follows: Premium on Bonds 2,000 Interest Expense 2,000	June 30, 2017 The interest payment is recorded as follows: Interest Expense 6,000 Cash 6,000 Amortization is recorded as follows: Interest Expense 2,000 Discount on Bonds 2,000
	December 31, 2017 The interest payment is recorded as follows: Interest Expense 6,000 Cash 6,000	December 31, 2017 The interest payment is recorded as follows: Interest Expense 6,000 Cash 6,000 Amortization is recorded as follows: Premium on Bonds 2,000 Interest Expense 2,000	December 31, 2017 The interest payment is recorded as follows: Interest Expense 6,000 Cash 6,000 Amortization is recorded as follows: Interest Expense 2,000 Discount on Bonds 2,000

CP 10–7

1. The amount of cash interest paid to investors each period is constant, and based on the face value of the bond and the stated interest rate in the bond indenture. When the bond is issued at a premium, the premium must be amortized so that the carrying amount of the bond at maturity is equal to its face value. The amortization of the premium reduces this interest expense of the corporation. When the bond is issued at a discount, the amortization of the discount increases the interest expense recorded on the corporation's income statement.

2. The diagram shows a bond for which the straight-line method of amortization is used, since the premium and discount are amortized by same amount as time passes (hence the term "straight-line").

CP 10–8 (Appendix)

1. Interest payment every 6 months = $200,000 x 12% x 1/2 = $12,000

2. Issue of $200,000 Bonds Payable for $210,152
Amortization Table
Using Market Interest Rate of 10 Per Cent

Year	Six month period ending	A Beginning bond carrying amount	B (½ x 10%) = 5% x A Using 10% market rate to calculate 6-month interest expense	C Actual cash interest paid	D (B – C) Periodic premium amort.	E (A – D) Ending bond carrying amount
2017	Jun. 30	$210,152	5% x $210,152 = $10,507	$12,000	$(1,493)	$208,659
	Dec. 31	208,659	5% x 208,659 = 10,433	12,000	(1,567)	207,092
2018	Jun. 30	207,092	5% x 207,092 = 10,355	12,000	(1,645)	205,447
	Dec. 31	205,447	5% x 205,447 = 10,272	12,000	(1,728)	203,719
2019	Jun. 30	203,719	5% x 203,719 = 10,186	12,000	(1,814)	201,905
	Dec. 31	201,905	5% x 201,905 = 10,095	12,000	(1,905)	200,000

3.

Calculation of Effective Interest Rate

Year	Six month period ending	A Bond carrying amount	B (½ x 10%) = 5% x A Using 10% market rate to calculate periodic interest expense	(B/A)
2017	Jun. 30	$210,152	5% x $210,152 = $10,507	5%
	Dec. 31	208,659	5% x 208,659 = 10,433	5%
				10%
2018	Jun. 30	207,092	5% x 207,092 = 10,355	5%
	Dec. 31	205,447	5% x 205,447 = 10,272	5%
				10%
2019	Jun. 30	203,719	5% x 203,719 = 10,186	5%
	Dec. 31	201,905	5% x 201,905 = 10,095	5%
				10%

4. The financing charge remains constant from period to period under the market interest method. It would vary slightly under the straight–line method. Some may argue that the interest rate should remain constant to be theoretically correct. From a practical point of view, there may be no material difference from period to period when using the straight–line method, and the effective interest method may not be worth the calculation effort. The straight–line method is simpler to use.

P 10–1

1. a. Amount of interest paid every 6 months = $150,000 x 12% x 1/2 = $9,000

   b.

Face value	$150,000
Issue price	147,000
Discount	$ 3,000

   Amortization every 6 months = $3,000 over 6 periods = $500

2. Actual interest expense = Cash paid + discount amortization
   = $9,000 + 500
   = 9,500

3.

2017			
June 30	Interest Expense	9,000	
	Cash		9,000
	To record payment of interest.		
June 30	Interest Expense	500	
	Bond Discount		500
	To record amortization of bond discount.		

4.

Round Corporation
Partial Statement of Financial Position
At December 31, 2018

	2018	*2017*
Liabilities		
Current		
Bonds payable (Note X)	$150,000	$ -0-
Discount on bonds	(1,000)	-0-
Carrying amount	149,000	-0-
Non-current		
Bonds payable (Note X)	-0-	150,000
Discount on bonds	-0-	(2,000)
Carrying amount	-0-	148,000

Note X would disclose relevant details about the bonds, including interest rate, maturity date, and fair value of the bonds at December 31 each year. Alternately, just carrying amounts could be shown on the statement of financial position. Face value and unamortized discount amounts could be disclosed in a note to the financial statements.

P 10–2

1.

2017			
Jun. 1	Cash	4,142,800	
	Bonds Payable		4,000,000
	Premium on Bonds		142,800
	To record bond issue.		

P 10–2 continued

2.	2017			
	Dec. 1	Interest Expense	216,200	
		Premium on Bonds	23,800	
		Cash		240,000
		To record interest payment and premium amortization as follows:		
		Premium = $142,800/3 years x 6/12 = $23,800		
		Cash = $4,000,000 x 12% x 6/12 = $240,000		
3.	2017			
	Dec. 31	Interest Expense	36,033	
		Premium on Bonds	3,967	
		Bond Interest Payable		40,000
		To accrue interest expense and premium amortization at year-end as follows:		
		Premium = $142,800/3 years x 1/12 = $3,967		
		Interest payable = $4,000,000 x 12% x 1/12 = $40,000		

If no bond premium was amortized on December 1 (see entry 2), the entry would be:

Dec. 31	Interest Expense	12,233	
	Premium on Bonds	27,767	
	Bond Interest Payable		40,000
	To accrue interest expense and premium amortization at year-end ($142,800/3 years x 7/12 = $27,767)		

4.	2018			
	Jun. 1	Interest Expense	180,167	
		Premium on Bonds	19,833	
		Bond Interest Payable	40,000	
		Cash		240,000
		To record interest payment and premium amortization.		
		Premium = $142,800/3 years x 5/12 = $19,833 (rounded)		
5.a.	2018			
	Sept. 1	Cash	3,910,400	
		Discount on Bonds	89,600	
		Bonds Payable		4,000,000
		To record issue of bonds at 97.76.		
		($4,000,000 x .9776 = $3,910,400)		
b.	Sept. 1	Cash	120,000	
		Bond Interest Payable		120,000
		To record accrued interest paid by purchaser.		
		($4,000,000 x 12% x 3/12 mos.)		

P 10–2 continued

6.a. 2020			
Jun.1	Interest Expense	180,167	
	Bond Interest Payable	40,000	
	Premium on Bonds	19,833	
	Cash		240,000
	To record final interest payment and premium amortization on first bond issue.		
b. Jun.1	Interest Expense	221,333	
	Bond Interest Payable	40,000	
	Discount on Bonds		21,333
	Cash		240,000
	To record final interest payment and discount amortization on second bond issue.		
c. Jun. 1	Bonds Payable	8,000,000	
	Cash		8,000,000
	To record repayment of bonds at maturity.		

P 10–3

1.a. Amount of interest paid every 6 months:

	Case A	Case B	Case C
Face value ($100,000 at 12% x 1/2)	$6,000	$6,000	$6,000

b. Amount of amortization every 6 months:

Issue price	$100,000	$103,000	$ 94,000
Face value	100,000	100,000	100,000
Premium (discount)	$ -0-	$ 3,000	$(6,000)
Amortization semi–annually over 3 years		$ 500	$(1,000)

2.

			Case A		Case B		Case C	
a.	Issue of the bonds:							
	2017							
	Jan.1	Cash	100,000		103,000		94,000	
		Bond Discount	—		—		6,000	
		Bond Payable		100,000		100,000		100,000
		Bond Premium		—		3,000		—
b.	Payment of interest:							
	2017							
	Jun. 30	Interest Expense	6,000		6,000		6,000	
		Cash		6,000		6,000		6,000
c.	Amortization:							
	2017							
	Jun. 30	Interest Expense	—		—		1,000	
		Bond Discount		—		—		1,000
		Bond Premium	—		500		—	
		Interest Expense		—		500		—

P 10–3 continued

			Case A		*Case B*		*Case C*	
d.	Payment of interest:							
	2017							
	Dec. 31	Interest Expense	6,000		6,000		6,000	
		Cash		6,000		6,000		6,000
e.	Amortization:							
	2017							
	Dec. 31	Interest Expense	—		—		1,000	
		Bond Discount		—		—		1,000
		Bond Premium	—		500		—	
		Interest Expense		—		500		—
f.	Payment of interest:							
	2019							
	Dec. 31	Interest Expense	6,000		6,000		6,000	
		Cash		6,000		6,000		6,000
g.	Amortization:							
	2019							
	Dec. 31	Interest Expense	—		—		1,000	
		Bond Discount		—		—		1,000
		Bond Premium	—		500		—	
		Interest Expense		—		500		—
h.	Redemption of bonds:							
	2020							
	Jan. 1	Bonds Payable	100,000		100,000		100,000	
		Cash		100,000		100,000		100,000

3. Calculation of interest expense:

	Case A	*Case B*	*Case* C
Cash interest paid	$12,000	$12,000	$12,000
Amortization of discount (premium)	-0-	(1,000)	2,000
Interest in income statement	$12,000	$11,000	$14,000

The amount of cash interest paid by Esther differs from the amount shown on the income statement where a premium or a discount exists because the amortization of a premium is credited to interest expense, while the amortization of a discount is debited to interest expense.

P 10–3 continued

4. Exercise of a call option at Dec. 31, 2018:

	Case A		*Case B*		*Case C*	
Bond Payable	50,000		50,000		50,000	
Bond Premium	—		2,000		—	
Loss on Bond Redemption	1,500		—		5,500	
Bond Discount		—		—		4,000
Gain on Bond Redemption		—		500		—
Cash		51,500		51,500		51,500

To record retirement of $50,000 of 12% bonds at 102 as follows:

	Case A	*Case B*	*Case C*
Face value	$50,000	$50,000	$50,000
Unamortized premium (discount)	—	2,000	(4,000)
Carrying amount	50,000	52,000	46,000
Cash paid ($50,000 @ 102)	51,500	51,500	51,500
Gain (loss) on retirement	$ 1,500	$ 500	($5,500)

P 10–4

1. a. Amount of interest paid every 6 months
   = $300,000 x 12% x 1/2 = $18,000

   b. Face value $300,000
   Issue price 272,263
   Discount $ 27,737

   Amortization every 6 months
   = $27,737 over 3 years x 1/2
   = $4,623 (rounded)

2.

Issue of $300,000 Bonds Payable for $272,263
Amortization Table
(straight-line)

		A	B	C	D	E
Year	*Six month period ending*	*Beginning bond carrying amount*	*(C + D) Periodic interest expense*	*Actual cash interest paid*	*Periodic discount amort.*	*(A + D) Ending bond carrying amount*
2017	Jun. 30	$272,263	$22,263	$18,000	$4,623	$276,886
	Dec. 31	276,886	22,263	18,000	4,623	281,509
2018	Jun. 30	281,509	22,263	18,000	4,623	286,132
	Dec. 31	286,132	22,263	18,000	4,623	290,755
2019	Jun. 30	290,755	22,263	18,000	4,623	295,378
	Dec. 31	295,378	22,262	18,000	4,622	300,000

P 10–4 continued

3.

Calculation of Effective Interest Rate

		A	*B*	
Year	*Six month period ending*	*Bond carrying amount*	*Six-month interest expense*	*% (B/A)*
2017	Jun. 30	$272,263	$22,623	8.3%
	Dec. 31	276,886	22,623	8.2%
2018	Jun. 30	281,509	22,623	8.0%
	Dec. 31	286,132	22,623	7.9%
2019	Jun. 30	290,755	22,623	7.8%
	Dec. 31	295,378	22,622	7.7%

4. The bonds were issued at a discount. Actual cash received was lower than the face value of the bonds. This indicates that the market rate of interest at the date of bond issue was higher than the stated interest rate of the bonds. The difference represents unamortized discount, which is amortized over the life of the bonds and acts to increase interest expense. As a result, the average interest expense is significantly higher than the interest rate on the face of the bonds each year (more than 15% per year actual vs. 12% per year stated). The interest expense also varies from period to period under the straight–line amortization method. Some may argue that such variation is not theoretically correct and therefore prefer the effective interest method, which provides a constant, market-based interest expense. From a practical point of view, there may be no material difference from period to period. The effective interest method may not be worth the calculation effort. The straight–line method is usually simpler to use.

P 10–4 continued

5. Otter Products Inc.
Partial Statement of Financial Position
At December 31, 2018

	2018	*2017*
Liabilities		
Current		
Bonds payable (Note X)	$300,000	$ -0-
Discount on bonds	(9,245)	-0-
Carrying amount	290,755	-0-
Non-current		
Bonds payable (Note X)	-0-	300,000
Discount on bonds	-0-	(18,491)
Carrying amount	-0-	281,509

Note X would disclose relevant details about the bonds, including interest rate, maturity date, and fair value of the bonds at December 31 each year. Alternately, just carrying amounts could be shown on the statement of financial position. Face value and unamortized discount amounts could be disclosed in a note to the financial statements.

P 10–5

1. a. Difference between the premiums from 2017 to 2018: ($23,600 – 21,200) =$2,400
   Amortization per month = $2,400/12 = $200
   Premium at date of issue, Nov. 1, 2017 = (2 x $200) + $23,600 = $24,000
   Original issue price = $500,000 + $24,000 = $524,000

   b. Total premium/yearly amortization = $24,000/2,400 = 10 years.
   The maturity date is 10 years after Nov. 1, 2017, or 10 years and four months after date of authorization on July 1, 2017.

2.

2017			
Nov. 1	Cash	539,000	
	Bonds Payable		500,000
	Premium on Bonds		24,000
	Bond Interest Payable		15,000
	To record the bond issue and accrued interest payable ($500,000 x 9% x 4/12 mos. = $15,000)		

P 10–5 continued

3. 2019 unadjusted interest expense = $43,800

Comprised of:

Cash interest paid ($500,000 x 9%)	$45,000
Amortization of premium from January 1 to June 30	(1,200)
	$43,800

The following journal entry is needed:

2019			
Dec. 31	Premium on Bonds	1,200	
	Interest Expense		1,200
	To record amortization of bond premium from July 1 to December 31 ($200 x 6 mos.)		

4. Carrying value at December 31, 2019
= $500,000 + 20,000 – 1,200
= $518,800

P 10–6

1.

2017			
Apr. 1	Discount on Bonds	30,000	
	Cash	970,000	
	Bonds Payable		1,000,000
	To record issue of bonds at 97.		
Sept. 30	Interest Expense	55,000	
	Discount on Bonds		5,000
	Cash		50,000
	To record payment of interest and amortization of bond discount.		
	Amortization = $30,000/3 x 6/12 = $5,000		
	Interest = $1,000,000 x 10% x 6/12 = $50,000		
Dec. 31	Interest Expense	27,500	
	Discount on Bonds		2,500
	Bond Interest Payable		25,000
	To record accrual of bond interest and amortization of bond discount to year-end		
	Interest = $1,000,000 x 10% x 3/12 = $25,000		
	Amortization = $30,000/3 x 3/12 mos. = $2,500		

P 10–6 continued

2.

2017			
Apr. 1	Cash	1,060,000	
	Premium on Bonds		60,000
	Bonds Payable		1,000,000
	To record bonds issued at 106.		
Sept. 30	Premium on Bonds	10,000	
	Interest Expense	40,000	
	Cash		50,000
	To record payment of interest and amortization of bond premium.		
	Interest = $1,000,000 x 10% x 6/12 = $50,000		
	Amortization = $60,000/3 x 6/12 = $10,000		
Dec. 31	Premium on Bonds	5,000	
	Interest Expense	20,000	
	Bond Interest Payable		25,000
	To record accrual of bond interest and amortization of bond premium to year-end		
	Interest = $1,000,000 x 10% x 3/12 = $25,000		
	Amortization = $60,000/3 x 3/12 mos. = $5,000		

3.

2018			
Dec.1	Cash	1,030,000	
	Premium on Bonds		30,000
	Bonds Payable		1,000,000
	To record bonds issued at 103.		
Dec. 1	Cash	16,667	
	Bond Interest Payable		16,667
	To record accrued interest on bonds issued November 30. ($1,000,000 x 10% x 2/12 mos. = $16,667)		
2018			
Dec. 31	Interest Expense	8,333	
	Bond Interest Payable		8,333
	To record additional accrued interest from December 1 to December 31 ($1,000,000 x 10% x 1/12 mos. = $8,333).		
Dec. 31	Premium on Bonds	1,875	
	Interest Expense		1,875
	To record amortization of bond premium to December 31. Bonds will be outstanding 16 months, Dec. 1, 2018 to April 1, 2020 ($30,000 x 1/16 mos. = $1,875)		

P 10–7 (Appendices)

			CASE A	*CASE B*	*CASE C*
1.	a.	Interest payment every 6 months:			
		\$500,000 x 12% x ½ yrs.	\$30,000	\$30,000	\$30,000
	b.	Issue price computation:			
		Present value \$500,000 at the end of 10 periods at			
		6% use 0.558395	\$279,197		
		8% use 0.463193		\$231,597	
		4% use 0.675564			\$337,782
		Present value \$30,000, payments for 10 periods at			
		6% use 7.360087	\$220,803		
		8% use 6.710081		\$201,302	
		4% use 8.110896			\$243,327
		Issue price	\$500,000	\$432,899	\$581,109

c. i. Bonds issued when market rate is 12%: no amortization needed

ii. Bonds issued when market rate is 16%: the amortization table is as follows:

		A	*B*	*C*	*D*	*E*
Year	*Six month period ending*	*Beginning bond carrying amount*	*1/2 x 16% = 8% x A*	*Actual cash interest paid*	*(B – C) Periodic premium amort.*	*(A + D) Ending bond carrying amount*
2017	Jun. 30	432,899	34,632	30,000	4,632	437,531
	Dec. 31	437,531	35,002	30,000	5,002	442,533
2018	Jun. 30	442,533	35,403	30,000	5,403	447,936
	Dec. 31	447,936	35,835	30,000	5,835	453,771
2019	Jun. 30	453,771	36,302	30,000	6,302	460,073
	Dec. 31	460,073	36,806	30,000	6,806	466,878

iii. Bonds issued when market rate is 8%; the amortization table is as follows:

		A	*B*	*C*	*D*	*E*
Year	*Six month period ending*	*Beginning bond carrying amount*	*1/2 x 8% = 4% x A*	*Actual cash interest paid*	*(B – C) Periodic premium amort.*	*(A + D) Ending bond carrying amount*
2017	Jun. 30	581,109	232,44	30,000	6,756	574,353
	Dec. 31	574,353	229,74	30,000	7,026	567,327
2018	Jun. 30	567,327	226,93	30,000	7,307	560,021
	Dec. 31	560,021	224,01	30,000	7,599	552,421
2019	Jun. 30	552,421	220,97	30,000	7,903	544,518
	Dec. 31	544,518	217,81	30,000	8,219	536,299

P 10–7 continued

d. The carrying value of the bonds at December 31, 2019:
   Case A: $500,000
   Case B: $466,878
   Case C: $536,299

2.

		CASE A		CASE B		CASE C	
2019							
Jan. 1	Cash	500,000		432,899		581,109	
	Bond Discount	—		67,101		—	
	Bond Payable		500,000		500,000		500,000
	Bond Premium		—		—		81,109
Jun. 30	Interest Expense	30,000		30,000		30,000	
	Cash		30,000		30,000		30,000
30	Interest Expense	—		6,302		—	
	Bond Discount		—		6,302		—
30	Bond Premium	—		—		7,903	
	Interest Expense		—		—		7,903
Dec. 31	Interest Expense	30,000		30,000		30,000	
	Cash		30,000		30,000		30,000
31	Interest Expense	—		6,806		—	
	Bond Discount		—		6,806		—
31	Bond Premium	—		—		8,219	
	Bond Interest Expense		—		—		8,219

P 10–8 (Appendices)

1. Issue price computation:

Present value of $300,000 at the end of 6 periods at 8%: use 0.630170	$189,051
Present value of $18,000 payments for 6 periods at 8%: use 4.622880	83,212
Issue price	$272,263

2.

Issue of $300,000 Bonds Payable for $272,263
Amortization Table
Using Market Interest Rate of 16 Per Cent

		A	B	C	D	E
Year	*Six month period ending*	*Beginning bond carrying amount*	*(1/2 x 16% = 8% x A) Using 16% market rate to calculate periodic interest expense*	*Actual cash interest paid*	*(B – C) Periodic premium amort.*	*(A + D) Ending bond carrying amount*
2017	Jun. 30	$272,263	(8% x $272,263) = $21,781	$18,000	$3,781	$276,044
	Dec. 31	276,044	(8% x 276,044) = 22,084	18,000	4,084	280,128
2018	Jun. 30	280,128	(8% x 280,128) = 22,410	18,000	4,410	284,538
	Dec. 31	284,538	(8% x 284,538) = 22,763	18,000	4,763	289,301
2019	Jun. 30	289,301	(8% x 289,301) = 23,144	18,000	3,144	294,445
	Dec. 31	294,445	(8% x 294,445) = 23,555	18,000	5,555	300,000

3. Calculation of financing percentage

		A	B	
Year	*Six month period ending*	*Bond carrying amount*	*Six-month interest expense*	*(B/A)*
2017	Jun. 30	$272,263	$21,781	8.0%
	Dec. 31	276,044	22,084	8.0%
				16.0%
2018	Jun. 30	280,128	22,410	8.0%
	Dec. 31	284,538	22,763	8.0%
				16.0%
2019	Jun. 30	289,301	23,144	8.0%
	Dec. 31	294,445	23,555	8.0%
				16.0%

4. The interest rate expense remains constant from period to period under the effective interest amortization method, though the amortization amount varies each period. The effective interest rate would vary slightly under the straight–line method. The former method is theoretically superior. From a practical point of view, there is often no material difference from period to period when using the straight–line method; therefore, the effective interest method may not be worth the effort.

CHAPTER ELEVEN
Equity Financing

Concept Self-check

1. The corporate form of organization offers the following advantages:
   a. It is a legal entity with unlimited life; its existence is separate from its owners; and it has many of the rights and responsibilities of an individual.
   b. It has limited liability; the owners are liable only for the amount they invest in the corporation.
   c. Acquiring capital is facilitated by being able to issue shares (ownership units) with different risk and reward structures to many owners.
   d. Corporations may pay income taxes at rates that may be lower than rates for individuals.

2. The owners of the corporation are liable for only the amount they have each invested. If the corporation fails, its assets are used to pay the creditors. If assets are not sufficient to pay all creditors, the shareholders have no further liability. Creditors are protected to some degree by disclosure of the corporation's limited liability.

3. Some of the rights of common shareholders are as follows:
   a. The right to participate in the management of the corporation by voting at shareholders' meetings (1 share generally equals 1 vote)
   b. The right to participate in dividends when they are declared by the corporation's board of directors
   c. The right to participate in a distribution of assets on liquidation
   d. The right to appoint auditors.

   The rights may be printed on the share certificate itself; they are detailed in the articles of incorporation.

Concept Self-check continued

4. One or more interested parties prepare and file an application for incorporation with the appropriate governmental agency. The forms describe the name, head office address, classes and maximum number of shares that the corporation requesting to issue, and the number of directors, among other information. A certificate of incorporation or similar document is issued by the state on approval of the application. The incorporators hold the initial shareholders' meeting to issue share certificates, and the shareholders elect a board of directors and approve the by–laws (set of corporate rules and regulations). The directors hold a directors' meeting to appoint the officers to execute the policies approved by the board of directors.

5. The shareholders elect a board of directors, which appoints the officers of the corporation. The officers execute the policies approved by the board of directors. The directors are not involved in the daily management of the corporation.

6. a. The two main classes of shares are:

    i. *Preferred Shares*—a class of shares that has a preference over common shares. Holders of preferred shares are entitled to payment of dividends before common shareholders and usually have prior claims on a corporation's assets on liquidation. A fixed dividend rate may be attached to the shares. Some preferred shares may have voting privileges.

    ii. *Common Shares*—the class of shares that are the basic ownership units in a corporation. Ownership of common shares carries the right to vote, to share in dividends, and to share in the assets of the corporation if it is liquidated; however, all other claims to the assets of a corporation rank ahead of the common shareholders' claims.

   b. Terms relating to the present status of a corporation's shares:

    i. *Authorized Shares*—the designated number of shares within each class of shares that a corporation may issue.

    ii. *Unissued Shares*—the shares of share capital in each class that a corporation is authorized to issue but has not yet issued.

    iii. *Issued Shares*—the total number of authorized shares that have been issued in the name of shareholders; issued shares may not actually be in the hands of shareholders (e.g., treasury shares).

    iv. *Outstanding Shares*—authorized shares that have been issued and are actually in the hands of shareholders.

    v. *Reacquired Shares*—shares that have been re-purchased from shareholders, have not been cancelled, and have not been reissued (also called treasury shares).

Concept Self-check continued

7. Shares are preferred in that their owners

   a. Generally assume less risk than common shareholders. When a corporation is dissolved, preferred shareholders have first claim on the remaining assets after the creditors have been paid; and

   b. Have a prior claim to the earnings of the corporation. Preferred shareholders must be paid specified dividends before any payments are made to common shareholders.

   Preferred shareholders are similar to common shareholders in that both

   a. Own share certificates, evidence of corporate ownership;

   b. Have the legal guarantee that all shares of the same class will be treated equally with respect to rights and privileges attached to them;

   c. Have the right to dividends declared by the board of directors; and

   d. Have the right to participate in distribution of assets on liquidation of the corporation.

   Preferred shareholders differ from common shareholders in that

   a. Common shareholders can participate in the management of the corporation by voting at shareholders' meetings (though some preferred shares may have voting privileges);

   b. Common shareholders can appoint auditors;

   c. Common shareholders assume more risk than preferred shareholders.. However, common shareholders have more potential for receiving substantial dividends and increases in the value of their shares if the corporation is successful; and

   d. Common shareholders receive the balance of assets after other claims have been satisfied—in the case of a bankruptcy or liquidation, there are usually few or no other assets to distribute to common shareholders; preferred shareholders have prior claims.

8. The shares are restored to the status of authorized but unissued. The appropriate stated capital account must be reduced by the payment. Assuming that common shares are repurchased for cash, the entry would be:

Dr.	Common Shares	XXX	
Cr.	Cash		XXXX
	To record repurchase of outstanding shares.		

   These shares can subsequently be resold.

9. When the shares of a corporation are selling at a high price on the stock market, management may opt for a share split in order to put them more easily within the reach of more investors.

Concept Self-check continued

10. a. The number of authorized and issued shares doubles.

    b. Stated value per share halves.

11. The major components of the shareholders' equity section of the statement of financial position are share capital (preferred shares and common shares) and retained earnings. These two major components are distinguished because share capital represents invested capital not available for distribution to owners, while retained earnings are available for distribution as dividends.

12. Some of the main considerations involving the declaration of dividends are

    a. Whether or not there is enough cash, or whether the dividends can be paid by distribution of some other assets;

    b. Whether the policy of the corporation precludes dividend payments; and

    c. Whether there is a legal requirement that dividends must be declared.

13. A corporation may decide not to pay cash dividends even though it has a substantial net income because financial conditions may make it impractical or impossible.

    a. There may be insufficient cash, due to a significant investment in capital assets or reduction of debt, for instance. In a growth–oriented corporation, shareholders benefit from this strategy through increased earnings, which increase market prices for the shares.

    b. The policy of the corporation may preclude dividend payments.

    c. There is no legal requirement that dividends must be paid, unless otherwise specified by the various classes of shares.

    d. Dividends may be issued in shares of the corporation rather than in cash. A share dividend helps to preserve cash or to increase the number of shares traded on the stock market.

14. *The date of dividend declaration:* the corporation is legally required to pay the dividend; a liability is established.

    The date of record: shareholders who own the shares on this date will receive the dividend.

    The date of payment: the dividend is actually paid on this date.

Concept Self-check continued

15. Dividend preferences that may be attached to preferred shares are
    a. Preferred shareholders are entitled to dividends before any dividends are distributed to common shareholders;
    b. Preferred shares may be cumulative; undeclared dividends can accumulate from one year to the next; and
    c. Preferred shareholders may participate with common shareholders in dividend distributions beyond their usual preferred dividends.

    Preferred shares have returns that are more predictable and thus attract investors with a lower tolerance for risk. These advantages do not mean that purchasing preferred shares are necessarily better than purchasing common shares. Holding common shares has its own advantages. Common shareholders generally have legal control of the corporation. Ownership of commons shares carries the right to vote, to earn potentially unlimited dividends, and to have share values increase on stock markets.

16. If preferred shares are cumulative, undeclared dividends from previous years are accumulated and must be paid along with the current dividend. The unpaid dividends are called dividends in arrears. They are not a liability of the corporation unless dividends have been declared by the board of directors.
17. Book value is the amount of net assets represented by one share. With respect to common shares, book value represents the amount of net assets not claimed by creditors and preferred shareholders. With respect to preferred shares, it represents the amount that preferred shareholders would receive if the corporation were liquidated. This would include any dividends in arrears.

18. When only one class of shares exists, book value is calculated by dividing shareholders' equity by the number of shares outstanding. If both preferred and common shares exist, preferred shares are allocated the amount they would receive if the corporation were liquidated. The common shares receive any remaining balance. The liquidating value of preferred shares is printed on the share certificate. Some preferred shares have a cumulative dividend feature — they are entitled to dividends that are in arrears. This is included when calculating the book value of preferred shares.

Concept Self-check continued

19. The balance in shareholders' equity changes from period to period; thus the book value changes also, since it is based on the shareholders' equity balance. The reader of the financial statements can compare book value with market value to get an insight into the perceived value of the corporation by investors. Since the market price of shares are related to factors such as company earnings, dividend payments, and perceived future potential to generate earnings, a book value higher than a market price may be interpreted by an investor as indicating that the corporation's shares are a poor investment. Comparing the ratio of market value per share to book value per share among different corporations can indicate the stock market's expectations of relative profitability for each company.

20. Since the market price of shares are related to such factors as company earnings, dividend payments, and future earnings potential, a book value higher than a market price could be interpreted by an investor as indicating that the corporation's shares are a poor investment rather than a bargain.

21. A cash dividend reduces both the asset Cash and the shareholders' equity account Retained Earnings. A share dividend does not affect Cash; the Retained Earnings account is still reduced, but the account Common (or Preferred, if applicable) Shares is increased. A share dividend has no net effect on shareholders' equity. Example journal entries for each kind of dividend are as follows:

	Declaration Date			*Payment/Distribution Date*		
Cash Dividend	Dividends	X		Dividends Payable	X	
	Dividends Payable		X	Cash		X
Share Dividend	Share Dividend	X		Share Dividend to be Issued	X	
	Share Dividend to be issued		X	Common Shares		X

22. A share dividend is a dividend in the form of shares of the corporation. Retained earnings decrease and share capital increases. A share split is an action taken by the corporation to increase the number of shares outstanding and reduce the per-share market value. No journal entry is required to record a share split, and there is no effect on the accounting records.

Concept Self-check continued

23. A share dividend increases the number of shares held by each shareholder but the ownership percentage remains the same. If a 10 per cent share dividend is distributed, each shareholder holds more shares but the percentage of ownership remains the same, illustrated as follows:

	Ownership			
	Before Share Dividend		*After Share Dividend*	
Shareholders	*Shares*	*%*	*Shares*	*%*
W	250	25%	275	25%
X	250	25%	275	25%
Y	250	25%	275	25%
Z	250	25%	275	25%
	1,000	100%	1,100	100%

24. Unrestricted retained earnings are those that are available for the payment of dividends. The board of directors passes a resolution for a specific purpose to restrict retained earnings: for example, to accommodate a plant expansion. The journal entry required to place a restriction on retained earnings would be

Dr.	Retained Earnings	XXX	
Cr.	Retained Earnings—Restricted for . . .		XXX
	To place a restriction on retained earnings.		

25. Retained earnings represent net assets that are earned by a corporation over its life that have not been distributed as dividends to shareholders. As such, they can be used to invest in productive activities of the business.

CP 11–1

		Total share capital	*Retained earnings*
1.	Company is incorporated	x	x
2.	Issued shares with a stated value of $1	↑	x
3.	Split the common shares 2 for 1	x	x
4.	Recorded net income for the year	x	↑
5.	Reacquired common shares previously outstanding	↓	x
6.	Declared a cash dividend	x	↓
7.	Paid a cash dividend (retained earnings effect recorded when dividend declared)	x	x
8.	Declared a share dividend	↑	↓
9.	Created a restriction on retained earnings	x	x

CP 11–2

1.

	12% bonds	*Preferred shares*	*Common shares*
Income before interest and income taxes	$12,000,000	$12,000,000	$12,000,000
Less: Interest expense	4,800,000 [1]	-0-	-0-
Income before income taxes	7,200,000	12,000,000	12,000,000
Less: Income taxes at 50%	3,600,000	6,000,000	6,000,000
	3,600,000	6,000,000	6,000,000
Less: Preferred dividends	-0-	4,000,000 [2]	-0-
Net available to common shareholders (a)	$3,600,000	$2,000,000	$6,000,000
Number of common shares outstanding (b)	200,000	200,000	400,000
Earnings per common share (a/b)	$18	$10	$15

[1] $40,000,000 x 12% = $4,800,000
[2] 400,000 x $100 x 10% = $4,000,000

2. Issuing bonds is the financing option that is most advantageous to the common shareholders, all other factors being considered equal. It results in higher earnings per common share. A second advantage is that bondholders normally do not have any control over the company. Issuing shares will distribute control over a larger number of shareholders and the present shareholders' control would be diluted. A third advantage is that interest expense is deductible for tax purposes, while dividends are paid out of after–tax dollars. One disadvantage, which may make one of the other options more advantageous, is that interest expense is fixed. The company may not earn enough income to cover the interest expense in any given year if bonds are issued.

CP 11–3

1. Authorization of share issue:

   Memorandum

   The company is authorized under the [name of legislation] to issue an unlimited number of common shares and 10,000, 4% preferred shares.

2. Issue of 10,000 common shares:

2018			
Jan. 2	Intangible Assets	10,000	
	Common Shares		10,000

3. Issue of 1,000 preferred shares:

2018			
Jan. 2	Cash	3,000	
	Preferred Shares		3,000

CP 11–4

1.

2018			
Jan. 2	Land	500,000	
	Preferred Shares		500,000
	To record the purchase of a tract of land in exchange for preferred shares.		

2. The credit part of the transaction would be classified on the statement of financial position in the shareholders' equity section as part of share capital. The debit part of the transaction would be recorded as an asset in the property, plant, and equipment section.

CP 11–5

1. The average price received for each issued preferred share is $54 ($3,456/64).
2. The average price received for each issued common share is $2.10 ($1,680/800).
3. The total stated capital is $5,136 ($3,456 + 1,680).

CP 11–6

2018			
Dec.	Cash	30,000	
	Common Shares		30,000
	To record issue of common shares for cash.		
	Common Shares	5,000	
	Cash		5,000
	To record redemption of common shares.		
	Cash	15,000	
	Preferred Shares		15,000
	To record issue of preferred shares for cash.		
	Building	8,000	
	Cash		8,000
	To record purchase of a building for cash.		
	Land	10,000	
	Building	12,000	
	Common Shares		22,000
	To record purchase of land and building through issue of common shares.		
	Cash	7,000	
	Common Shares		7,000
	To record issue of common shares for cash.		
	Cash	4,000	
	Land		4,000
	To record sale of land for cash.		
	Preferred Shares	6,000	
	Cash		6,000
	To record redemption of preferred shares for cash.		
	Incorporation Costs	14,000	
	Preferred Shares		14,000
	To record issue of preferred shares in exchange for incorporation costs. (If incorporation costs amounts are judged material, this would be recorded as an asset; otherwise, it would be expensed.)		

CP 11–7

1. 2018

May 25	Dividends Declared	100,000	
	Dividends Payable		100,000
	To record the declaration of the dividend.		

2. 2018

June 26	Dividends Payable	100,000	
	Cash		100,000
	To record payment of the dividend.		

CP 11–8

1. Since the preferred shareholders have cumulative shares, they must receive all dividends in arrears and the current dividend before the common shareholders receive any dividends.

   Dividends received by preferred shareholders
   = Dividends in arrears for one year + Dividends for current year
   = $5,000 + 5,000 = $10,000

2. Common shareholders receive the balance, or $4,000.

   Dividends received by common shareholders
   = Total dividends – Dividends received by preferred shareholders
   = $14,000 – $10,000 = $4,000

CP 11–9

Dividends in arrears	$ 2,000
Liquidation value	25,000
Preferred shares	$27,000

Book value of preferred shares = Preferred shares/Number of preferred shares
= $27,000/5,000
= $5.40 per preferred share

Book value of common shares = (Total shareholders' equity—Preferred shares) / Number of common shares
= ($210,000 – 27,000)/20,000
= $9.15 per common share

CP 11–10

1. a. Book value per preferred share = ($300 + 30)/300 shares = $1.10 per share

   b. Book value per common share = ($992 – 330)/20 shares = $33.10 per share

2. Book value per common share after split = $662/40 shares = $16.55 per share

CP 11–11

1. The amount of cumulative preferred dividends in arrears at December 31, 2018 does not appear as a liability. Although the dividends pertain to cumulative shares, no liability exists until such time as the board of directors *declares* a dividend. Disclosure of dividends in arrears would be made in a note to the financial statements as shown here, however.

2. The company may have sufficient retained earnings but may not have sufficient cash to pay the dividends, taking into consideration other needs of the company. Perhaps working capital is being conserved for an important investment project, for instance. The retained earnings balance may be restricted and consequently not available at present for shareholder dividends.

3.

Amount available for all dividends (1/2 x $35,000)	$17,500
Priority given to cumulative preferred shareholders	
Arrears to December, 2018	(15,000)
Preferred dividends for 2019	(5,000)
Deficiency	$(2,500)

The $2,500 deficiency in 2019 preferred dividends has to be paid in the future before any dividends are paid to common shareholders. There will be no dividends available for common shareholders at December 31, 2019 based on the projections.

CP 11–12

Common share dividend to be issued = (5,000 shares x 10%) x $10
= $5,000

2018			
Jan. 15	Retained Earnings	5,000	
	Common Share Dividend to be Issued		5,000
Feb. 15	Common Share Dividend to be Issued	5,000	
	Common Shares		5,000

CP 11–13

2018			
Apr. 1	Share Dividend Declared	15,000	
	Common Share Dividend To Be Issued		15,000
	To record the declaration of the share dividend. (10,000 x 10% x $15)		
Apr. 15	Common Share Dividend To Be Issued	15,000	
	Common Shares		15,000
	To record the distribution of the dividend.		
Jun. 1	Cash Dividends Declared	22,000	
	Dividends Payable		22,000
	To record the declaration of the cash dividend. [(10,000 + 1,000) x $2]		
Jun. 30	Dividends Payable	22,000	
	Cash		22,000
	To record the cash dividend payment.		
Dec. 31	Retained Earnings	37,000	
	Share Dividend Declared		15,000
	Cash Dividend Declared		22,000
	To close the Dividends Declared general ledger account to the Retained Earnings account.		

CP 11–14

1.

2018			
Jan. 5	Cash	150	
	Common Shares		150
	To record issue of 10 common shares for cash.		
12	Land	50	
	Buildings	100	
	Machinery	100	
	Common Shares		250
	To record issue of 50 common shares in exchange for assets.		
Feb. 28	Share Dividend Declared	42	
	Common Share Dividend to be Issued		42
	To record the share dividend [(10 + 50) x 10% = 6 shares x $7]. (An entry to record net income to date could be made, but is not necessary.)		
Mar. 15	Common Share Dividend to be Issued	42	
	Common Shares		42
	To record issue of dividend on common shares.		

CP 11–14 continued

Dec. 31	Income Summary	200	
	Retained Earnings		200
	To close the income summary account.		
Dec. 31	Cash Dividend Declared	66	
	Dividends Payable		66
	To record the cash dividend declared [(10 + 50 + 6) x $1]		
Dec. 31	Retained Earnings	108	
	Share Dividend Declared		42
	Cash Dividend Declared		66
	To close 2018 dividends to retained earnings.		

2. a.

Blitz Power Tongs Inc.
Partial Statement of Financial Position
At January 31, 2018

Shareholders' Equity

Common shares, stated value $6.67 per share		
Authorized—unlimited shares		
Issued and outstanding—60 shares	$400	

b.

Blitz Power Tongs Inc.
Partial Statement of Financial Position
At February 28, 2018

Shareholders' Equity

Common shares, stated value $6.70 per share		
Authorized—unlimited shares		
Issued and outstanding—60 shares	$400	
Common share dividend to be issued – 6 shares	42	$442
Retained earnings		
Net income	60	
Common share dividend declared	(42)	18*
Total shareholders' equity		$460

*alternately, these amounts could be shown on the statement of changes in equity and just the total retained earnings ($18) shown on the statement of financial position. Other reasonable presentation formats are acceptable.

CP 11–14 continued

c. Blitz Power Tongs Inc.
Partial Statement of Financial Position
At December 31, 2018

Shareholders' Equity

Common shares, stated value $7.37 per share		
Authorized—unlimited shares		
Issued and outstanding—60 shares		$442
Retained earnings		
Net income	$200	
Cash dividends declared	(66)	
Common share dividend declared	(42)	92
Total shareholders' equity		$534

Other presentation formats and disclosure are acceptable; for instance, information other than the ending share capital and retained earnings balances at each of the three statement of financial position dates could be disclosed in a note to the financial statements.

CP 11–15

1. 2018

Dec. 31	Retained Earnings	80,000	
	Retained Earnings – Restriction for Plant Expansion		80,000
	To record restriction per board of directors' resolution.		

2.

Shareholders' Equity

	2018
Share capital	$ 100,000
Retained earnings (Note X)	200,000
Total shareholders' equity	$300,000

Note X: On December 31, 2018 the board of directors authorized a $80,000 restriction on the retained earnings for plant expansion.

3. 2019

Jun. 30	Plant	90,000	
	Cash		90,000
	To record construction of building.		

4. 2019

Jul. 31	Retained Earnings – Restriction for Plant Expansion	80,000	
	Retained Earnings		80,000
	To record removal of restriction.		

CP 11–16

Stetson Auto Inc.
Partial Statement of Financial Position
As at December 31, 2018

Share Capital		
Common shares, stated value $1		
Issued and outstanding — 10,000 shares		$ 10,000
Retained Earnings		
Restricted for plant addition	$150,000	
Unrestricted	400,000[1]	
Total retained earnings		550,000
Total shareholders' equity		$560,000

Alternately, these ending balances could be disclosed in a note to the financial statements. The partial statement of financial position would just show:

Share capital (Note X)	$ 10,000
Retained earnings (Note Y)	550,000
Total shareholders' equity	$560,000

Stetson Auto Inc.
Statement of Changes in Equity
For the Year Ended December 31, 2018

	Share capital	*Retained earnings*		*Total equity*
		Unrestricted	*Restricted*	
Balance at Jan. 1, 2018	$ -0-	$ -0-	$ -0-	$ -0-
Common shares issued (Note X)	8,000			8,000
Net income		575,000		575,000
Cash dividends declared		(23,000)		(23,000)
Common share dividend declared	2,000	(2,000)		
Restriction for plant addition (Note Y)		(150,000)	150,000	
Balance at Dec. 31, 2018	$10,000	$400,000	$150,000	$560,000

P 11–1

1.

	12% bonds	*Preferred shares*	*Common shares*
Income before interest and income taxes	$1,000,000	$1,000,000	$1,000,000
Less: Interest expense	240,000 [1]	-0-	-0-
Income before income taxes	760,000	1,000,000	1,000,000
Less: Income taxes at 50%	380,000	500,000	500,000
	380,000	500,000	500,000
Less: Preferred dividends	-0-	160,000 [2]	-0-
Net Available to common shareholders (a)	$380,000	$340,000	$500,000
Number of common shares outstanding (b)	40,000	40,000	90,000
Earnings per common share (a/b)	$9.50	$8.50	$5.56

[1] $2,000,000 x 12% = $240,000
[2] 20,000 x $8 = $160,000

2. As representatives of common shareholders results based on earnings per share are important. On this basis, issuing bonds is the best option, since it results in higher earnings per share.

3. Other factors to be considered by board of directors:

   a. Bondholders do not normally have control over managerial decisions. By issuing shares, the present shareholders' control would be spread over a larger number of shareholders.

   b. The company may not be profitable enough to be able to cover a fixed annual interest charge.

P 11–2

1\. a. 2018

a.	Jan. 2	Cash	18,000	
		Preferred Shares		18,000
		To record issue of 3,000 preferred shares for cash.		
b.	Jan. 2	Cash	4,000	
		Common Shares		4,000
		To record issue of 2,000 common shares for cash.		
c.	Jan. 12	Cash	25,000	
		Preferred Shares		25,000
		To record issue of 5,000 preferred shares for cash.		
d.	Aug. 1	Cash	1,000	
		Common Shares		1,000
		To record issue of 1,000 common shares for cash.		
e.	Dec. 15	Land	15,000	
		Preferred Shares		15,000
		To record issue of 500 preferred shares for land.		

2\.

Crystal Clear Electronics Inc.
Partial Statement of Financial Position
At December 31, 2018

Shareholders' Equity

Share capital (Note X)	$63,000

Note X (reasonable alternate wording is acceptable)

The share capital of Crystal Clear Electronics Inc. consists of an unlimited number of no-par value common shares and 20,000, 5%, no-par value, non-cumulative, non-voting preferred shares. Preferred shares take precedence when dividends are declared and upon repayment of capital. Common shares represent one vote each at shareholders' meetings of Crystal Clear Electronics Inc.

During the year, 3,000 common shares with an average stated value of $1.67[1] per share were issued. This represented 100% of total common shares issued. 8,000 preferred shares with an average stated value of $5.38[2] per share were issued for cash. This represented 95% of total preferred shares issued. 500 preferred shares with a stated value of $30 per share were issued to acquire land for future operations. This represented 5% of total preferred shares issued.

At December 31, 2018 dividends on preferred shares were in arrears by $2,150[3].

[1] [($4,000 + 1,000)/(2,000 + 1,000)] = $1.67 (rounded)
[2.] [($18,000 + 25,000)/(3,000 + 5,000)] = $5.38 (rounded)
[3] ($18,000 + 25,000) x 5% = $2,150

P 11–2 continued

3. Crystal Clear Electronics Inc.
Statement of Changes in Equity
For the Years Ended December 31, 2018 and 2019

	Share Capital		
	Common	*Preferred*	*Total*
Balance at January 1, 2018	$ -0-	$ -0-	$ -0-
Shares issued during 2018			
Common – 3,000	5,000		5,000
Preferred – 8,500		58,000	58,000
Balance at December 31, 2018	5,000	58,000	63,000
2:1 Common share split at Dec. 15, 2019	-0-	-0-	-0-
Balance at December 31, 2019			
Common – 6,000	$5,000		
Preferred – 8,500		$58,000	
Total			$63,000

Alternate presentation formats are acceptable. For example, the share split and ending shares issued could be disclosed in a note.

P 11–3

1.

Before Split *Shareholders' Equity*		After Split *Shareholders' Equity*	
Common Shares		Common Shares	
Authorized—5,000 Shares		Authorized—5,000 Shares	
Issued and Outstanding — 1,000 shares	$100,000	Issued and Outstanding — 5,000 shares	$100,000

2.

Common Shares No. XXX

Date	*Description*	*F*	*Debit*	*Credit*
2019 April 15	Memorandum The outstanding shares were increased from 1,000 to 5,000 by a 5–for–1 share split.			

3. The market price per share would be $8 ($40/5). The share split should not have any effect on the overall value of the firm to investors. Therefore, if five times as many shares are now outstanding, each share should be worth 1/5 as much.

P 11–4

Gearing Gravel Limited
Statement of Changes in Equity
For the Year Ended December 31, 2018

	Common	*Preferred*	*Ret. earnings*	*Treas. shares*	*Total equity*
Balance at January 1, 2018	$10,000	$50,000	$100,000	$ -0-	$160,000
Shares issued	5,000				5,000
Net income			20,000		20,000
Share reacquired and held as treasury shares				(1,000)	(1,000)
Cash dividends declared					
Common shares			(500)		(500)
Preferred shares ($50,000 x 5%)			(2,500)		(2,500)
Balance at December 31, 2018	$15,000	$50,000	$117,000	$(1,000)	$181,000

Note X

The authorized share capital of Gearing Gravel Limited consists of an unlimited number of voting common shares with a stated value of $50 per share, and 1,000 5%, non-voting, non-cumulative preferred shares with a stated value of $50 per share. Preferred shares take precedence when dividends are declared and upon repayment of capital. Common shares represent one vote at shareholders' meetings of Gearing Gravel Limited.

During the year, 100 common shares were issued for a stated value of $50 per share. This represents 33%[1] of total common shares issued as of December 31, 2018. 20 common shares were reacquired during the year and held as treasury shares. This represents 7%[2] of total common shares issued as of December 31, 2018.

[1] 100/300 = 33% (rounded)
[2] 20/300 = 7% (rounded)

(Alternate presentation and disclosure formats are acceptable, providing that information contained in the note and statement of changes in equity shown here are disclosed in some fashion.)

P 11–5

		Assets	Liabilities	Shareholders' Equity
1.	Common shares issued for cash	↑	x	↑
2.	Declared a cash dividend	x	↑	↓
3.	Common shares split 3:1	x	x	x
4.	Calculated book value of common shares	x	x	x
5.	Paid cash dividend related to item 2 above	↓	↑	x
6.	Recorded restriction of retained earnings	x	x	x

P 11–6

1.	a.	Common Shares	4,000	
		Cash		4,000
		To record reacquisition of 400 common shares at $10.		
	b.	Memorandum		
		Split common shares 2–for–1; issued shares increased from 4,400 to 8,800 shares		
	c.	Cash	600	
		Common Shares		600
		To record issue of 200 common shares for cash.		
	d.	Income Summary	19,500	
		Retained Earnings		19,500
		To close income summary.		
	e.	Retained Earnings	5,000	
		Retained Earnings—Restricted for Plant Expansion		5,000
		To record restriction of retained earnings for plant expansion. (Complete only if Appendix 2 is covered.)		

P 11–6 continued

2.

River Valley Produce Limited
Statement of Changes in Equity
For the Year Ended December 31, 2019

	Share capital		*Retained earnings*			*Other*	*Total equity*
	Common shares	*Preferred shares*	*Restricted for plant expansion*	*Un-restricted*	*Total*	*Treas. shares*	
Balance at Jan. 1, 2019	$24,000	$15,000	$ -0-	$40,000	$40,000	$ -0-	$79,000
Shares reacquired and held as treasury shares						(4,000)	(4,000)
Common shares Issued	600						600
Restriction for plant expansion			5,000	(5,000)			
Net income				19,500	19,500		19,500
Balance at Dec. 31, 2019	$24,600	$15,000	$5,000	**$54,500**	$59,500*	(4,000)	$95,100

*If appendix 2 is not covered, only the "Total" column of retained earnings applies. Also, there would be no row entitled, "Restriction for plant expansion".

3. $54,500 is available for distribution, the amount of unrestricted retained earnings at December 31, 2019 (see bolded amount above). If Appendix 2 is not covered, $59,500 is available.

P 11–7

1. Stated value per common share = $\dfrac{\text{Dollar amount of shares issued}}{\text{Number of shares outstanding}}$
= $3,070/300 = $10.23 (rounded)

   Book value per common share = $\dfrac{\text{Total equity}}{\text{Number of shares outstanding}}$
= $3,570/300 = $11.90

2. There is little relationship between market price and the book value of a share. Book value provides only a basis on which to compare two or more companies, or to compare a company's market price per share. Market value is affected by investors' perceptions of future earnings expectations of the company. Also some assets recorded at historical cost, such as land, may have appreciated in value. This appreciation would be reflected in the market value of the common shares, but not in the book value.

P 11–8

1.

Date	Account	Debit	Credit
2020			
Feb. 15	Cash Dividends Declared	112	
	Dividends Payable—Preferred Shares		12
	Dividends Payable—Common Shares		100
Apr. 1	Dividends Payable—Preferred Shares	12	
	Dividends Payable—Common Shares	100	
	Cash		112
May 1	Share Dividends Declared	400	
	Share Dividends to be Issued		400
	(2,000 x 10% = 200 shares @ $2 FMV)		
Jun. 15	Share Dividends to be Issued	400	
	Common Shares		400
Aug. 15	Cash Dividends Declared	122	
	Dividends Payable—Preferred Shares		12
	Dividends Payable—Common Shares (2,200 x $.05)		110
Oct. 1	Dividends Payable—Preferred Shares	12	
	Dividends Payable—Common Shares	110	
	Cash		122
Dec. 15	Share Dividends Declared	660	
	Share Dividends to be Issued		660
	(2,200 x 10% x $3 = $660)		
31	Income Summary	1,400	
	Retained Earnings		1,400
31	Retained Earnings	1,294	
	Share Dividends Declared		1,060
	Cash Dividends Declared		234

2.

TWR Contracting Inc.
Statement of Changes in Equity
For the Year Ended December 31, 2020

	Common shares	*Preferred shares*	*Retained earnings*	*Total equity*
Balance at Jan. 1, 2020	$ 400	$2,000	$ 900	$ 3,300
Net income			1,400	1,400
Dividends declared				
Cash			(234)	(234)
Common shares	1,060		(1,060)	
Balance at Dec. 31, 2020	$1,460	$2,000	$ 1,006	$ 4,466

P 11–9

1\.

Cash dividends paid on December 31, 2019	$25,000
Cumulative and unpaid balance of dividends on preferred shares that was not declared per March 20 entry (50,000 x $.20)	(10,000)
Cash dividends paid on common shares	$15,000

2\.

2019			
Mar. 20	Cash Dividends Declared	10,000	
	Dividends Payable—Preferred Shares		10,000
Apr. 1	Dividends Payable—Preferred Shares	10,000	
	Cash		10,000
Jun. 15	Cash Dividends Declared	20,000	
	Dividends Payable—Common Shares		20,000
Jul. 10	Dividends Payable—Common Shares	20,000	
	Cash		20,000
Aug. 1	Cash	200,000	
	Common Shares		200,000
Dec. 15	Retained Earnings	20,000	
	Dividends Payable—Common Shares		20,000
Dec. 31	Cash Dividends Declared[1]	10,000	
	Dividends Payable – Common Shares	15,000	
	Cash		25,000

Remaining cumulative dividends on preferred shares = 50,000 x $.20 = $10,000

[1] No preferred share dividends were declared, but these are cumulative. $10,000 remains to be paid per part 1 above. Therefore, the debit to record the preferred shares dividend goes directly against the Cash Dividends Declared general ledger account.

P 11–9 continued

3\.

Apex Auto Corporation
Statement of Changes in Equity
For the Year Ended December 31, 2019
('000s)

			Retained earnings			
	Common shares	*Preferred shares*	*Restricted for plant expansion*	*Un-restricted*	*Total*	*Total equity*
Balance at Jan. 1, 2019	$ 750	$ 500	$ 150	$ 600	$ 750	$2,000
Common shares Issued	200					200
Restriction for plant extension			75	(75)		
Net income				165	165	165
Dividends						
Preferred[1]				(20)[1]	(20)	(20)
Common[2]				(40)[2]	(40)	(40)
Balance at Dec. 31, 2019	$ 950	$ 500	$ 225	$ 630	$ 855*	$2,305

[1] March 20 dividends	$10,000
Dec. 31 cumulative dividends deemed paid	10,000
Total	$20,000

[2] June 15 dividends	$20,000
Dec. 15 dividends	20,000
Total	$40,000

*If appendix 2 is not covered, only the "Total" column of retained earnings applies. Also, there would be no row entitled, "Restriction for plant extension".

CHAPTER TWELVE
Proprietorships and Partnerships

Concept Self-check

1. A proprietorship differs from a corporation because:
   a. it is not a separate legal entity from the owner;
   b. it is not taxed separately on its earnings; proprietorship earnings are included in income reported on a proprietor's personal income tax return.; and
   c. it does not have limited liability; if an unincorporated business cannot pay its debts, creditors have claims on the personal assets of the owner.

2. Dr. Cash XXX
   Cr. Proprietor's Capital XXX

Dr.	Cash	XXX	
Cr.	Proprietor's Capital		XXX

3. The closing entries of a proprietorship do not require net income to be closed to Retained Earnings general ledger account. Rather, net income is closed to the Proprietor's Capital general ledger account. . There are no dividend payments in a proprietorship. Withdrawals by the proprietor are closed to the Proprietor's Capital account. All profits are credited to the Proprietor's Capital account.

4. A corporation's statement of financial position distinguishes between investments in the corporation (shares) and net income generated by the company less its dividends distributions (retained earnings). A proprietorship makes no such distinction. Since there is only one owner and no separate legal entity, there is no distinction made between contributions, earnings, and distributions of profit in a proprietorship.

5. A partnership is an unincorporated form of business organization in which the entity is owned by two or more persons. Five characteristics of a partnership are:
   a. Limited life — if a partner is admitted, withdraws, or dies, the existing partnership is dissolved and the business continues under a new partnership agreement.
   b. Unlimited liability — in general, each partner is personally liable for the debts that the partnership cannot pay. In the event that a partner cannot pay his/her share of partnership debts, the other partners can be called on to pay personally for such debts.
   c. Mutual agency — each partner can make binding agreements not only on the partnership, but also on the other partners.

Concept Self-check continued

d. Co-ownership of assets — all assets contributed to the partnership by individual partners are jointly owned by all partners.

e. Sharing of profits and losses — if the partnership agreement does not stipulate how profits and losses will be shared, all profits and losses are shared equally.

6. The advantages of a partnership are:

   a. The knowledge, skills, and financial resources of two or more persons can be combined.

   b. Partnerships can be formed relatively easily and quickly.

   c. A partnership can act promptly as a business enterprise in all matters. A corporation may be restricted in its actions on certain matters by its charter, by laws, or by statute.

   d. Many of the formal government reports required of a corporation are not required of the partnership.

   e. Income taxes are not levied against partnerships. The partners, however, report on their individual tax returns their share of partnership income.

   The disadvantages of partnerships are:

   a. Liability is usually unlimited. Partners are liable for all debts of the partnership.

   b. The life of the partnership is limited. Death, withdrawal, or admission of a partner; agreement to terminate; bankruptcy; and incapacity of a partner are all terminate a partnership.

   c. The partnership is a mutual agency; that is, each partner may act in business matters as the agent of the partnership.

   d. The ability of a partnership to raise funds may be limited.

7. To account for a partnership, two types of accounts are used. One is the capital account, where contributions and withdrawals by each partner are recorded, along with the share of profits and losses. The withdrawals account records distributions and is closed to the capital account at the end of each fiscal period. Each partner has his/her own capital and withdrawals account.

   In a corporation, a general ledger account called Share Capital or Common Shares is used to record the amount of shares issued. A separate account called Retained Earnings records all net income, losses and distributions to shareholders.

Concept Self-check continued

8. Profits and losses are divided equally among partners if no agreement exists. Otherwise, several methods may be followed to allocate profits or losses Formulas often consider three factors — a return to each partner based on relative levels of services rendered, a return on capital invested, and a further division of remaining profits and losses according to a fixed ratio.

9. Salary and interest allocations are included in the division of profits and losses because the time and effort contributed by individual partners to the business and the amount of contributed capital may differ among partners.

10. The statement of financial position of a partnership merely shows the ending capital balance of each partner. If many partners exist, a total capital amount is shown and the details of each partner's capital account appear in a statement of partners' capital.

11. A partner may be admitted to replace an existing partner. In this case, there is no change in the capital account balances. A new partner may be admitted by new contributions to the partnership. If the amount invested exceeds the amount of credit that the partner receives in the partnership, the excess is credited to the other partners as a bonus on the basis of the profit sharing agreement. The bonus may be paid in order to gain admission to the partnership.

12. An existing partner may withdraw by either selling his/her interest to a new partner or selling to the remaining partners. If the partner sells to a new partner, there is no change in the assets or capital of the partnership. Payment is a private transaction. If the partner sells to existing partners, the assets and equity of the partnership may change if the value of the partnership interest as agreed is different from the partnership interest as recorded in the accounting records. Also, an entry must be made to record the change and transfer the capital of the withdrawing partner to the remaining partners.

13. A deficiency is allocated to the other partners on the basis of the profit sharing agreement.

CP 12–1

1. An adjusting entry is needed to reallocate personal income taxes:

Proprietor's Withdrawals	5,000	
Income Taxes Expense		5,000

The income statement would then appear as follows:

R. Black Proprietorship
Income Statement
For the Year Ended December 31, 2018

Sales	$166,000
Cost of goods sold	100,000
Gross profit	66,000
Operating expenses	
Rent	24,000
Net income	$42,000

2.

R. Black Proprietorship
Statement of Proprietor's Capital
For the Year Ended December 31, 2018

Balance at Jan. 1, 2018 (derived)	$ -0-
Contributions	5,000
Net income	42,000
Withdrawals	(12,000)
Balance at Dec. 31, 2018	$ 35,000

CP 12–1 continued

3.

R. Black Proprietorship
Statement of Financial Position
At December 31, 2018

Assets	
Current	
Cash	$10,000
Accounts receivable	20,000
Inventory	30,000
Total assets	$60,000
Liabilities	
Current	
Accounts payable	$25,000
Proprietor's Capital	
R. Black, capital	35,000
Total liabilities and proprietor's capital	$60,000

4.

Sales	166,000	
Cost of Goods Sold		100,000
Rent Expense		24,000
Income Summary		42,000
Income Summary	42,000	
R. Black, Capital		42,000
R. Black, Capital	12,000	
R. Black, Withdrawals		12,000

CP 12–2

1.

R. Black Ltd.
Income Statement
For the Year Ended December 31, 2018

Sales	$166,000
Cost of goods sold	100,000
Gross profit	66,000
Operating expenses	
Rent	24,000
Income before income taxes	42,000
Income taxes	5,000
Net income	$37,000

2.

R. Black Ltd.
Statement of Changes in Equity
For the Year Ended December 31, 2018

	Share capital	*Retained earnings*	*Total*
Balance at Jan. 1, 2018	$5,000	$ -0-	$ 5,000
Net income		37,000	37,000
Dividends		(7,000)	(7,000)
Balance at Dec. 31, 2018	$5,000	$30,000	$35,000

3.

R. Black Ltd.
Statement of Financial Position
At December 31, 2018

	Assets	
Current		
Cash		$10,000
Accounts receivable		20,000
Inventory		30,000
Total assets		$60,000
	Liabilities	
Current		
Accounts payable		$25,000
	Shareholders' Equity	
Share capital	$ 5,000	
Retained earnings	30,000	35,000
Total liabilities and shareholders' equity		$60,000

CP 12–2 continued

4.	Sales	166,000	
	Cost of Goods Sold		100,000
	Rent Expense		24,000
	Income Taxes Expense		5,000
	Income Summary		37,000
	Income Summary	37,000	
	Retained Earnings		37,000
	Income Summary	7,000	
	Dividends		7,000

CP 12–3

1.	G, Capital	30,000	
	I, Capital		30,000
	To record transfer of G's partnership interest to new partner I.		

2.	G, Capital ($30,000 – 17,100)	12,900	
	H, Capital ($10,000 – 17,100)		7,100
	I, Capital		3,800
	Cash		2,000

To record payment of bonus to new partner I and reallocation of partnership interest as follows:

G, Capital	$30,000
H, Capital	10,000
Bonus payment	(2,000)
Capital of new partnership	$38,000

Allocated as:

G (45%)	$17,100
H (45%)	17,100
I (10%)	3,800
	$38,000

CP 12–3 continued

3. Land 100,000
   G, Capital ($30,000 – 28,000) 2,000
   H, Capital ($10,000 – 7,000) 3,000
   I, Capital 105,000
   To record contribution of assets by new partner I and reallocation of partnership interest as follows:

G, Capital	$30,000
H, Capital	10,000
I, Investment	100,000
Capital of new partnership	$140,000
Allocated as:	
G (20%)	$28,000
H (5%)	7,000
I (75%)	105,000
	$140,000

CP 12–4

		Debit	Credit
1.	X, Capital	10,000	
	T, Capital		10,000
	To record transfer of X's partnership interest to new partner T.		
2.	X, Capital	10,000	
	Y, Capital		10,000
	To record transfer of X's partnership interest to existing partner Y.		
3.	X, Capital	10,000	
	Accounts Payable	2,000	
	Y, Capital		1,200
	Z, Capital		800
	Cash		5,000
	Inventory		5,000
	To record dispersal of partnership net assets to withdrawing partner X and transfer of X's partnership interest to existing partners Y and Z.		

CP 12–5

1.

Able, Brown, and Crown
Statement of Partnership Liquidation
For the Month Ending November 30, 2018

	Cash	Other assets	Liabilities	Partners' capital		
				Able	Brown	Crown
Balance, November 1, 2018	$ 20,000	$180,000	$50,000	$37,000	$65,000	$48,000
Sale of other assets and	100,000	(180,000)				
allocation of loss ($80,000)				(32,000)	(32,000)	(16,000)
	120,000	$ -0-	50,000	5,000	33,000	32,000
Payment of liabilities	(50,000)		(50,000)			
	70,000		$ -0-			
Distribution of cash	(70,000)			(5,000)	(33,000)	(32,000)
Balance, November 30, 2018	$ -0-			$ -0-	$ -0-	$ -0-

2\.

	Debit	Credit
a. Loss on Sale of Other Assets	80,000	
Cash	100,000	
Other Assets		180,000
To record sale of other assets for cash.		
b. Able, Capital	32,000	
Brown, Capital	32,000	
Crown, Capital	16,000	
Loss on Sale of Other Assets		80,000
To allocate loss on sale of other assets.		
c. Accounts Payable	50,000	
Cash		50,000
To record the payment of liabilities.		
d. Able, Capital	5,000	
Brown, Capital	33,000	
Crown, Capital	32,000	
Cash		70,000
To record payment of capital accounts.		

P 12–1

1.

B. White and C. Green Partnership
Income Statement
For the Year Ended December 31, 2018

Sales		$322,000
Cost of goods sold		160,500
Gross profit		161,500
Operating expenses		
Rent	36,000	
Advertizing	27,200	
Delivery	9,600	
Office	12,800	
Utilities	23,300	108,900
Net income		$ 52,600

2.

B. White and C. Green Partnership
Statement of Partners' Capital
For the Year Ended December 31, 2018

	White	*Green*	*Total*
Balance at Jan. 1, 2018	$20,000	$10,000	$ 30,000
Contributions	10,000	10,000	20,000
Net income	26,300	26,300	52,600
Withdrawals	(7,000)	(5,000)	(12,000)
Balance at Dec. 31, 2018	$49,300	$41,300	$ 90,600

P 12–1 continued

3. B. White and C. Green Partnership
Statement of Financial Position
At December 31, 2018

Assets		
Current		
Cash		$41,000
Accounts receivable		68,400
Inventory		27,000
Total assets		$136,400
Liabilities		
Current		
Accounts payable		$45,800
Partners' Capital		
B. White, capital	$49,300	
C. Green, capital	41,300	90,600
Total liabilities and partners' capital		$136,400

4.

Sales	322,000	
Cost of Goods Sold		160,500
Rent		36,000
Advertizing		27,200
Delivery		9,600
Office		12,800
Utilities		23,300
Income Summary		52,600
Income Summary	52,600	
B. White, Capital		26,300
C. Green, Capital		26,300
B. White, Capital	7,000	
B. White, Withdrawals		7,000
C. Green, Capital	5,000	
C. Green, Withdrawals		5,000

P 12–2

1.

B. White Proprietorship
Statement of Proprietor's Capital
For the Year Ended December 31, 2018

Balance at Jan. 1, 2018	$ 30,000
Contributions	20,000
Net income	52,600
Withdrawals	(12,000)
Balance at Dec. 31, 2018	$ 90,600

2.

BW and CG Ltd.
Statement of Changes in Equity
For the Year Ended December 31, 2018

	Share capital	*Retained earnings*	*Total*
Balance at Jan. 1, 2018	$200	$29,800	$ 30,000
Common shares issued	20,000		20,000
Net income		52,600	52,600
Dividends declared		(12,000)	(12,000)
Balance at Dec. 31, 2018	$20,200	$70,400	$ 90,600

P 12–3

1.

Income Summary		52,600	
B. White, Capital			32,875
C. Green, Capital			19,725
To allocate 2018 net income as follows:			
White ($52,600 x 5/8)	$32,875		
Green ($52,600 x 3/8)	19,725		
	$52,600		

P 12–3 continued

2. Income Summary 52,600
   B. White, Capital 37,760
   C. Green, Capital 14,840
   To allocate 2018 net income as follows:

	White	*Green*	*Total*
Profit to be allocated			$52,600
Interest allocation:			
White: $20,000 x 10%	$ 2,000		
Green: $10,000x 10%		$ 1,000	(3,000)
Balance			49,600
Salary allocation:	30,000	10,000	(40,000)
Balance			9,600
Balance allocated in profit and loss sharing ratio:			
White: $9,600 x 3/5	5,760		
Green: $9,600 x 2/5		3,840	(9,600)
Balance			$ -0-
Total allocated to partners	$37,760	$14,840	

P 12–4

1.

	Bog	*Cog*	*Fog*	*Total*
Profit to be allocated				$40,000
Interest allocation:				
Bog: $60,000 x 10%	$ 6,000			
Cog: $100,000x 10%		$ 10,000		(18,000)
Fog: $20,000 x 10%			$ 2,000	
Balance				22,000
Salary allocation:	24,000	30,000	48,000	(102,000)
Balance (deficit)				(80,000)
Balance allocated in profit and loss sharing ratio:				
Bog: ($80,000) x 5/10	(40,000)			
Cog: ($80,000) x 3/10		(24,000)		80,000
Fog: ($80,000 x 2/10			(16,000)	
Balance				$ -0-
Total allocated to partners	($10,000)	$16,000	$34,000	

P 12–4 continued

2.	Income Summary	40,000	
	Bog, Capital	10,000	
	Cog, Capital		16,000
	Fog, Capital		34,000
	To record net income allocation to partners.		

P 12–5

1.

Profit and loss sharing plan		(a) Division with profit $60,000		(b) Division with loss $30,000	
		Bo	*Diddley*	*Bo*	*Diddley*
Plan A	Salary	$15,000	$ -0-	$ 15,000	$ -0-
	Balance	15,000 [1]	30,000 [2]	(15,000)	(30,000)
	Totals	$30,000	$30,000	$ -0-	$(30,000)
Plan B	Salary	$12,000	$ -0-	$ 12,000	$ -0-
	Interest	4,000	8,000	4,000	8,000
	Balance	18,000	18,000	(27,000)	(27,000)
	Totals	$34,000	$26,000	$(11,000)	$(19,000)

[1] ($60,000 – 15,000) x ($50,000/150,000) = $15,000
[2] ($60,000 – 15,000) x ($100,000/150,000) = $30,000

2. Plan A produces less income variability for Bo compared to plan B and more variability for Diddley. If the allocation based on salary is reasonable (that is, Bo actually works more hours than Diddley), plan B is likely more equitable.

P 12–6

1.

Good, capital	$30,000	
Hood, capital	26,000	
Food, capital	19,000	
Existing capital	75,000	
Investment by Mood	15,000	
Capital of new partnership (a)	$90,000	
Mood's capital (a x 1/4)	$22,500	

The new partner's bonus is recorded as:

Cash	15,000	
Good, Capital	2,500	
Hood, Capital	2,500	
Food, Capital	2,500	
Mood, Capital		22,500

2.

Good, capital	$ 30,000	
Hood, capital	26,000	
Food, capital	19,000	
Existing capital	75,000	
Investment by Mood	45,000	
Capital of new partnership (a)	$120,000	
Mood's capital (a x 1/4)	$ 30,000	

The bonus to existing partners is recorded as:

Cash	45,000	
Good, Capital		5,000
Hood, Capital		5,000
Food, Capital		5,000
Mood, Capital		30,000

P 12–7

1.

A, B, and C
Statement of Partnership Liquidation
For the Month Ending March 31, 2018

	Cash	*Other assets*	*Accounts payable*	*Partners' capital*		
				A	*B*	*C*
Balance, March 1, 2018	$ 10,000	$125,000	$ 10,000	$ 25,000	$ 37,500	$ 62,500
Sale of other assets and	42,500	(125,000)				
Allocation of loss ($82,500)				(27,500)	(27,500)	(27,500)
	52,500	$ -0-	10,000	(2,500)	10,000	35,000
Payment of liabilities	(10,000)		(10,000)			
	42,500		$ -0-			
Allocation of A's debit balance				2,500	(1,250)	(1,250)
				-0-	8,750	33,750
Distribution of cash	(42,500)				(8,750)	(33,750)
	$ -0-			$ -0-	$ -0-	$ -0-

2.

a. Loss on Sale of Other Assets	82,500	
Cash	42,500	
Other Assets		125,000
To record sale of other assets.		
b. A, Capital	27,500	
B, Capital	27,500	
C, Capital	27,500	
Loss on Sale of Other Assets		82,500
To record allocation of the loss on sale of other assets.		
c. Accounts Payable	10,000	
Cash		10,000
To record payment of liabilities.		
d. B, Capital	1,250	
C, Capital	1,250	
A, Capital		2,500
To record allocation of A's debit balance.		
e. B, Capital	8,750	
C, Capital	33,750	
Cash		42,500
To record payment of capital accounts.		

CHAPTER THIRTEEN
Financial Statement Analysis

Concept Self-check

1. Comparisons can be made using published industry statistics, statistics of previous years, statistics of leading competitors, trade magazines, or internally-developed ratios.

2. Liquidity is a corporation's ability to pay current liabilities as they become due. Being less liquid means creditors that have provided the corporation with goods and services on account, or with other forms of short-term borrowing, cannot be paid. Implications of being less liquid:

   Creditors:
   a. Can refuse to provide further goods or services on account
   b. Can sue for payment
   c. Can put the corporation into receivership or bankruptcy
   d. Can refuse to lend additional cash
   e. Can demand repayment of all debts, including long-term debt.

   Shareholders:
   a. May be unwilling to invest in additional share capital of the corporation
   b. Risk the loss of their investments if the company becomes bankrupt

3. A corporation is becoming less liquid if it cannot pay current liabilities as they become due. The corporation may have large sums of capital tied up in inventory and therefore not enough cash available to pay liabilities as needed, for instance.

4. Current ratio: Indicates how many current asset dollars exist to pay current liabilities

   Acid–test ratio: Indicates whether or not the corporation is able to meet the immediate demands of creditors, without considering current assets tied up in inventory or prepaid expenses.

   Accounts receivable collection period: Indicates the average time needed to collect receivables

   Number of days of sales in inventory: Indicates how many days of sales can be made with inventory on hand

   Revenue operating cycle: Indicates how long it is between the purchase of inventory and the subsequent collection of cash from sales of inventory.

Concept Self-check continued

5. a. Working capital is the difference between current assets and current liabilities.

   The current ratio is computed by dividing current assets by current liabilities. It is one measure of whether or not the corporation is able to repay short–term creditors. The acid–test ratio, on the other hand, is a more severe test of liquidity. It is computed by dividing quick assets (cash, short-term investments, accounts receivable) by current liabilities.

   b. The current ratio is only a rough indication of how able an entity is to pay its current liabilities as they become due. The relative liquidity of components of current assets is not considered in the calculation of this ratio. The acid-test ratio is often used as a more severe test of liquidity.

6. The ability to pay short-term creditors as amounts become due depends on the liquidity of the current assets. If, for example, company X's current assets consist of cash and company Y's current assets consist of inventory, company Y will not be able to pay its creditors easily because of a lack of cash.

7. Taking too long to collect accounts receivable will reduce the amount of cash available to pay liabilities as they become due. The same is true if there is an over–investment in inventory.

8. An acceptable number of days to collect accounts receivable and to convert inventory to sales depends on several factors, including the industry in which the corporation does business and the state of the economy. Management judgement and experience are crucial. If accounts receivable are collected too slowly, or if credit is extended to liberally, debts may not be collected in a timely manner, or at all. If accounts receivable collections are too short, potential credit sales may be lost. Similarly, higher number of days of sales in inventory indicates that more cash is tied up in inventory. On the other hand, a lower number of days of sales in inventory may indicate that inventory levels are too low. Potential sales may be lost.

9. Advantages of decreasing number of days of sales in inventory might be that
   a. The amount of assets tied up in inventory is reduced
   b. The dangers of obsolescence or deterioration are reduced
   c. Less storage space is used for inventory, so that warehousing expenses are reduced.
   d. Borrowings to purchase inventory and related interest expense can be reduced.

   A disadvantage of decreasing number of days of sales in inventory is that merchandize can be reduced to the point where sales are lost.

Concept Self-check continued

10. The revenue operating cycle indicates the number of days that elapse between the purchase of inventory and the subsequent collection of cash after a sale is made. It is computed by adding the average number of days needed to turn over inventory and the average number of days needed to collect receivables. It is useful in evaluating liquidity because a comparison can be made of the number of days needed to complete the cycle and the number of days within which the payables are due. Management can determine how long it will take the corporation to reinvest in inventory with cash generated by the revenue operating cycle.

11. a. Ratios that measure margins on sales:
    i. Gross profit ratio: indicates the amount of revenue left to cover other expenses after deducting cost of goods sold. It is calculated by dividing gross profit by net sales.
    ii. Operating profit ratio: indicates the amount of revenue left to cover interest and income taxes expenses after deducting cost of goods sold and operating expenses. It is calculated by dividing income from operations by net sales.
    iii. Net profit ratio: Indicates the percentage of sales revenue left in the business after payment of operating expenses, interest, and income taxes. It is calculated by dividing net income by net sales.

    b. Ratios that measure returns on statement of financial position items:
    i. Sales to total assets ratio: Indicates the adequacy of sales in relation to the investment in capital assets. It is calculated by dividing net sales by average capital assets.
    ii. Return on total assets ratio: Indicates how efficiently a company uses all of its statement of financial position assets to earn income from operations. It is calculated by dividing income from operations by average total assets.
    iii. Return on shareholders' equity ratio: Indicates the amount of income that is generated by shareholders' proportion of total assets. It is calculated by dividing net income by average shareholders' equity.

12. Analysts and investors are concerned with the financial structure of a corporation because the higher the reliance on debt, the more substantial claim the creditors have against the assets of the corporation. The corporation is also more vulnerable to rises in interest rates and economic downturns, which in turn affects future earnings expectations.

Concept Self-check continued

13. Reliance on creditor financing can be positive, since financing a corporation by issuing additional shares results in a dilution of existing shareholders' control of the corporation. Also, creditor financing is beneficial to shareholders when the return is greater than the interest paid on the debt. However, interest has to be paid on the debt and, ultimately, the debt itself has to be repaid. Interest reduces the income of the corporation. If interest rates paid on debt are higher than the returns generated from the borrowed funds, net income is reduced. The corporation is more susceptible to economic downturns and interest rate increases as its reliance on debt grows.

14. *Short–term financing*

    Advantages:
    a. Usually does not require interest payment to the creditors
    b. Easily obtained

    Disadvantages:
    a. Payment is required within a short time
    b. More risky, because it has to be renewed more frequently

    Long–term financing

    Advantages:
    a. More secure, because renewal is infrequent
    b. Principal repayment not required for a long time

    Disadvantages:
    a. Must pay interest, and legal documents are often signed to enforce this.
    b. More work to acquire (must present financial statements, may have to be audited)

15. a. Earnings per share: Indicates the amount of net income that has been earned on each common share. It is calculated by dividing (net income less preferred share dividends) by number of common shares outstanding.

    b. Price-earnings ratio: Indicates the reasonableness of the market price in relation to per-share earnings. It is calculated by dividing market price per share by earnings per share.

    c. Dividend yield: Indicates the short-term cash return that could be expected from an investment in a company's shares. It is calculated by dividing dividends declared by outstanding common shares.

Concept Self-check continued

16. Horizontal analysis is the comparison of the change in one item on financial statements (such as merchandize inventory) during two or more accounting periods. Vertical analysis is the analysis of the composition of a financial statement by restating all items in that statement as percentages of a total. Generally sales is used as the income statement base and total assets (or total liabilities and shareholders' equity) is used as the statement of financial position base. Comparing the percentages of a particular item between two or more years shows the change in composition of the statement components.

17. The Scott formula is calculated as follows:

$$\underbrace{\left[\frac{\text{Income from operations (after tax)}}{\text{Net sales}} \times \frac{\text{Net sales}}{\text{Operating capital}}\right]}_{\substack{\textit{Return on operating capital} \\ (1)\ \times\ (2)}} + \underbrace{\left[(\text{ROC} - \text{Interest rate}) \times \frac{\text{Net financial debt}}{\text{Shareholders' equity}}\right]}_{\substack{\textit{Return on leveraging} \\ (3)\ \times\ (4)}} = \underbrace{\frac{\text{Net income}}{\text{Shareholders' equity}}}_{\substack{\textit{Return on shareholders' equity} \\ (5)}}$$

The formula separates ROSE into two components: return on operating capital (ROC) and return on leveraging (ROL). ROC can be further analysed as the product of the after-tax return on operating income x sales to operating capital ratio. ROL can be further analysed as (ROC – after-tax interest rate) x debt to shareholders' equity ratio. The after-tax interest rate is calculated as [interest expense x (1- income tax rate)]/net financial debt.

CP 13–1

l	Acid–test ratio
f	Current ratio
k	Return on shareholders' equity
a	Times interest earned
c	Earnings per share
m	Accounts receivable collection period
d	Sales to total assets
j	Dividend yield
e	Price–to–earnings ratio
g	Number of days of sales in inventory
b	Debt to shareholders' equity ratio
h	Net profit ratio
m	Accounts receivable collection period
i	Return on total assets

CP 13–2

1. Current ratio = $\dfrac{\text{Current assets}}{\text{Current liabilities}}$

   The current ratio indicates how many dollars of current assets exist to pay a dollar of current liabilities. A ratio of 2 to 1 is often appropriate but this depends on the type of industry.

   2018: ($10 +35 + 200 + 600)/745 = $1.13 to 1
   2017: ($15 +35 + 150 + 400)/580 = $1.03 to 1

2. Acid–test ratio = $\dfrac{\text{Quick assets}}{\text{Current liabilities}}$

   The acid–test ratio indicates how many dollars of current assets excluding inventory and prepaid expenses exist to pay a dollar of current liabilities. A ratio of at least 1 to 1 is often appropriate but this depends on the type of industry.

   2018: ($10 + 35 + 200)/745 = $.33 to 1
   2017: ($15 + 35 + 150)/580 = $.34 to 1

3. Both the current and acid-test ratios are below the suggested guidelines. The company's continuing low acid-test ratio in particular suggests that it will likely have problems meeting its liabilities as they become due, and that the company may be at risk of bankruptcy.

4.

	2018	*2017*
Working capital from operations		
Accounts receivable	$200	$150
Inventory	600	400
Less: Accounts payable	(500)	(400)
	$300	$150
Net financial debt		
Borrowings	$245	$180
Less: Cash	(10)	(15)
Short-term investments	(35)	(35)
	$200	$130

CP 13–3

Gross profit ratio = $\frac{\text{Gross profit}}{\text{Net sales}}$

2019: $63/252 = 25%
2018: $48/141 = 34%
2017: $54/120 = 45%

Net profit ratio = $\frac{\text{Net income}}{\text{Net sales}}$

2019: $12/252 = 4.7%
2018: $5/141 = 3.6%
2017: $15/120 = 12.5%

This company has a decreasing gross profit ratio. This significantly affects net income and the net profit ratio. Net income and the net profit ratio dipped significantly in 2018, but both have rebounded somewhat in 2019. The company may be facing significant competition in recent years; hence the overall decline in the gross profit and net profit ratios.

CP 13–4

Price-earnings ratio = $\frac{\text{Market price per share}}{\text{Earnings per share}}$

This ratio indicates the stock market's expectations of profitability for the company. A higher P/E ratio indicates that the market expects the company to be profitable despite relatively lower net income at present. On this basis, company C is preferred.

A: $35/11 = 3.2
B: $40/5 = 8
C: $90/10 = 9

Dividend yield = $\frac{\text{Dividends per share}}{\text{Market price per share}}$

This ratio indicates what short-term cash return shareholders might expect on their investment in common shares of the company.

A: 0
B: $4/40 = 10
C: $6/90 = 6.7

The stock market indicates that company C is expected to be relatively more profitable than A or B in the future. However, if dividend yield is important to the shareholder, then company B should be chosen. On either basis, company A does not appear to be a good investment.

CP 13–5

	2018	*2017*	*Change*	
	(a)	*(b)*	*Amount* *(a – b)*	*Percentage* *(a – b)/b*
Sales	$2,520	$1,440	$ +1,080	+75%
Cost of goods sold	1,890	960	+930	+96.9%
Gross profit	$630	$480	+150	+31.3%
Operating expenses	510	430	+80	+18.6%
Net income	$ 120	$ 50	+70	+140%

Although sales have increased, cost of goods sold has increased at a faster pace. However, operating expenses have increased at a slower pace, resulting in a substantially higher net income.

CP 13–6

		Effect on ratio		
Transaction	Ratio	*Inc.*	*Dec.*	*No change*
Declared a cash dividend	Current ratio		X	
Wrote-off an uncollectible account receivable	Accounts receivable collection period	X		
Purchased inventory on account	Acid–test ratio		X	
Issued 10–year bonds to acquire capital assets	Return on total assets		X	
Issued additional shares for cash	Debt to shareholders' equity ratio		X	
Declared a share dividend on common shares	Earnings per share			X
Restricted part of retained earnings	Return on shareholders' equity			X
Purchased supplies on account	Current ratio		X	
Paid a short–term creditor in full	Acid–test ratio	X		
Paid an account payable, taking the cash discount	Number of days sales in inventory			X

CP 13–7

1.a. Return on total assets

= $\frac{\text{Income from operations}}{\text{Average total assets}}$

= (\$36/220)

= 16.4%

b. Return on shareholders' equity

= $\frac{\text{Net income}}{\text{Average shareholders' equity}}$

= \$20/(80 + 60)

= 14.3%

c. Times interest earned ratio

= $\frac{\text{Income from operations}}{\text{Interest expense}}$

= \$36/6

= 6 times

d. Earnings per share

= $\frac{\text{Net income}}{\text{Number of common shares outstanding}}$

= \$20/8 shares

= \$2.50

e. Number of days of sales in inventory

= $\frac{\text{Average inventory}}{\text{Cost of goods sold}}$ x 365 days

= \$40/50 x 365 days

= 292 days

f. Accounts receivable collection period

= $\frac{\text{Accounts receivable}}{\text{Net credit sales}}$ x 365 days

= \$20/100 x 365 days

= 73 days

g. Sales to total assets ratio

= $\frac{\text{Net sales}}{\text{Average total assets}}$

= \$100/220

= 45%

h. Current ratio

= $\frac{\text{Current assets}}{\text{Current liabilities}}$

= (\$20 + 20 + 40)/20

= 4:1

CP 13–7 continued

i. Acid-test ratio

$$= \frac{\text{Quick assets}}{\text{Current liabilities}}$$

= ($20 + 20)/20

= 2:1

j. Debt to shareholders' equity ratio

$$= \frac{\text{Total liabilities}}{\text{Shareholders' equity}}$$

= $(20 + 60)/140)

= .57:1

2. The following ratios are measures of liquidity:
   e. Number of days of sales in inventory
   f. Accounts receivable collection period
   h. Current ratio
   i. Acid–test ratio

3.

Statement of Financial Position

Operating Capital

Working capital from operations		
Accounts receivable		$ 20
Merchandize inventory		40
Less: Accounts payable		(20)
		40
Plant, at carrying amount		140
Operating capital		$180
Net Financial Debt		
Borrowings	$ 60	
Less: Cash	(20)	40
Shareholders' Equity		
Share capital	80	
Retained earnings	60	140
Financial capital		$180

CP 13–7 continued

Income Statement

Sales		$100
Cost of goods sold		50
Gross profit		50
Operating expenses		14
Income from operations		36
Less: Income taxes		(12)
Income from operations, after-tax		24
Interest	6	
Less: Income tax savings	(2)	
Net interest expense		4
Net income		$20

4. Scott formula

$$\underbrace{\left[\frac{\$24}{100} \times \frac{\$100}{180}\right]}_{\textit{Return on operating capital: (1), (2)}} + \underbrace{\left[\left\{\frac{\$24}{180} - \frac{\$4}{40}\right\} \times \frac{\$40}{140}\right]}_{\textit{Return on leveraging: (3), (4)}} = \underbrace{\frac{\$20}{140}}_{\textit{Return on shareholders' equity (5)}}$$

$$= [\,24\% \times .6\,] + [\,3.3\% \times .3\,] = 14.3\%$$

$$= \mathbf{13.3\%} + \mathbf{1.0\%} = \mathbf{14.3\%}$$

CP 13–8

1. Current ratio

$$= \frac{\text{Current assets}}{\text{Current liabilities}}$$

$$= \frac{\text{Cash + accounts receivable + inventory + prepaid expenses}}{\text{Current liabilities}}$$

= ($72 + 88 + 100 + 40)/60

= $300/60

= 5:1

2. Return on total assets

$$= \frac{\text{Income from operations}}{\text{Average total assets}}$$

= $46/620

= 7.4%

1. Sales to total assets ratio

$$= \frac{\text{Net sales}}{\text{Average total assets}}$$

= $240/620

= 38.7%

4. Acid-test ratio

$$= \frac{\text{Quick assets}}{\text{Current liabilities}}$$

$$= \frac{\text{Cash + accounts receivable}}{\text{Current liabilities}}$$

= ($72 + 88)/60

= 2.7:1

5. Times interest earned ratio

$$= \frac{\text{Income from operations}}{\text{Interest expense}}$$

= $46/8

= 5.75:1

6. Earnings per common share

$$= \frac{\text{Net income – preferred share dividends}}{\text{Number of common shares outstanding}}$$

= [$20 – ($60 x 10%)]/10 shares

= $1.40 per share

CP 13–8 continued

7. Accounts receivable collection period

$$= \frac{\text{Average accounts receivable}}{\text{Net credit sales}} \times 365 \text{ days}$$

= \$88/(80% x \$240) x 365 days

= 167 days

8. Return on shareholders' equity

$$= \frac{\text{Net income}}{\text{Shareholders' equity}}$$

$$= \frac{\text{Net income}}{\text{Preferred shares + common shares + retained earnings}}$$

= \$20/(60 + 250 + 100)

= 4.9%

9. Scott formula

Return on operating capital		+	*Return on leveraging*		=	*Return on shareholders' equity*
(1)	(2)		(3)	(4)		(5)

$$\left[\frac{24^{1}}{240} \times \frac{\$240}{488^{2}}\right] + \left[\left[\frac{\$24}{488} - \frac{\$4^{3}}{78^{4}}\right] \times \frac{\$78}{410^{5}}\right] = \frac{\$20}{410}$$

$$= \left[10\% \times .49\right] + \left[(0\%) \times .2\right] = 4.9\%$$

$$= \mathbf{4.9\%} + \mathbf{0\%} = \mathbf{4.9\%}$$

[1] \$46 x (1 – .473*) = \$24 [2] \$620 – 72 – 60 = \$488

[3] \$8 x (1 –.473) = \$4 [4] \$150 – 72 = \$78

[5] \$60 + 250 + 100 = \$410

*income tax rate: \$18/38 = 47.3%

CP 13–9

1. Current assets + capital assets = Total liabilities + shareholders' equity
   Current assets + $90 =$40 + 140
   Current assets = $90
   Current ratio= $\frac{\text{Current assets}}{\text{Current liabilities}}$
   2.5 = $90/Current liabilities
   Current liabilities = $36

2. Per above: Current assets = $90; current liabilities = $36
   Acid-test Ratio = $\frac{\text{Quick current assets}}{\text{Current liabilities}}$
   Since the Acid-test Ratio is 1:1,

   Inventory = $\frac{\$90 - \text{inventory} + 0}{\$36}$
   Inventory = $90 – 36
   Inventory = $54

3. Accounts receivable =Quick current assets – (cash + short-term investments)
   $36 – 6 = 30
   Accounts rec. collection period = $\frac{\text{Average accounts receivable}}{\text{Net credit sales}}$ x 365 days
   = $30/300 x 365 days
   = 37 days

4. If gross profit is 30 per cent of sales, the cost of goods sold is 70 per cent of sales (70% x $420 = $294). Per above, inventory = $54
   Number of days of sales in inventory = $\frac{\text{Average inventory}}{\text{Net credit sales}}$ x 365 days
   = $54/294 x 365 days
   = 12 days

5. Revenue operating cycle = Accounts receivable collection period + number of days of sales in inventory

   = 77 + 12 = 49 days

6. Net financial debt = Bank loan (current liabilities) – (cash and short-term investments)

   = $36 (see above) – 6

   = $30

CP 13–10

1.

	Transaction	Inc.	Dec.	No change
a.	Bought $20,000 of merchandize on account (the company uses a perpetual inventory system)		X	
b.	Sold for $10,000 cash, merchandize that cost $5,000	X		
c.	Collected a $2,500 account receivable			X
d.	Paid a $10,000 account payable	X		
e.	Wrote off a $1,500 bad debt against the allowance for doubtful accounts			X*
f.	Declared a $1 per–share cash dividend on the 10,000 outstanding common shares		X	
g.	Paid the dividend declared above	X		
h.	Borrowed $10,000 from a bank by assuming a 60–day, 10 per cent loan		X	
i.	Borrowed $25,000 from a bank by placing a 10–year mortgage on the plant	X		
j.	Used the $25,000 proceeds of the mortgage to buy additional machinery		X	

Effect on current ratio (Inc. / Dec. / No change)

* the journal entry is Dr. Allowance for Doubtful Accounts; Cr. Accounts Receivable

2. At the end of May,

a. The current ratio was 2.15 to 1, calculated as follows:

		May 1 Bal.	*(a)*	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*	*(g)*	*(h)*	*(i)*	*(j)*	*May 31 Bal.*
Current assets (given)	x	$200	+20	+10 –5	+2.5 –2.5	–10	+1.5 –1.5	–	–10	+10	+25	–25	215
Current liabilities (derived)	y	$80	+20	–	–	–10	–	+10	–10	+10	–	–	100
Current ratio	x/y	2.5											**2.15**

CP 13–10 continued

b. The acid–test ratio was 1 to 1 calculated as follows:

		May 1 Bal.	*(a)*	*(b)*	*(c)*	*(d)*	*(e)*	*(f)*	*(g)*	*(h)*	*(i)*	*(j)*	*May 31 Bal.*
Quick assets (derived)	x	$100	–	+10	+2.5 –2.5	–10	+1.5 –1.5	–	–10	+10	+25	–25	100
Current liabilities (see above)	y	$80	+20	–	–	–10	–	+10	–10	+10	–	–	100
Acid-test ratio	x/y	1.25											**1.0**

P 13–1

1. a. Current ratio

$$= \frac{\text{Current assets}}{\text{Current liabilities}}$$

= $850/400

= 2.13:1

b. Acid-test ratio

$$= \frac{\text{Quick assets}}{\text{Current liabilities}}$$

= $300/400

= .75:1

c. Debt to shareholders' equity ratio

$$= \frac{\text{Total liabilities}}{\text{Shareholders' equity}}$$

= $1,200/(500 + 50)

= 1.85:1

2. Mammoth Corporation could be considered a poor risk for a potential lender. While the current ratio is acceptable, the acid–test ratio is less than 1. There do not appear to be enough liquid assets ($100) to cover short–term liabilities ($400).

   The total debt is high in relation to total shareholders' equity, which means that outside creditors are providing most of the financing of Mammoth; it may be difficult to obtain further debt financing.

3. A full set of financial statements including notes would help, as well as past years' ratios and industry averages. Stock market information and investors' analyses would also be useful, as well as other qualitative information like management discussion and analysis often contained in the companies' annual reports.

P 13–2

1. a. Current ratio

$$= \frac{\text{Current assets}}{\text{Current liabilities}}$$

$$= \frac{\text{Cash + accounts receivable + inventory + prepaid expenses}}{\text{Accounts payable + notes payable + current portion of borrowings}}$$

= ($60 + 140 + 250 + 10)/(100 + 20 + 60)
= $460/180
= 2.6:1

b. Acid-test ratio

$$= \frac{\text{Quick assets}}{\text{Current liabilities}}$$

$$= \frac{\text{Cash + accounts receivable}}{\text{Accounts payable + notes payable + current portion of borrowings}}$$

= ($60 + 140)/180
= $200/180
= 1.1:1

c. Accounts receivable collection period

$$= \frac{\text{Average accounts receivable}}{\text{Net credit sales}} \times 365 \text{ days}$$

Average accounts receivable
= ($140 + 180)/2
= $160

Accounts receivable collection period
= $160/800 x 365 days
= 73 days

d. Number of days of sales in inventory

$$= \frac{\text{Average inventory}}{\text{Cost of goods sold}} \times 365 \text{ days}$$

= [($200 + 250)/2]/600 x 365 days
= $24 days

e. Debt to shareholders' equity ratio

$$= \frac{\text{Total liabilities}}{\text{Shareholders' equity}}$$

$$= \frac{\text{Current liabilities + borrowings}}{\text{Common shares + preferred shares + retained earnings}}$$

-

= ($180 + 140)/(250 + 120 + 100)
= $320/470
= .68:1

P 13–2 continued

f. Return on shareholders' equity

$$= \frac{\text{Net income}}{\text{Average shareholders' equity}}$$

Average shareholders' equity
= [($120 + 250 + 100) + (120 + 250 + 80)]/2
= $460

Return on shareholders' equity
= $50/460
= 10.9%

g. Earnings per share

$$= \frac{\text{Net income – preferred share dividends}}{\text{Number of common shares outstanding}}$$

Preferred share dividends
= $120 x 10%
= $12

Earnings per share
= ($50 – 12)/50
= $.76 per share

2. Dividends paid on common shares = $18, calculated as follows:

Retained Earnings (Dr.)	Retained Earnings (Cr.)	
	80	Opening balance (Jan. 1, 2018, given)
	50	Net income 2018
12		Preferred share dividend (1g above)
18		Common share dividend (to balance)
	100	Closing balance (Dec. 31, 2018, given)

3. The debt to shareholders' equity ratio shows that Epicentre has $.68 of debt financing for each $1 of shareholders' equity. Creditors may prefer this greater emphasis on shareholders' equity financing. Both the current ratio and the acid–test ratio tell us that Epicentre is not threatened with insolvency, given the high ratios. Again, creditors may like this. Epicentre takes 73 days to collect the average account receivable. This rate seems a little slow, but it depends on the credit terms offered to customers. The number of days sales in inventory is 24, which seems very low. However, the company may operate in an unusual industry. Epicentre's return on shareholders' equity seems adequate at 10.9 per cent. Earnings per share and dividends need to be evaluated in conjunction with the market price of common shares, but overall Epicentre seems to be a good investment for creditors and shareholders. As always, more information would be useful, particularly prior years' ratios and industry averages.

P 13–2 continued

4.

Epicentre Corporation
Statement of Financial Position
At December 31, 2018

Operating Capital		
Working capital from operations		
Accounts receivable		$140
Merchandize inventory		250
Prepaid expenses		10
Less: Accounts payable		(100)
		300
Capital Assets, net		330
Operating capital		$630
Net Financial Debt		
Notes payable	$ 20	
Borrowings ($140 + 60)	200	
Less: Cash	(60)	160
Shareholders' Equity		
Preferred shares	120	
Share capital	250	
Retained earnings	100	470
Financial capital		$630

Epicentre Corporation
Income Statement
For the Year Ended December 31, 2018

Sales		$800
Cost of goods sold		600
Gross profit		200
Selling and administrative expenses		100
Income from operations		100
Less: Income taxes*		(38)
Income from operations, after-tax		62
Interest	$20	
Less: Income tax savings	(8)	
Net interest expense		12
Net income		$50

*$30/80 = 37.5%; $100 x 37.5% = $38 (rounded)

P 13–2 continued

5. Scott Formula

Return on operating capital		+	*Return on leveraging*		=	*Return on shareholders' equity*
(1)	(2)		(3)	(4)		(5)

$$\left[\frac{\$62}{800} \times \frac{\$800}{630}\right] + \left[\left[\frac{\$62}{630} - \frac{\$12}{160}\right] \times \frac{\$160}{470}\right] = \frac{\$50}{470}$$

$$= [\;7.8\% \times 1.3\;] + [\;2.3\% \times .34\;] = 10.6\%$$

$$= \mathbf{9.8\%} + \mathbf{.8\%} = \mathbf{10.6\%}$$

Epicentre earns almost its entire ROSE from ROC (9.8/10.6). ROL is only .8%. Since the difference between ROC and the cost of borrowing is relatively healthy (2.3%), the company could consider borrowing more funds and paying off preferred shares if their dividend rate is higher than the after-tax interest rate ($12/160 or 7.5%). As always, prior years' information and other indicators (e.g., P/E ratio) would help the analysis.

P 13–3

Belafonte Corporation
Statement of Financial Position
At April 30, 2018

Assets			*Liabilities and Shareholders' Equity*		
Cash	$ 2,000	(c)	Accounts payable	$ 8,000	(f)
Accounts receivable	8,000	(a)	Bonds payable	20,000	(b)
Merchandize inventories	20,000	(b)	Common shares	15,000	(g)
Total current assets	30,000	(d)	Retained earnings	7,000	(i)
Capital assets, net	20,000	(b)			
Total assets	$50,000	(e)	Total liabilities and shareholders' equity	$50,000	(h)

Information:

(1) Current assets = 3.75 x Current liabilities (accounts payable)

(2) Sales for year = $73,000

(3) Merchandize inventories = $20,000 = Capital assets = bonds payable

(4) Accounts receivable collection period = 40 days

$$\frac{\text{Average accounts receivable x 365 days}}{\text{Net credit sales}}$$

(5) Bonds payable = 10 x cash

(6) Total current assets = 2 x common shares.

P 13–3 continued

Calculations:

(a) $\frac{\text{Average accounts receivable x 365 days}}{\$73{,}000}$ = 40 days

Average accounts receivable = $8,000

(b) Merchandize inventory, capital assets (net), and bonds payable each equal $20,000

(c) Cash = bonds payable/10 = $20,000/10 = $2,000

(d) Total current assets = $2,000 + 8,000 + 20,000 = $30,000

(e) Total assets = $20,000 + 30,000 = $50,000

(f) Accounts payable = Current assets/3.75 = $30,000/3.75 = $8,000

(g) Common shares = Current assets/2 = $30,000/2 = $15,000

(h) Total liabilities and shareholders' equity must equal total assets

(i) Retained earnings = Total liabilities and shareholders' equity – accounts payable – bonds payable – common shares
= $50,000 – 8,000 – 20,000 – $15,000 = $7,000

P 13–4

1. Escalade Corporation
Vertical Analysis of the Income Statement
For the Years Ending December 31, 2018–2020

	Common–size percentages		
	2020	*2019*	*2018*
Sales	100.0	100.0	100.0
Cost of goods sold	76.0	66.7	50.0
Gross profit	24.0	33.3	50.0
Other expenses	14.0	22.7	29.2
Net income	10.0	10.6	20.8

2. Escalade's gross profit ratio has significantly declined over the past three years. This could be owing to the initial inefficiency of a larger plant or because of selling an increased number of units at a greatly reduced price to obtain a larger share of the market. At any rate, the reasons for this decline should be investigated further. Since other expenses have not increased proportionately, perhaps more money could be put into sales promotion to increase the number of units sold.

P 13–5

Hook Limited
Statement of Financial Position
At December 31, 2018

Assets

Current				
Cash			$ 30,000	
Accounts receivable			150,000	(3)
Merchandize inventories			90,000	(4)
Total current assets			270,000	(2)
Property, plant, and equipment	442,500	(10)		
Less: Accumulated depreciation	100,000		342,500	(9)
Total assets			$612,500	(8)
Liabilities				
Current				
Accounts payable	$ 50,000			
Accrued liabilities	70,000	(1)		
Total current liabilities			120,000	
Non-current				
8% Bonds payable			125,000	(6)
			245,000	
Shareholders' Equity				
Common shares	80,000	(5)		
Retained earnings	287,500	(12)	367,500	
Total liabilities and shareholders' equity			$612,500	(11)

Calculations:

(1) Accrued liabilities = $120,000 – 50,000 = $70,000
(Total current liabilities – accounts payable)

(2) Total current assets = $120,000 + 150,000 = $270,000
(Total current liabilities + working capital)

(3) Accounts receivable = ($120,000 x 1.5) – 30,000 = $150,000
[(Total current liabilities x acid–test ratio) – cash]

(4) Inventories = $270,000 – 150,000 – 30,000 = $90,000
(Total current assets – accounts receivable – cash)

(5) Net income = [$80,000 – (80,000/8)] – $30,000 = $40,000
[Income before interest and income taxes – (income before interest and income taxes/Times interest earned) – income taxes

Therefore, common shares = $40,000/5 x $10 = $80,000
(Net income/Earnings per share) x issued value

P 13–5 continued

(6) Bonds payable = \$80,000/8 divided by 0.08% = \$125,000
[Income before interest and income taxes/Times interest earned)/Interest rate]

(7) If the ratio of shareholders' equity to total assets is 0.60 to 1, then the ratio of liabilities to total assets is 0.40 to 1.

(8) Total assets = (\$120,000 + 125,000)/0.4 = \$612,500
[(Total current liabilities + total non–current liabilities)/Total debt to total assets ratio]

(9) Net PPE = \$612,500 – 270,000 = \$342,500
(Total assets – current assets)

(10) PPE = \$342,500 + 100,000 = \$442,500
(Net PPE + accumulated depreciation)

(11) Total liabilities and shareholders' equity = Total assets = \$612,500.

(12) Retained earnings = \$612,500 – 245,000 – 80,000 = \$287,500
(Total liabilities and shareholders' equity – total liabilities – common shares)

CHAPTER FOURTEEN
The Statement of Cash Flows

Concept Self-check

1. A statement of cash flows (SCF) provides external readers of a corporation's financial statements with a summary of the cash transactions that took place in the company in a particular period. For example, a reader could determine the amount of proceeds from the sale of capital assets, or whether capital assets were acquired. It communicates how the company is financing its activities (internally from operations or externally from other sources), and why cash increased or decreased.

   Its advantage over the statement of financial position is that the statement of financial position reports the financial position of the company at a particular point in time, while the SCF reports the changes in cash that occurred from one statement of financial position date to another.

   An income statement reports earnings on an accrual basis, which is important. However, investors and creditors are also interested in determining how a corporation has generated and used cash during a fiscal period, because cash is an important determinant of liquidity. The SCF provides this information succinctly to readers.

2. These activities are important to readers who wish to evaluate the financial position and the results of operations of a particular company in order to make certain decisions, such as whether or not to invest in it. The extent of cash flows resulting from financing and investing decisions can help readers identify the underlying, longer-range activities of the firm that may affect future earnings, such as whether capital assets are being acquired, or debt is being retired. The SCF makes these activities explicit.

3. An increase in accounts receivable during a fiscal year is recorded by a debit. The offsetting credit to the Cash account denotes a use of cash. In effect, cash has been diminished because amounts owing by customers has increased, instead of being collected at the same rate as the prior year.

4. This is only partially correct. While the SCF information does disclose cash receipts and disbursements in a fiscal period, it also classifies these as operating, investing, and financing activities. This classification is additionally useful to readers

Concept Self-check continued

5. The declaration of cash dividends has no effect on cash flow, since it does not involve the use of cash; it merely sets up a dividend payable in the books of the company. The payment of a dividend declared decreases cash flow, since it involves the outlay of cash. Whether the dividend was declared in prior years or in the current year has no effect; only the payment reduces cash. Changes in dividends payable amounts from one year to the next also affect cash flows. A net reduction in dividends payable (a debit) increases cash outflow from financing activities (a credit). A net increase in dividends payable decreases cash outflow.

6. Buying or selling short-term investments may decrease or increase the amount of cash available to the company if they are not considered part of cash and cash equivalents. If they are considered part of C&CE, transactions involving short-term investments have no effect on cash flow from operating activities, since they are considered the same as cash.

7. Net income for a period usually consists of sales less cost of sales, operating expenses, and other expenses like interest and income taxes. If there are a large number of credit sales and the amount of accounts receivable over the last year has increased, then there is less cash inflow compared to sales revenue recorded on the income statement. If many expenses are prepaid, then cash has been used but the expenses have not decreased net income. Similarly, if inventory levels have increased from one year-end to the next, cash has decreased but cost of goods sold is unaffected on the income statement.

   Depreciation of property, plant, and equipment decreases net income but not cash. Losses and gains on sale of long-lived assets affect net income, but do not affect cash flows. Cash may also be used to purchase property, plant, and equipment, pay off borrowings, pay dividends, and repurchase outstanding shares, as examples. These investing and financing activities affect cash, but are not reflected on the income statement.

8. Main statement of financial position account transactions that use cash are (a) operations of the company (net cash outflow from operating activities during the period), (b) purchase of capital assets, (c) retirement of debt and share capital, and (d) payment of dividends. The statement of financial position accounts are analysed by looking at the opening and ending balances of the account, determining the reasons for the change in the account, and recording the effects as a cash inflow or outflow from operating, financing, or investing activities.

Concept Self-check continued

9. Steps in using the cash flow table method to prepare the SCF:

   Step 1 Set up a cash flow table.

   Step 2 Calculate the net debit and net credit change for every non-cash account on the statement of financial position.

   Step 3 Record the opposite change as a cash inflow or outflow in the appropriate cash effect column. A debit change in a non-cash statement of financial position account creates a credit change in the Cash account. A credit change corresponds to a cash outflow. A credit change in a non-cash statement of financial position account creates a debit change in the Cash account. A debit change corresponds to a cash inflow. Each change is labelled as a change resulting from an operating, investing, or financing activity depending on the underlying nature of the transaction.

   Step 4 Prepare the cash flow from operating activities section of the SCF. Adjust this section to disclose income taxes paid in cash.

   Step 5 Prepare the remainder of the statement of cash flows.

10. A model format of the SCF lists separate sections for operating, investing, and financing activities involving cash flows, as follows:

Operating activities		
Income before income taxes		
Income taxes paid		
Items not affecting cash flow		
Net changes in non-cash working capital		
Depreciation expense		
Net gains (losses) on disposal		________
Cash flow from (used by) operating activities		
Investing activities		
Proceeds from sale of capital assets		
Purchase of capital assets	________	
Cash flow from (used by) investing activities		
Financing activities		
Loan proceeds (repayments)		
Shares issued (redeemed)		
Payment of dividends	________	
Cash flow from (used by) financing activities		________
Net increase (decrease) in cash		
Cash at beginning of year		________
Cash at end of year		========

CP 14–1

F	A payment of $5,000 was made on a non-current bank loan.
O	Depreciation expense for equipment was $1,000.
F	$10,000 of share capital was issued for cash.
F	Cash dividends of $2,500 were declared and paid to shareholders.
F & I	A long-term bank loan was assumed in exchange for equipment costing $7,000.
I	Land was purchased for $25,000 cash.
O	$750 of accrued salaries was paid.
F*	A $5,000 short-term demand loan was obtained.
O	$10,000 of accounts receivable was collected.
I & F	A building was purchased for $80,000. $30,000 was paid in cash and the rest was borrowed.
I	Land was sold for $50,000 cash.
O & I	Equipment was sold for $6,000. The original cost was $10,000. The accumulated depreciation was $3,000.
O	$1,200 was paid for a 14–month insurance policy to take effect next year.
O	A patent was amortized for $500.
F	Shares were redeemed for $50,000 cash, their original issue price.

*The short-term loan would be considered “negative” cash, so the transaction has no cash effect and would not be reported on the statement of cash flows.

CP 14–2

		Operating activities In (out)	Financing activities In (out)	Investing activities In (out)
1.	Retired $100 of non-current debt with cash		(100)	
2.	Purchased a building for $90; $60 was loaned by a bank and the rest was paid in cash		60	(90)
3.	Declared and paid cash dividends of $12 during the year		(12)	
4.	Purchased equipment by issuing $20 of common shares with the proceeds		20	(20)
5.	Paid $50 in cash to pay off a non-current bank loan		(50)	
6.	Sold land for $30 cash			30
7.	Earned net income of $75	75		
8.	Purchased equipment costing $15; of this, $5 was paid in cash and the rest with a 90–day note payable		10[1]	(15)
9.	Amortized a patent by $2	2[2]		
10.	Assumed $100 of non-current debt and repurchased common shares		100 (100)	
11.	Purchased short-term investments for $5 cash			(5)[3]
12.	Sold a machine that cost $20 for $7 cash; the accumulated depreciation on it was $10	3[4]		7
13.	Depreciation expense for building and equipment amounted to $8	8[2]		
14.	Paid in cash the note payable from transaction 8 above.		(10)[1]	
15.	Issued $20 of preferred shares for cash		20	
16.	Purchased a patent for $25 cash			(25)
17.	Prepaid $20 for the next two months of advertizing	(2)		
18.	Purchased land for $60 cash.			(60)

[1] If the note payable is considered a cash equivalent, the $10 portion of the transaction has no cash effect and would not be reported as a financing activity.

[2] This would be added back to net income to arrive at cash flow from operating activities.

[3] If the short-term investments are low-risk and will be cashed with three months of the date of acquisition, they would be considered cash equivalents. This transaction would have no effect on the statement of cash flows.

CP 14–2 continued

[4] The loss on sale would be $3, calculated as:

Cost of machine	$ 20
Accumulated depreciation	(10)
Carrying amount	10
Cash proceeds	(7)
Loss on sale	$ 3

The journal entry to record the sale would be:

Dr.	Cash	7	
Dr.	Accumulated Depreciation – Machine	10	
Dr.	Loss on Sale	3	
Cr.	Machine		20

On the SCF, a $7 debit would be recorded as an inflow when calculating cash flow from investing activities. The $3 loss (also a debit) would be added back to net income to arrive at cash flow from operating activities.

CP 14–3

Cash Flow ↑	Cash Flow ↓	No Effect	
X			1. Earning net income for the year
	X		2. Redemption of preferred shares at face value
	X		3. Purchase of inventory
X	X		4. Issuing common shares for equipment
X			5. Assuming non-current debt
		X	6. Declaring a cash dividend
X			7. Collection of an account receivable
	X		8. Payment of an account payable
	X		9. Purchase of land for cash
X			10. Issuing common shares for cash
		X	11. Reclassifying non-current liabilities as current liabilities equal to the amount to be repaid in cash next year
	X		12. Payment of a cash dividend declared last year
		X	13. Decrease in market value of short-term investments
		X	14. Calculation of amount owing for income taxes.

CP 14–4

The answer depends on your definition of cash equivalents. If the short-term investments will be converted into a known amount of cash within three months of acquisition and are not subject to significant risk of changes in value, cash and cash equivalents are the same at the beginning and end of the year: $100.

If the short-term investments are not considered to be cash equivalents, cash has decreased by $100 during the year. More information is needed about the nature of the short-term investments.

CP 14–5

There has been no change in cash and cash equivalents during the year. The bank loan would be considered "negative cash" since it is due on demand by the creditor.

Opening cash and cash equivalents ($50 – 50)	$ -0-
Change in cash and cash equivalents during the year	-0-
Ending cash and cash equivalents ($100 – 100)	$ -0-

CP 14–6

Cash Flow Table:

	Balance		*Change*		*Cash effect*		*Activity*
	2019 Dr. (Cr.)	*2018 Dr. (Cr.)*	*Dr.*	*Cr.*	*Inflow*	*Outflow*	
Cash	100	86	14		To be explained		C&CE
Accounts receivable	60	40	20			20	Operating
Inventory	36	30	6			6	Operating
Prepaid rent	10	-0-	10			10	Operating
Retained earnings	(206)	(156)		50	50		Operating
	-0-	-0-	50	50	50	36	

$14 net cash inflow

Cash flow from operating activities would be calculated as:

Net income		$ 50
Add (deduct) changes in non-cash working capital		
Increase in accounts receivable	(20)	
Increase in inventory	(6)	
Increase in prepaid rent	(10)	(36)
Cash flow from operating activities		$ 14

CP 14–7

1. The equipment's carrying amount at the start of the year was $400 ($1,000 – 600). No depreciation was claimed during the year according to the income statement. A $500 gain was realized when the equipment was sold per the income statement. The equipment therefore must have sold for $900 cash ($400 + 500).

2. The journal entry to record the sale of the equipment would have been:

Dr Cash		900	
Dr. Accumulated Depreciation		600	
Cr.	Equipment		1,000
Cr.	Gain on Sale of Equipment		500

   The only cash effect of this transaction is the receipt of $900 from the sale of the equipment. The gain on sale needs to be deducted from net income to arrive at cash flow from operating activities (which will be $0), since it (a) is not related to an operating activity, and (b) does not represent actual cash flow.

3.

Operating activities	
Net income	$ 500
Item not affecting cash flow	
Gain on sale of equipment	(500)
	$ -0-
Investing activities	
Proceeds from sale of equipment	$ 900

CP 14–8

1. Cash flow table:

	Balance		*Change*		*Cash effect*		*Activity*
	2019	*2018*					
	Dr. (Cr.)	*Dr. (Cr.)*	*Dr.*	*Cr.*	*Inflow*	*Outflow*	
Cash	1,250	1,600		*350	To be explained		C&CE
S/T investments	100	200		*100	To be explained		C&CE
Borrowings	(600)	(1,000)	400			400	Financing
Common shares	(200)	(300)	100			100	Financing
Ret. earnings	(550)	(500)		50	90		Operating
						40	Financing
	-0-	-0-	500	500	90	540	

*$450 net cash outflow

CP 14–8 continued

Cash flow from operating activities equals net income of $90. All revenue was received in cash and all expenses were paid in cash, and there were no changes to any other statement of financial position accounts that affect cash flow from operating activities.

2. Dividends declared must have been $40, calculated as follows:

Opening retained earnings (given)	$500
Add: Net income (given)	90
Less: Dividends paid (derived)	**(40)**
Ending retained earnings (given)	$550

3. Cash used by financing activities

Repayment of borrowings	($400)
Redemption of common shares	(100)
Payment of dividends	(40)
	($540)

CP 14–9

1. Cash flow table:

	Balance		*Change*		*Cash effect*		*Activity*
	2019	*2018*	*Dr.*	*Cr.*	*Inflow*	*Outflow*	
Cash	10	8	2		To be explained		C&CE
Accounts receivable	18	10	8			8	Operating
Merchandize inventory	24	20	4			4	Operating
Land	10	24		14	(a) 10		Investing
					(a) 4		Operating
Plant and equipment	94	60	41			41	Investing
			~~34~~	(b) 7	(b) 6		Investing
Accum. dep'n	(14)	(10)	(b) 2			(b) 1	Operating
				6	6		Operating
				~~4~~			
Accounts payable	(16)	(12)		4	4		Operating
Non-current borrowings	(40)	(32)		8	8		Financing
Common shares	(60)	(50)		10	10		Financing
Retained earnings	(26)	(18)		8	14		Operating
						6	Financing
	-0-	-0-	57	57	62	60	

$2 net cash inflow

(a) The journal entry to record the sale of the land would be:

Dr. Cash	10	
Dr. Loss on Disposal	4	
Cr. Land		14

(b)

Cost of equipment sold (given)	$7
Accumulated depreciation (derived)	(2)
Carrying amount (given)	5
Cash proceeds (derived)	**(6)**
Gain on sale (per income statement)	$1

The journal entry to record the disposal of machinery would be:

Dr. Cash	6	
Dr. Accumulated Dep'n.	2	
Cr. Equipment**		7
Cr. Gain on Disposal		1

CP 14–9 continued

2.

Glacier Corporation
Statement of Cash Flows
For the Year Ended December 31, 2019

Operating activities		
Net income		$ 14
Items not affecting cash flow		
Depreciation expense		6
Gain on sale of equipment		(1)
Loss on sale of land		4
Net changes in non-cash working capital ($4 – 8 – 4)		(8)
Cash flow from operating activities		15
Investing activities		
Proceeds from sale of equipment	$ 6	
Proceeds from sale of land	10	
Purchase of property, plant, and equipment	(41)	
Cash flow used by investing activities		(25)
Financing activities		
Proceeds from borrowings	8	
Common shares issued	10	
Payment of dividends	(6)	
Cash flow from financing activities		12
Net increase in cash		2
Cash at beginning of year		8
Cash at end of year		$ 10

3. Cash flow from operating activities is almost identical to net income ($15 vs. $14). The company appears to be embarking on a re-capitalization project, selling equipment and investing in new property, plant, and equipment. Most of this ($8 + 10) has been financed by issuing debt and common shares. Opening and ending cash balances are almost identical. ($8 vs. $10).

P 14–1

1. Dr. Accumulated Depreciation 16[1]
   Dr. Cash 12 (a)
   Cr. Equipment 20 (b)
   Cr. Gain on Sale of Equipment 8

	Cost (given)	20
1	Acc. depreciation (derived)	(16)
	Carrying amount (given)	4
	Cash proceeds	(12)
	Gain on sale	8

Cash is increased by $12 (a), the amount of the sale proceeds, but this does not represent cash flow from an operating activity. The sale of capital assets is an investing activity, and so will not be shown in the calculation of cash flow from operating activities. It will be shown as a cash inflow in the Investing Activities section of the SCF.

However, the $8 gain on sale (b) is included in the calculation of net income on the income statement. Since it does not represent cash inflow (the $12 is the actual cash inflow) and it is not an operating activity, the gain is deducted from net income on the SCF to derive cash flow from operating activities.

2.

Net income	$ 33
Items not affecting cash flow	
Depreciation expense	10
Gain on sale of equipment	(8)
Cash flow from operating activities	$ 35

P 14–2

Cash Flow Table:

	Balance		*Change*		*Cash effect*		*Activity*
	2019 Dr. (Cr.)	*2018 Dr. (Cr.)*	*Dr.*	*Cr.*	*Inflow*	*Outflow*	
Cash	135	38	97		To be explained		C&CE
Accounts payable	(15)	(6)		9	9		Operating
Income taxes payable	(20)	(12)		8	8		Operating
Retained earnings	(100)	(20)		80	80		Operating
	-0-	-0-	97	97	97	-0-	

$97 net cash inflow

Cash flow from operating activities would be calculated as:

Income before income taxes	$100
Income taxes paid ($20 – 8)	(12)
Add changes in non-cash working capital	
Increase in accounts payable	9
Cash flow from operating activities	$ 97

P 14–3

1. Dr. Depreciation Expense 100
   Cr. Accumulated Depreciation—Machinery 100

   There is no cash effect. However, the depreciation expense should be added back to the net loss figure when deriving cash flow from operating activities. Note, as well, that the credit to Accumulated Depreciation accounts for all the change to this account during the year.

2. Dr. Machinery 300
   Cr. Cash 300

   Since (a) the Machinery account increased $300 (500 — 200) during the year, (b) no disposals occurred, and (c) all purchases of machinery were paid in cash, $300 of cash must have been spent on machinery purchases. This cash outflow is an investing activity since it affects a non–current asset account and should be shown as such when preparing the SCF.

P 14–3 continued

3. Cash flow table:

	Balance		*Change*		*Cash effect*		*Activity*
	2019	*2018*					
	Dr. (Cr.)	*Dr. (Cr.)*	*Dr.*	*Cr.*	*Inflow*	*Outflow*	
Cash	350	650		300	To be explained		C&CE
Machinery	500	200	300			300	Investing
Acc. depn.	(250)	(150)		100	100		Operating
Ret. earn.	(600)	(700)	100			100	Operating
	-0-	-0-	400	400	100	400	

$300 net cash outflow

Statement of Cash Flows
For the Year Ended December 31, 2019

Operating activities	
Net loss	$(100)
Item not affecting cash flow	
Depreciation expense	100
Cash flow from operating activities	-0-
Investing activities	
Purchase of machinery	(300)
Net decrease in cash	(300)
Cash at beginning of year	650
Cash at end of year	$ 350

P 14–4

1. Partial cash flow table:

	Balance 2019 Dr. (Cr.)	Balance 2018 Dr. (Cr.)	Change Dr.	Change Cr.	Cash effect Inflow	Cash effect Outflow	Activity
Cash			*1,175		To be explained		C&CE
Accum. dep'n.				120(b)	120		Operating
Acc. rec.			(d)40			40	Operating
Merch. inventory				50(e)	50		Operating
Acc. am. – patents				5(f)	5		Operating
Wages payable				20(c)	20		Operating
Borrowings			(g)250			250	Financing
Common shares				500(h)	500		Financing
Retained earnings				800(a)	800		Operating
			(i)30			30	Financing
			1,495	1,495	1,495	320	

*$1,175 net cash inflow

* balancing figure for Change columns

2. Statement of cash flows:

Hubris Corporation
Statement of Cash Flows
For the Year Ended December 31, 2019

Operating activities		
Net income		$ 800
Items not affecting cash flow		
Depreciation and amortization expense ($120 + 5)		125
Net changes in non-cash working capital ($20 – 40 + 50)		30
Cash flow from operating activities		955
Financing activities		
Repayment of borrowings	$(250)	
Common shares issued	500	
Payment of dividends	(30)	
Cash flow from financing activities		220
Net increase in cash		1,175
Cash at beginning of year**		25
Cash at end of year		$1,200

**If the company had $1,200 cash on hand at the end of the year and cash increased by $1,175 during the year, cash on hand at the beginning of the year must be $25.

P 14–5

1. Partial cash flow table:

	Balance		*Change*		*Cash effect*		*Activity*
	2019	*2018*	*Dr.*	*Cr.*	*Inflow*	*Outflow*	
Cash			37,900[1]			To be explained	C&CE
Accounts receivable			(c) 900			900	Operating
Merchandize inventory				(d) 1,200	1,200		Operating
Equipment			(h) 10,000			10,000	Investing
				(j) 15,000	(i)6,000[2]		Investing
					(j)1,500		Operating
Accum. dep'n. – equip.			(j) 7,500	(a) 3,000	3,000		Operating
Accum. amort – patents				(e) 100	100		Operating
Accounts payable			(k) 1,000			1,000	Operating
Wages payable				(b) 500	500		Operating
Dividends payable				(i) 5,000	5,000		Financing
Borrowings			(f) 5,000			5,000	Financing
Common shares				(g) 12,500	22,500		Financing
				(h) 10,000			
Retained earnings				20,000[1]	20,000		Operating
			(i) 5,000			5,000	Financing
			67,300	67,300	59,800	21,900	

$37,900[1] net cash inflow

[1] Given

[2] Cost of machinery

Cost of machinery	$15,000
Accumulated depreciation (1/2)	(7,500)
Carrying amount	7,500
Cash proceeds	(6,000)
Loss on disposal	$1,500

The journal entry to record the sale would be:

Dr.	Cash	6,000(i)	
Dr.	Accumulated Dep'n.	7,500	
Dr.	Loss on Disposal	1,500(j)	
Cr.	Machinery		15,000

The first item (i) is a cash inflow from investing activities. The second item (j) is added back to net income to arrive at cash flow from operating activities.

P 14–5 continued

2.

Wheaton Co. Ltd.
Statement of Cash Flows
For the Year Ended December 31, 2019

Operating activities		
Income before income taxes ($95,000 – 70,000)		$ 25,000
Income taxes paid		(5,000)
Items not affecting cash flow		
Depreciation and amortization ($3,000 + 100)		3,100
Loss on disposal of machinery		1,500
Net changes in non-cash working capital ($500 – 900 + 1,200 – 1,000)		(200)
Cash flow from operating activities		24,400
Investing activities		
Proceeds from sale of machinery	$ 6,000	
Purchase of machinery	(10,000)	
Cash flow used by investing activities		(4,000)
Financing activities		
Repayment of borrowings	(5,000)	
Dividends paid ($5,000 – 5,000)	-0-	
Common shares issued	22,500	
Cash flow from financing activities		17,500
Net increase in cash		37,900
Cash at beginning of year (given)		1,000
Cash at end of year (derived)		$ 38,900

3. The statement of cash flows shows that the company has financed its activities internally from operations and by issuing common shares. The sale of machinery also generated cash. It has repaid some borrowings and acquired some capital assets. Wheaton Co. Ltd. has generated substantially more cash than it has used in 2019.

P 14–6

1.

Sales	$225
Cost of goods sold	(92)
Selling and administrative	(39)
Depreciation	(44)
Income taxes	(7)
Gain on disposal of land	20
Net income	63
Retained earnings, beginning of year	-0-
Dividends declared	(15)
Retained earnings, end of year	$ 48

2. Cash flow table:

	Balance		*Change*		*Cash effect*		*Activity*
	2019	*2018*	*Dr.*	*Cr.*	*Inflow*	*Outflow*	
Cash	45	-0-	45		To be explained		C&CE
Accounts receivable	100	-0-	100			100	Operating
Merchandize inventory	60	-0-	60			60	Operating
Prepaid rent	10	-0-	10			10	Operating
Equipment	160	-0-	160			(a) 40	Investing
						(c) 120	Investing
Accum. dep'n	(44)	-0-		44	44		Operating
Land	-0-	-0-	30			30	Investing
				(b) 30		(b) 20	Operating
					(b) 50		Investing
Accounts payable	(50)	-0-		50	50		Operating
Dividends payable	(5)	-0-		5	5		Financing
Income taxes payable	(8)	-0-		8	8		Operating
Non-current borrowings	(80)	-0-		80		20	Financing
					(d) 100		Financing
Common shares	(140)	-0-		140	(a) 40		Financing
					(e) 100		
Retained earnings	(48)	-0-		48	63		Operating
						15	Financing
	-0-	-0-	405	405	460	415	

$45 net cash inflow

(a) $40 of equipment was purchased for $40 of common shares.
(b) The journal entry to record the sale of land would be:

Dr.	Cash	50	
Cr.	Land		30
Cr.	Gain on Sale		20

(c) Given

P 14–6 continued

(d) \$100 of non-current debt was assumed; \$20 of non-current debt was redeemed.

Obelisk Corporation
Statement of Cash Flows
For the Year Ended December 31, 2019

Operating activities		
Income from operations		\$ 52
Income taxes paid (\$9 – 8)		(1)
Items not affecting cash flow		
Depreciation expense		44
Net changes in non-cash working capital		
(\$50 – 100 – 60 – 10)		(120)
Cash flow used by operating activities		(25)
Investing activities		
Proceeds from sale of land	\$ 50	
Purchase of equipment	(160)	
Purchase of land	(30)	
Cash flow used by investing activities		(140)
Financing activities		
Proceeds from non-current borrowings	100 *	
Common shares issued	140	
Repayment of non-current borrowings	(20) *	
Payment of dividends (\$15 – 5)	(10)	
Cash flow from financing activities		210
Net increase in cash		45
Cash at beginning of year		-0-
Cash at end of year		\$ 45

*Theses could be netted and shown as \$80 inflow.

3. The statement of cash flows shows that the company used cash to finance its operations, purchase land and equipment, and pay dividends. It generated cash by assuming long-term debt (net), issuing common shares, and selling land. The company generated more cash than it used (\$45), but chiefly from financing activities. The cash flow used by operating activities (\$25) is a concern, but on the other hand, this may be acceptable in the first year of operations.

P 14–7

1. Cash flow table ($000s):

	Balance		*Change*		*Cash effect*		*Activity*
	2019	*2018*	*Dr.*	*Cr.*	*Inflow*	*Outflow*	
Cash	40	30	10		To be explained		C&CE
Accounts receivable	38	28	10			10	Operating
Merchandize inventory	102	106		4	4		Operating
Prepaid expenses	8	6	2			2	Operating
Land	-0-	20		20	24		Investing
						4	Operating
Building	240	180	60			60	Investing
Machinery	134	80	90			90	Investing
				(a) 36	(a) 2		Operating
					(a) 16		Investing
Accum. dep'n	(76)	(80)	(a) 18	14	14		Operating
Patents	8	10		2	2		Operating
Accounts payable	(40)	(44)	4			4	Operating
Income taxes payable	(8)	(6)		2	2		Operating
Borrowings	(70)	(60)		10	10		Financing
Common shares	(310)	(240)		70	70		Financing
Retained earnings	(66)	(30)		36	56		Operating
						20	Financing
	-0-	-0-	194	194	200	190	

$10 net cash inflow

a. Cash inflow of $16,000 is reported as an investing activity, representing the sale proceeds.

b. The $2,000 loss on the sale is added back to income before income taxes to arrive at cash flow from operating activities. This amount was deducted on the income statement to arrive at net income, but does not relate to an operating activity.

Transactions (d) and (e) involve the exchange of shares for machinery and non-current debt, respectively. These transactions are each recorded as two separate transactions, one recording the cash inflow and one the cash outflow.

P 14–7 continued

2.

Cormier Limited
Statement of Cash Flows
For the Year Ended December 31, 2019
($000s)

Operating activities		
Income before income taxes ($56 + 20)		$ 76
Income taxes paid ($20 – 2)		(18)
Items not affecting cash flow		
Depreciation and amortization expense ($14 + 2)		16
Net gains on disposal ($2 – 4)		(2)
Net changes in non-cash working capital ($4 – 10 – 2 – 4)		(12)
Cash flow from operating activities		60
Investing activities		
Proceeds from sale of land	$ 24	
Proceeds from sale of machinery	16	
Purchase of machinery and building	(150)	
Cash flow used by investing activities		(110)
Financing activities		
Loan proceeds	10	
Common shares issued	70	
Payment of dividends	(20)	
Cash flow from financing activities		60
Net increase in cash		10
Cash at beginning of year		30
Cash at end of year		$ 40

3. Cormier has generated cash inflow of $60,000 from operating activities, which is good. It has sold land and machinery, but overall there has been a cash outflow from investing activities because of the purchase of new machinery and the building. Much of the acquisition of capital assets have been financed through loans and issuing common shares. Overall, the company has $30,000 more cash on hand at the end of the year.

Published by Valley Educational Services Ltd.

4910C – 58 St., Athabasca AB T9S 1L5

ISBN 978-0-9953266-1-3

Printed and bound in Canada by Athabasca University

Library and Archives Canada Cataloguing in Publication

Annand, David, 1954–

Latest version available at http://business.athabascau.ca/faculty/david-annand-edd/

Please forward suggested changes to davida@athabascau.ca.

Version 2.2

December 31, 2016