Student Solutions Manual to
Accompany

Introduction to
Financial Accounting

Second Edition (Revised)

Based on International Financial Reporting Standards

David Annand
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.
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, statement of profit and loss, statement of cash flows, and statement of changes in equity).

9. The purpose of the statement of profit and loss 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 Statement of Profit and Loss 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 statement of profit and loss 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:

\[
\text{ASSETS} = \text{LIABILITIES} + \text{SHAREHOLDERS’ EQUITY}
\]

(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.
1. Issued share capital for cash (+) Cash (+) Share Capital
2. Borrowed money from a bank (+) Cash (+) Bank Loan
3. Collected an account receivable (+) Cash (-) Accounts Receivable
4. 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]
5. Paid for this month’s advertising in a newspaper (-) Cash (-) Expense [or (+) Accounts Payable (-) Expense, then (-) Cash (-) Accounts Payable if the bill is first set up as an Accounts Payable]
6. Repaid money borrowed from a bank (-) Cash (-) Bank Loan
X. Signed a contract to purchase a computer NO EFFECT
1. Sent a bill to a customer for repairs made today (+) Accounts Receivable (+) Revenue
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
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)

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.

1. L  8. A
3. L  10. E
4. A  11. E
5. A  12. E
6. E  13. A
7. L  14. E
Since shareholders' equity is $200,000 and retained earnings is $39,000, share capital must be $161,000.

<table>
<thead>
<tr>
<th></th>
<th>ASSETS = Cash + Accounts receivable + Unused supplies + Land + Building + Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>= $33,000 + $82,000 + $2,000 + $25,000 + $70,000 + $30,000</td>
</tr>
<tr>
<td></td>
<td>= $242,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>LIABILITIES = Bank loan + Accounts payable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>= $15,000 + $27,000</td>
</tr>
<tr>
<td></td>
<td>= $42,000</td>
</tr>
</tbody>
</table>

|   | ASSETS = LIABILITIES + SHAREHOLDERS’ EQUITY                                 |
|   | S/H EQUITY = $242,000 - $42,000                                            |
|   | = $200,000                                                                |
|   | RET. EARN. = $40,000 - 1,000                                               |
|   | = $39,000                                                                  |
Statement of Profit and Loss
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

<table>
<thead>
<tr>
<th>Share capital</th>
<th>Retained earnings</th>
<th>Total equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open balance</td>
<td>$-0-</td>
<td>$-0-</td>
</tr>
<tr>
<td>Shares issued</td>
<td>4,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Net income</td>
<td>6,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Dividends</td>
<td>-</td>
<td>(2,000)</td>
</tr>
<tr>
<td>Ending balance</td>
<td>$4,000</td>
<td>$4,000</td>
</tr>
</tbody>
</table>

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
Adams Ltd.
Statement of Profit and Loss
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

<table>
<thead>
<tr>
<th>Share capital</th>
<th>Retained earnings</th>
<th>Total equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening balance</td>
<td>$ -0-</td>
<td>$ -0-</td>
</tr>
<tr>
<td>Shares issued</td>
<td>3,000</td>
<td>-0-</td>
</tr>
<tr>
<td>Net income</td>
<td>-0-</td>
<td>1,200</td>
</tr>
<tr>
<td>Dividends</td>
<td>-0-</td>
<td>(500)</td>
</tr>
<tr>
<td>Ending balance</td>
<td>$3,000</td>
<td>$700</td>
</tr>
</tbody>
</table>

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
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.
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
   Increases are debited. Liabilities, Share Capital, Revenues
   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 statement of profit and loss 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 statement of profit and loss.

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.
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 statement of profit and loss, statement of financial position, and statement of changes in equity.
### CP 2–1

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Any Asset</th>
<th>Any Liability</th>
<th>Share Capital</th>
<th>Any Revenue</th>
<th>Any Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Debit (increase)</td>
<td>Credit (decrease)</td>
<td>Debit (increase)</td>
<td>Credit (decrease)</td>
<td>Debit (increase)</td>
</tr>
<tr>
<td>(1)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>(2)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(7)</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(9)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(10)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(11)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>(12)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(13)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CP 2–2

\[ \text{ASSETS} = \text{LIABILITIES} + \text{SHAREHOLDERS' EQUITY} \]

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

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

CP 2–3

\[
\begin{array}{cccc}
\text{Assets} & = & \text{Liabilities} & + \text{S/H Equity} \\
\text{Debit (increase)} & \text{Credit (decrease)} & \text{Debit (decrease)} & \text{Credit (increase)} & \text{Debit (decrease)} & \text{Credit (increase)} \\
\hline
2. Borrowed $5,000 from the bank & 5,000 & & & 5,000 & \\
3. Paid $2,000 of the bank loan & & 2,000 & 2,000 & \\
4. Paid $600 in advance for a one–year insurance policy & 600 & & 600 & \\
5. Received $500 in advance for next month’s rental of office space & 500 & & & 500 \\
\end{array}
\]

CP 2–4

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

<table>
<thead>
<tr>
<th></th>
<th>Cash</th>
<th>Bank Loan</th>
<th>Share Capital</th>
<th>Repair Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>5,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5)</td>
<td>7,500</td>
<td></td>
<td>7,500</td>
<td>5,000</td>
</tr>
<tr>
<td>(6)</td>
<td>500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8)</td>
<td>2,500</td>
<td>2,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(10)</td>
<td>2,000</td>
<td></td>
<td>200</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Accounts Receivable</th>
<th>Accounts Payable</th>
<th>Electricity Expense</th>
<th>Rent Expense</th>
<th>Supplies Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3)</td>
<td>1,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6)</td>
<td>500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(10)</td>
<td>2,000</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(4)</td>
<td>2,000</td>
<td>2,000</td>
<td></td>
<td></td>
<td>800</td>
</tr>
<tr>
<td>(7)</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Prepaid Rent</th>
<th>Rent Expense</th>
<th>Supplies Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2)</td>
<td>900</td>
<td>(11) 300</td>
<td>(9) 800</td>
</tr>
<tr>
<td>(11)</td>
<td>300</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. Cash  
   Share Capital  
   Debit 3,000  Credit 3,000  
   To record the issuance of share capital.

2. Equipment  
   Accounts Payable  
   Debit 2,000  Credit 2,000  
   To record the purchase of equipment on account.

3.* Rent Expense  
   Cash  
   Debit 400  Credit 400  
   To record the payment of rent for the month.

4. Supplies  
   Accounts Payable  
   Debit 4,000  Credit 4,000  
   To record the purchase of supplies.

5. Accounts Receivable  
   Repair Revenue  
   Debit 2,500  Credit 2,500  
   To record repair revenue.

6. Accounts Payable  
   Cash  
   Debit 2,000  Credit 2,000  
   To record the payment on account.

7. Cash  
   Accounts Receivable  
   Debit 500  Credit 500  
   To record collection of an amount owed.

8. Cash  
   Equipment  
   Debit 1,000  Credit 1,000  
   To record the sale of equipment.

*Alternately, two entries could be made

3. Prepaid Rent  
   Cash  
   Debit 400  Credit 400  
   To record payment in advance of rent for the month.

9. Rent Expense  
   Prepaid Rent  
   Debit 400  Credit 400  
   To record rent expense for the month.
1. Cash  
   Share Capital  
   To record issuance of share capital.

2. Equipment  
   Cash  
   Accounts Payable  
   To record purchase of equipment.

3. Cash  
   Accounts Receivable  
   Service Revenue  
   To record revenue earned.

4. Accounts receivable  
   Service Revenue  
   To record revenue earned.

5. Prepaid Rent  
   Cash  
   To record rent paid in advance.

6. Truck Operating Expense  
   Accounts Payable  
   To record bill received for truck repairs.

7. Supplies Expense  
   Accounts Payable  
   To record supplies purchased and used.

8. Cash  
   Equipment  
   To record the sale of equipment.

9. Rent Expense  
   Prepaid Rent  
   To record rent for the month.

10. Accounts Payable  
    Cash  
    To record payment on account.

11. Cash  
    Bank Loan  
    To record the receipt of a bank loan.
Cross Corporation  
Trial Balance  
At December 31, 2017

<table>
<thead>
<tr>
<th>Acct. No.</th>
<th>Account Title</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Cash</td>
<td>$120,400</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>Accounts receivable</td>
<td>26,000</td>
<td></td>
</tr>
<tr>
<td>173</td>
<td>Unused supplies</td>
<td>6,000</td>
<td></td>
</tr>
<tr>
<td>180</td>
<td>Land</td>
<td>8,000</td>
<td></td>
</tr>
<tr>
<td>181</td>
<td>Building</td>
<td>120,000</td>
<td></td>
</tr>
<tr>
<td>201</td>
<td>Bank loan</td>
<td></td>
<td>$80,000</td>
</tr>
<tr>
<td>210</td>
<td>Accounts payable</td>
<td></td>
<td>30,000</td>
</tr>
<tr>
<td>320</td>
<td>Share capital</td>
<td></td>
<td>170,000</td>
</tr>
<tr>
<td>420</td>
<td>Commissions earned</td>
<td></td>
<td>5,000</td>
</tr>
<tr>
<td>631</td>
<td>Insurance expense</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>654</td>
<td>Rent expense</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>656</td>
<td>Salaries expense</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>668</td>
<td>Supplies expense</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>669</td>
<td>Telephone expense</td>
<td>200</td>
<td></td>
</tr>
</tbody>
</table>

**Total Debits = Total Credits**
<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cash</td>
<td>101</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Share Capital</td>
<td>320</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>To record issuance of share capital.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Equipment</td>
<td>183</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Cash</td>
<td>101</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Accounts Payable</td>
<td>210</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>To record purchase of equipment for cash and on account.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Prepaid Rent</td>
<td>162</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Cash</td>
<td>101</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>To record payment of rent in advance.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Cash</td>
<td>101</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Accounts Receivable</td>
<td>110</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Service Revenue</td>
<td>470</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>To record receipt of payments and billing of customers for work done.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Cash</td>
<td>101</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Equipment</td>
<td>183</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>To record sale of equipment for cash.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Supplies Expense</td>
<td>668</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Accounts Payable</td>
<td>210</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>To record purchase of supplies on account.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Accounts Receivable</td>
<td>110</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Service Revenue</td>
<td>470</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>To record billing of client for work done.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Rent Expense</td>
<td>654</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Prepaid Rent</td>
<td>162</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>To record write–off of rent expired for the month.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Truck Operating Expense</td>
<td>670</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Accounts Payable</td>
<td>210</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>To record receipt of bill with respect to truck expenses incurred.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Accounts Payable</td>
<td>210</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Cash</td>
<td>101</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>To record payment of account payable.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Schulte Corporation**

<table>
<thead>
<tr>
<th></th>
<th>Cash No. 101</th>
<th>Accounts Payable No. 210</th>
<th>Share Capital No. 320</th>
<th>Service Revenue No. 470</th>
<th>Rent Expense No. 654</th>
<th>Supplies Expense No. 668</th>
<th>Truck Operating Expense No. 670</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mar. 1</strong></td>
<td>15</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mar. 2</strong></td>
<td>4</td>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mar. 3</strong></td>
<td>17</td>
<td>1</td>
<td>31</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mar. 15</strong></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mar. 18</strong></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bal.</strong></td>
<td>4</td>
<td>10</td>
<td>6</td>
<td>1</td>
<td>8</td>
<td>Bal. 7</td>
<td></td>
</tr>
</tbody>
</table>

**Accounts Receivable No. 110**

|                | Mar. 15 | 2       | Bal. 3 |

**Prepaid Rent No. 162**

|                | Mar. 3 | 2       |

**Equipment No. 183**

|                | Mar. 2 | 6       | Mar. 17 | 1       |

|                | Bal.   | 5       |         |         |
3. Schulte Corporation
Trial Balance
At March 31, 2017

<table>
<thead>
<tr>
<th>Account Balances</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 4</td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Prepaid rent</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td></td>
<td>$ 7</td>
</tr>
<tr>
<td>Share capital</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Service revenue</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Rent expense</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Supplies expense</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Truck operating expense</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$19</td>
<td>$19</td>
</tr>
</tbody>
</table>

Total Debits = Total Credits

4. Schulte Corporation
Statement of Profit and Loss
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

<table>
<thead>
<tr>
<th>Share capital</th>
<th>Retained earnings</th>
<th>Total equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening balance</td>
<td>$ -0-</td>
<td>$ -0-</td>
</tr>
<tr>
<td>Shares issued</td>
<td>5</td>
<td>-0-</td>
</tr>
<tr>
<td>Net income</td>
<td>--0-</td>
<td>1</td>
</tr>
<tr>
<td>Ending balance</td>
<td>$ 5</td>
<td>$ 1</td>
</tr>
</tbody>
</table>
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

McQueen Corp.
Trial Balance
At December 31, 2017

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

$116,250  $116,250
1. | 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. |
2. **Collins Corporation**  
   **Trial Balance**  
   **June 30, 2017**

<table>
<thead>
<tr>
<th>Account Title</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 5,500</td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td>Prepaid insurance</td>
<td>1,800</td>
<td></td>
</tr>
<tr>
<td>Unused supplies</td>
<td>3,800</td>
<td></td>
</tr>
<tr>
<td>Land</td>
<td>5,000</td>
<td></td>
</tr>
<tr>
<td>Building</td>
<td>15,000</td>
<td></td>
</tr>
<tr>
<td>Bank loan</td>
<td></td>
<td>$ 4,000</td>
</tr>
<tr>
<td>Accounts payable</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Share capital</td>
<td>25,000</td>
<td></td>
</tr>
<tr>
<td>Repair revenue</td>
<td>8,000</td>
<td></td>
</tr>
<tr>
<td>Insurance expense</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Rent expense</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>Salaries expense</td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td>Supplies expense</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Telephone expense</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$37,100</strong></td>
<td><strong>$37,100</strong></td>
</tr>
</tbody>
</table>

3. **Collins Corporation**  
   **Statement of Profit and Loss**  
   **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
Collins Corporation
Statement of Changes in Equity
For the Month Ended January 31, 2017

<table>
<thead>
<tr>
<th>Share capital</th>
<th>Retained earnings</th>
<th>Total equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening balance</td>
<td>$ -0- $ -0- $ -0-</td>
<td></td>
</tr>
<tr>
<td>Shares issued</td>
<td>25,000 0 25,000</td>
<td></td>
</tr>
<tr>
<td>Net income</td>
<td>-0- 5,000 5,000</td>
<td></td>
</tr>
<tr>
<td>Ending balance</td>
<td>$25,000 $5,000 $30,000</td>
<td></td>
</tr>
</tbody>
</table>

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

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

2. Sabre Travels Inc.
   Statement of Profit and Loss
   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

   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
   Total liabilities 120

   Shareholders’ Equity
   Share capital 250
   Retained earnings 1,140
   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

<table>
<thead>
<tr>
<th></th>
<th>Share capital</th>
<th>Retained earnings</th>
<th>Total equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening balance</td>
<td>$ 250</td>
<td>$ -0-</td>
<td>$ 250</td>
</tr>
<tr>
<td>Net income</td>
<td>$ -0-</td>
<td>1,140</td>
<td>1,140</td>
</tr>
<tr>
<td>Ending balance</td>
<td>$ 250</td>
<td>$1,140</td>
<td>$1,390</td>
</tr>
</tbody>
</table>
### Elgert Corporation

1. | Cash | Accounts Payable | Share Capital | Service Revenue |
   | Jan. 1 | 10,000 | Jan. 28 | 450 | Jan. 1 | 10,000 | Jan. 11 | 1,300 | 31 | 1,600 |
   | 11 | 1,300 | 4 | 4,000 | 30 | 1,800 | 31 | 50 | Bal. | 2,900 |
   | 11,300 | 6,050 | Bal. | 5,250 |

| Accounts Receivable | Dividends | Rent Expense |
| Jan. 31 | 1,600 | Jan. 31 | 50 | Jan. 5 | 200 |

| Unused Supplies | Truck Operating Expense | Salaries Expense |
| Jan. 9 | 4,000 | Jan. 28 | 450 | Jan. 30 | 1,800 |
| Bal. | 3,800 | Bal. | 200 |
2. Elgert Corporation
Trial Balance
January 31, 2017

<table>
<thead>
<tr>
<th>Account Title</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 5,250</td>
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</tr>
<tr>
<td>Accounts receivable</td>
<td>1,600</td>
<td></td>
</tr>
<tr>
<td>Unused supplies</td>
<td>3,800</td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>450</td>
<td></td>
</tr>
<tr>
<td>Share capital</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Dividends</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Service revenue</td>
<td>2,900</td>
<td></td>
</tr>
<tr>
<td>Rent expense</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>Truck operating expense</td>
<td>450</td>
<td></td>
</tr>
<tr>
<td>Salaries expense</td>
<td>1,800</td>
<td></td>
</tr>
<tr>
<td>Supplies expense</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$13,350</strong></td>
<td><strong>$13,350</strong></td>
</tr>
</tbody>
</table>

3. Elgert Corporation
Statement of Profit and Loss
For the Month Ended January 31, 2017

<table>
<thead>
<tr>
<th>Revenue</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Services</td>
<td>$2,900</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent</td>
<td>$200</td>
</tr>
<tr>
<td>Truck operating</td>
<td>450</td>
</tr>
<tr>
<td>Salaries</td>
<td>1,800</td>
</tr>
<tr>
<td>Supplies</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total expenses</strong></td>
<td><strong>2,650</strong></td>
</tr>
</tbody>
</table>

Net income  
$ 250
Elgert Corporation
Statement of Changes in Equity
For the Month Ended January 31, 2017

<table>
<thead>
<tr>
<th></th>
<th>Share capital</th>
<th>Retained earnings</th>
<th>Total equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening balance</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Shares issued</td>
<td>10,000</td>
<td>0</td>
<td>10,000</td>
</tr>
<tr>
<td>Net income</td>
<td>250</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>Dividends</td>
<td>0</td>
<td>(50)</td>
<td>(50)</td>
</tr>
<tr>
<td>Ending balance</td>
<td>$10,000</td>
<td>$200</td>
<td>$10,200</td>
</tr>
</tbody>
</table>

Elgert Corporation
Statement of Financial Position
At January 31, 2017

**Assets**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$5,250</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>1,600</td>
</tr>
<tr>
<td>Unused supplies</td>
<td>3,800</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>$10,650</strong></td>
</tr>
</tbody>
</table>

**Liabilities**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable</td>
<td>$450</td>
</tr>
</tbody>
</table>

**Shareholders’ Equity**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital</td>
<td>$10,000</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total liabilities and shareholders’ equity</strong></td>
<td><strong>$10,650</strong></td>
</tr>
</tbody>
</table>
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 statement of profit and loss as depreciation expense.
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 Receivable XX
    Revenue XX
    To record revenue 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 statement of profit and loss (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.
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 summarizes 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.
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 a 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 summarizes 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
    Income Summary XX
    X 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 statement of profit and
loss. This balance is then closed to retained earnings.

20. The Dividends account is not closed to the Income Summary account because it
is not a statement of profit and loss 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.
CHAPTER 3 / Financial Accounting and the Use of Adjusting Entries

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)
$10,000 = $2,500/year
4 years

CP 3-3

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
</table>
| a. Jul. 30 | Office Supplies Expense
| Unused Office Supplies | 135      | 135        |
|        | To adjust of office supplies on hand to the remaining amount. |        |         |
| b. 30 | Depreciation Expense-Truck
| Accumulated Depreciation-Truck | 400       | 400       |
|        | To record truck depreciation for the period. |        |         |
| c. 30 | Insurance Expense
| Prepaid Insurance | 240       | 240       |
|        | To adjust the portion of insurance expired for the period. |        |         |
| d. 30 | Interest Expense
| Interest Payable | 100       | 100       |
|        | To adjust interest payable for the period. |        |         |
| e. 30 | Unearned Rent Revenue
| Rent Earned | 500       | 500       |
|        | To adjust the portion of unearned rent at the end of the period. |        |         |
1. and 3.

Graham Corporation
General Ledger

\[ \text{ASSETS} = \text{LIABILITIES} + \text{SHAREHOLDERS' EQUITY} \]

<table>
<thead>
<tr>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent Receivable</td>
<td></td>
<td>110</td>
</tr>
<tr>
<td>Rent Earned</td>
<td></td>
<td>110</td>
</tr>
<tr>
<td>Interest Payable</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Rent Earned</td>
<td></td>
<td>110</td>
</tr>
<tr>
<td>Insurance Expense</td>
<td></td>
<td>1,200</td>
</tr>
<tr>
<td>Prepaid Insurance</td>
<td>1,200</td>
<td></td>
</tr>
<tr>
<td>Bal.</td>
<td>600</td>
<td></td>
</tr>
</tbody>
</table>

2. Graham Corporation
GENERAL JOURNAL

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>F</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Adjusting Entries</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a.</td>
<td>Rent Receivable</td>
<td></td>
<td></td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>Rent Earned</td>
<td></td>
<td></td>
<td>110</td>
</tr>
<tr>
<td>b.</td>
<td>Insurance Expense</td>
<td></td>
<td></td>
<td>1,200</td>
</tr>
<tr>
<td></td>
<td>Prepaid Insurance</td>
<td></td>
<td></td>
<td>1,200</td>
</tr>
<tr>
<td>c.</td>
<td>Interest Expense</td>
<td></td>
<td>90</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interest Payable</td>
<td></td>
<td></td>
<td>90</td>
</tr>
<tr>
<td>4.</td>
<td>Rent Earned</td>
<td></td>
<td>110</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Insurance Expense</td>
<td></td>
<td>1,200</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interest Expense</td>
<td></td>
<td>90</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER THREE / Financial Accounting and the Use of Adjusting Entries

CP 3-6

1. **General Journal**

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>F</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>Rent Expense</td>
<td>200</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prepaid Rent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To adjust prepaid rent account to the proper balance.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Office Supplies Expense</td>
<td>400</td>
<td></td>
<td>400</td>
</tr>
<tr>
<td></td>
<td>Unused Office Supplies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To adjust the ending balance of supplies on hand.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Income Taxes Expense</td>
<td>5,000</td>
<td></td>
<td>5,000</td>
</tr>
<tr>
<td></td>
<td>Income Taxes Payable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To record income taxes for the period.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Unearned Commissions Revenue</td>
<td>1,000</td>
<td></td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td>Commissions Earned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To record the proper balance in the Unearned Commissions account.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Salaries Expense</td>
<td>300</td>
<td></td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>Salaries Payable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>To accrue salaries for the period.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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).**
Bernard Inc.
General Journal

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

**CP 3-8**

1.

<table>
<thead>
<tr>
<th>Account</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>101</td>
</tr>
<tr>
<td>Accounts Payable</td>
<td>210</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>110</td>
</tr>
<tr>
<td>Rent Receivable</td>
<td>125</td>
</tr>
<tr>
<td>Prepaid Insurance</td>
<td>161</td>
</tr>
<tr>
<td>Unused Office Supplies</td>
<td>170</td>
</tr>
<tr>
<td>Unused Repair Supplies</td>
<td>171</td>
</tr>
<tr>
<td>Furniture</td>
<td>182</td>
</tr>
<tr>
<td>Acc. Dep’n – Furniture</td>
<td>191</td>
</tr>
<tr>
<td>Accounts Payable</td>
<td>70</td>
</tr>
<tr>
<td>Unearned Repair Revenue</td>
<td>247</td>
</tr>
<tr>
<td>(e) 400</td>
<td></td>
</tr>
<tr>
<td>Interest Payable</td>
<td>222</td>
</tr>
<tr>
<td>Interest Expense</td>
<td>632</td>
</tr>
<tr>
<td>Income Taxes Pay.</td>
<td>260</td>
</tr>
<tr>
<td>Income Taxes Expense</td>
<td>830</td>
</tr>
<tr>
<td>Rent Expense</td>
<td>654</td>
</tr>
<tr>
<td>Repair Supplies Expense</td>
<td>655</td>
</tr>
<tr>
<td>Telephone Expense</td>
<td>669</td>
</tr>
<tr>
<td>Share Capital</td>
<td>320</td>
</tr>
<tr>
<td>Ret. Earn.</td>
<td>340</td>
</tr>
<tr>
<td>Repair Rev.</td>
<td>450</td>
</tr>
<tr>
<td>Rent Earned</td>
<td>440</td>
</tr>
<tr>
<td>Dep’n Exp. - Furniture</td>
<td>621</td>
</tr>
<tr>
<td>Insurance Exp.</td>
<td>631</td>
</tr>
<tr>
<td>Office Supplies Exp.</td>
<td>650</td>
</tr>
<tr>
<td>Income Taxes Expense</td>
<td>400</td>
</tr>
<tr>
<td>(f) 40</td>
<td></td>
</tr>
</tbody>
</table>

### Adjusting Entries

- **(a)**
- **(b)**
- **(c)**
- **(d)**
- **(e)**
- **(f)**
- **(g)**
- **(h)**
2. Hynes Corporation
General Journal

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>F</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adjusting Entries</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Dec. 31</td>
<td>Insurance Expense</td>
<td>631</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prepaid Insurance</td>
<td>161</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>To record expiry of prepaid insurance.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. 31</td>
<td>Depreciation Expense—Furniture</td>
<td>621</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accumulated Depreciation—Furniture</td>
<td>191</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>To record depreciation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. 31</td>
<td>Office Supplies Expense</td>
<td>650</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unused Office Supplies</td>
<td>170</td>
<td></td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>To record use of office supplies.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. 31</td>
<td>Repair Supplies Expense</td>
<td>655</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unused Repair Supplies</td>
<td>171</td>
<td></td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>To record use of supplies.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. 31</td>
<td>Unearned Repair Revenue</td>
<td>247</td>
<td>400</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Repair Revenue</td>
<td>450</td>
<td></td>
<td>400</td>
</tr>
<tr>
<td></td>
<td>To adjust unearned repair revenue to actual.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. 31</td>
<td>Rent Receivable</td>
<td>125</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rent Earned</td>
<td>440</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>To adjust for rent receivable.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. 31</td>
<td>Interest Expense</td>
<td>632</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interest Payable</td>
<td>222</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>h. 31</td>
<td>Income Taxes Expense</td>
<td>669</td>
<td>400</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Income Taxes Payable</td>
<td>260</td>
<td></td>
<td>400</td>
</tr>
<tr>
<td></td>
<td>To adjust for income taxes.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### CP 3-9

1. 

<table>
<thead>
<tr>
<th>Acct. No.</th>
<th>Account</th>
<th>Trial Balance</th>
<th>Adjustments</th>
<th>Adjusted Trial Balance</th>
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</thead>
<tbody>
<tr>
<td>101</td>
<td>Cash</td>
<td>$4,000</td>
<td></td>
<td>$4,000</td>
</tr>
<tr>
<td>110</td>
<td>Accounts receivable</td>
<td>5,000</td>
<td></td>
<td>5,000</td>
</tr>
<tr>
<td>161</td>
<td>Prepaid insurance</td>
<td>3,600</td>
<td>(a) 300</td>
<td>3,300</td>
</tr>
<tr>
<td>162</td>
<td>Prepaid rent</td>
<td>1,000</td>
<td>(b) 500</td>
<td>500</td>
</tr>
<tr>
<td>184</td>
<td>Truck</td>
<td>6,000</td>
<td></td>
<td>6,000</td>
</tr>
<tr>
<td>194</td>
<td>Acc. dep. – truck</td>
<td>(c) 1,500</td>
<td></td>
<td>$1,500</td>
</tr>
<tr>
<td>210</td>
<td>Accounts payable</td>
<td>$7,000</td>
<td>(d) 400</td>
<td>7,400</td>
</tr>
<tr>
<td>222</td>
<td>Interest payable</td>
<td>(e) 1,000</td>
<td></td>
<td>1,000</td>
</tr>
<tr>
<td>248</td>
<td>Unearned rent revenue</td>
<td>1,200</td>
<td>(f) 600</td>
<td>700</td>
</tr>
<tr>
<td>320</td>
<td>Share capital</td>
<td>2,700</td>
<td></td>
<td>2,700</td>
</tr>
<tr>
<td>440</td>
<td>Rent earned</td>
<td>25,000</td>
<td>(f) 600</td>
<td>25,600</td>
</tr>
<tr>
<td>610</td>
<td>Advertising expense</td>
<td>700</td>
<td></td>
<td>700</td>
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<tr>
<td>615</td>
<td>Commissions expense</td>
<td>2,000</td>
<td></td>
<td>2,000</td>
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<tr>
<td>624</td>
<td>Dep. expense – truck</td>
<td>(c) 1,500</td>
<td></td>
<td>1,500</td>
</tr>
<tr>
<td>631</td>
<td>Insurance expense</td>
<td>(a) 300</td>
<td></td>
<td>300</td>
</tr>
<tr>
<td>632</td>
<td>Interest expense</td>
<td>(d) 400</td>
<td></td>
<td>400</td>
</tr>
<tr>
<td>654</td>
<td>Rent expense</td>
<td>5,500</td>
<td>(b) 500</td>
<td>5,500</td>
</tr>
<tr>
<td>656</td>
<td>Salaries expense</td>
<td>8,000</td>
<td>(e) 1,000</td>
<td>6,000</td>
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<tr>
<td><strong>Totals</strong></td>
<td><strong>$35,900</strong></td>
<td><strong>$35,900</strong></td>
<td><strong>$4,300</strong></td>
<td><strong>$38,800</strong></td>
</tr>
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</table>
### 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 expiry of unearned rent.
### Adjusting Entries

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>F</th>
<th>Debit</th>
<th>Credit</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Dec. 31</td>
<td><strong>Insurance Expense</strong></td>
<td>631</td>
<td>600</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Prepaid Insurance</strong></td>
<td>161</td>
<td></td>
<td>600</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To adjust for expiry of 6 months insurance ($1,200 x ½).</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td><strong>Supplies Expense</strong></td>
<td>668</td>
<td>200</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Unused Supplies</strong></td>
<td>173</td>
<td></td>
<td>200</td>
<td></td>
</tr>
<tr>
<td></td>
<td>To adjust supplies on hand to physical count.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td><strong>Rent Expense</strong></td>
<td>654</td>
<td>50</td>
<td>50</td>
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</tr>
<tr>
<td></td>
<td><strong>Accounts Payable</strong></td>
<td>210</td>
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<td>50</td>
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</tr>
<tr>
<td></td>
<td>To adjust for unpaid rent.</td>
<td></td>
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</table>
## Wolfe Corporation

<table>
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<tbody>
<tr>
<td>Cash 101</td>
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<td>Accounts Payable 210</td>
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<td>(c) 50</td>
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<tr>
<td>Bal. 3,800</td>
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<td>Accounts Receivable 110</td>
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<tr>
<td>Prepaid Insurance 161</td>
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</tr>
<tr>
<td>(a) 600</td>
<td></td>
</tr>
<tr>
<td>Bal. 0</td>
<td></td>
</tr>
<tr>
<td>Unused Supplies 173</td>
<td>700</td>
</tr>
<tr>
<td>(b) 200</td>
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</tr>
<tr>
<td>Bal. 500</td>
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</tr>
<tr>
<td>Share Capital 320</td>
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<tr>
<td>Bal. 7,750</td>
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</tr>
<tr>
<td>Repair Revenue 450</td>
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</tr>
<tr>
<td>Bal. 0</td>
<td></td>
</tr>
<tr>
<td>Op. Bal. 7,750</td>
<td></td>
</tr>
<tr>
<td>Retained Earnings 340</td>
<td>1,950</td>
</tr>
<tr>
<td>(f) 1,950</td>
<td></td>
</tr>
<tr>
<td>Bal. 1,950</td>
<td></td>
</tr>
<tr>
<td>Income Summary 360</td>
<td></td>
</tr>
<tr>
<td>(e) 5,800</td>
<td></td>
</tr>
<tr>
<td>(d) 7,750</td>
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</tr>
<tr>
<td>(f) 1,950</td>
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</tr>
<tr>
<td>Bal. 0</td>
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<tr>
<td>Advertising Expense 610</td>
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<tr>
<td>Op. Bal. 200</td>
<td></td>
</tr>
<tr>
<td>Bal. 0</td>
<td></td>
</tr>
<tr>
<td>Income Expense 631</td>
<td></td>
</tr>
<tr>
<td>(a) 600</td>
<td></td>
</tr>
<tr>
<td>(e) 600</td>
<td></td>
</tr>
<tr>
<td>Bal. 0</td>
<td></td>
</tr>
<tr>
<td>Rent Expense 654</td>
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</tr>
<tr>
<td>Op. Bal. 250</td>
<td></td>
</tr>
<tr>
<td>(c) 50</td>
<td></td>
</tr>
<tr>
<td>Bal. 300</td>
<td></td>
</tr>
<tr>
<td>(e) 300</td>
<td></td>
</tr>
<tr>
<td>Bal. 0</td>
<td></td>
</tr>
<tr>
<td>Salaries Expense 656</td>
<td>4,500</td>
</tr>
<tr>
<td>Op. Bal. 4,500</td>
<td></td>
</tr>
<tr>
<td>Bal. 0</td>
<td></td>
</tr>
<tr>
<td>Supplies Expense 668</td>
<td></td>
</tr>
<tr>
<td>(b) 200</td>
<td></td>
</tr>
<tr>
<td>(e) 200</td>
<td></td>
</tr>
<tr>
<td>Bal. 0</td>
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</tr>
</tbody>
</table>
### CP 3–10 continued

3. Wolfe Corporation

<table>
<thead>
<tr>
<th>Date</th>
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<th>Credit</th>
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</thead>
<tbody>
<tr>
<td></td>
<td><strong>Closing Entries</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>d.</td>
<td>Dec. 31 Repair Revenue</td>
<td>450</td>
<td>7,750</td>
<td></td>
</tr>
<tr>
<td>e.</td>
<td>31 Income Summary</td>
<td>360</td>
<td></td>
<td>5,800</td>
</tr>
<tr>
<td></td>
<td>Advertizing Expense</td>
<td>610</td>
<td></td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>Insurance Expense</td>
<td>631</td>
<td></td>
<td>600</td>
</tr>
<tr>
<td></td>
<td>Rent Expense</td>
<td>654</td>
<td></td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>Salaries Expense</td>
<td>656</td>
<td></td>
<td>4,500</td>
</tr>
<tr>
<td></td>
<td>Supplies Expense</td>
<td>668</td>
<td></td>
<td>200</td>
</tr>
<tr>
<td>f.</td>
<td>31 Income Summary</td>
<td>360</td>
<td></td>
<td>1,950</td>
</tr>
<tr>
<td></td>
<td>Retained Earnings</td>
<td>340</td>
<td></td>
<td>1,950</td>
</tr>
</tbody>
</table>
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.
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 statement of profit and loss, 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. \[ \text{ASSETS} = \text{LIABILITIES} + \text{SHAREHOLDERS' EQUITY} \]
   \[ \$284,645 = 241,145 + 43,500. \]

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. GAAP 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.
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 GAAP 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 GAAP, 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.
### Viking Company Ltd.

**Statement of Financial Position**

At December 31, 2018

#### Assets

<table>
<thead>
<tr>
<th>Current</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$20</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>100</td>
</tr>
<tr>
<td>Notes receivable</td>
<td>40</td>
</tr>
<tr>
<td>Prepaid insurance</td>
<td>30</td>
</tr>
<tr>
<td>Unused supplies</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td><strong>$200</strong></td>
</tr>
</tbody>
</table>

**Property, plant, and equipment**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>2,000</td>
</tr>
<tr>
<td>Building</td>
<td>1,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>500</td>
</tr>
<tr>
<td><strong>Net property, plant, and equipment</strong></td>
<td><strong>3,500</strong></td>
</tr>
</tbody>
</table>

**Total assets**

<table>
<thead>
<tr>
<th></th>
<th><strong>$3,700</strong></th>
</tr>
</thead>
</table>

#### Liabilities

<table>
<thead>
<tr>
<th>Current</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable</td>
<td>$200</td>
</tr>
<tr>
<td>Bank loan</td>
<td>500</td>
</tr>
<tr>
<td>Salaries payable</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total current liabilities</strong></td>
<td><strong>$760</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-current</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortgage payable</td>
<td>1,500</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td><strong>2,260</strong></td>
</tr>
</tbody>
</table>

#### Shareholders’ Equity

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital</td>
<td>1,200</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>220</td>
</tr>
<tr>
<td><strong>Total shareholders’ equity</strong></td>
<td><strong>1,440</strong></td>
</tr>
</tbody>
</table>

**Total liabilities and shareholders’ equity**

<table>
<thead>
<tr>
<th></th>
<th><strong>$3,700</strong></th>
</tr>
</thead>
</table>
Oregon Corporation  
Statement of Financial Position  
At October 31, 2018

<table>
<thead>
<tr>
<th>Assets</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current</strong></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$2</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>5</td>
</tr>
<tr>
<td>Inventories</td>
<td>3</td>
</tr>
<tr>
<td>Total current assets</td>
<td>$10</td>
</tr>
<tr>
<td><strong>Non-current investments</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Property, plant, and equipment</strong></td>
<td></td>
</tr>
<tr>
<td>Land</td>
<td>200</td>
</tr>
<tr>
<td>Buildings</td>
<td>10</td>
</tr>
<tr>
<td>Equipment</td>
<td>5</td>
</tr>
<tr>
<td>Net property, plant, and equipment</td>
<td>215</td>
</tr>
<tr>
<td>Total assets</td>
<td>$229</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current</strong></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$30</td>
</tr>
<tr>
<td>Current portion of mortgage payable</td>
<td>4</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>$34</td>
</tr>
<tr>
<td><strong>Non-current</strong></td>
<td></td>
</tr>
<tr>
<td>Mortgage payable</td>
<td>6</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Shareholders’ Equity</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital</td>
<td>100</td>
</tr>
<tr>
<td>Retained earnings (balancing figure)</td>
<td>89</td>
</tr>
<tr>
<td>Total shareholders’ equity</td>
<td>189</td>
</tr>
<tr>
<td>Total liabilities and shareholders’ equity</td>
<td>$229</td>
</tr>
</tbody>
</table>
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 statement of profit and loss will show this. This includes the calculation of gross profit—the difference between sales and cost of goods sold. A service business statement of profit and loss 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

<table>
<thead>
<tr>
<th>Sales</th>
<th>$16,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Goods Sold</td>
<td>$12,000</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>$4,000</td>
</tr>
</tbody>
</table>

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 Merchandise Inventory and Cost Of Goods Sold accounts in the general ledger are updated immediately when a purchase or sale of goods occurs.

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

5. The amount of a purchase allowance is recorded as a credit to the Merchandise 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). Merchandise inventory is credited for the amount of the purchase discount.

8. The sale of merchandise 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 Merchandise Inventory.
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 statement of profit and loss.

11. Usually, a physical count of inventory is conducted at the fiscal year-end and valued. This amount is then compared to the Merchandise 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, Merchandise 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 Merchandise Inventory general ledger account under the perpetual inventory system.

13. All items with credit balances are still closed to the Income Summary for a merchandising company. In a service company, usually this closing entry only includes the Revenue general ledger account. In a merchandising 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 merchandising company. These include Sales Discounts and Sales Returns and Allowances under a perpetual inventory system.

14. The classified multiple-step statement of profit and loss 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, advertising, 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.
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 statement of profit and loss items. The Merchandise 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 Merchandise 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 Merchandise Inventory account in the general ledger and crediting the Income Summary account.
1.  

<table>
<thead>
<tr>
<th>Year</th>
<th>2021</th>
<th>2020</th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$10,000</td>
<td>$9,000</td>
<td>$8,000</td>
<td>$7,000</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>7,500</td>
<td>6,840</td>
<td>6,160</td>
<td>5,460</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>2,500</td>
<td>2,160</td>
<td>1,840</td>
<td>1,540</td>
</tr>
<tr>
<td>Gross Profit Percentage</td>
<td>25%</td>
<td>24%</td>
<td>23%</td>
<td>22%</td>
</tr>
</tbody>
</table>

$7,000 \times 0.22 = 1,540$

$7,000 - 1,540 = 5,460$

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

---

**CP 5–2**

### Reber Corp.

**General Journal**

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>F</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul. 6</td>
<td>Merchandise Inventory</td>
<td>150</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accounts Payable</td>
<td>210</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Accounts Payable</td>
<td>210</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Merchandise Inventory</td>
<td>150</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Accounts Payable</td>
<td>210</td>
<td>400</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cash</td>
<td>101</td>
<td>396</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Purchase Discounts</td>
<td>559</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

To record payment made within discount period

\[\text{\{[$600 - 200] \times 1\% = $4\}.}\]
**Boucher Ltd.**  
**General Journal**

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

   May 5  
   Accounts Receivable 4,000
   Sales 4,000
   Cost of Goods Sold 2,500
   Merchandise Inventory 2,500

   To record sale on account to Sperling.

   May 7  
   Sales Returns and Allowances 500
   Accounts Receivable 500
   Merchandise 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
   Merchandise Inventory 100

   To adjust the Merchandise 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  
   Merchandise Inventory 4,000
   Accounts Payable 4,000

   To record purchase on account from Horne.

   May 7  
   Accounts Payable 500
   Merchandise Inventory 500

   To record return of merchandise to Horne.

   May 15  
   Accounts Payable 3,500
   Merchandise Inventory 70
   Cash 3,430

   To record payment to Horne: discount taken.
1. Smith Corp.

Statement of Profit and Loss
For the Year Ended June 20, 2018

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$72,000</td>
</tr>
<tr>
<td>Less: Sales returns and allowances</td>
<td>(2,000)</td>
</tr>
<tr>
<td>Net sales</td>
<td>70,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>50,000</td>
</tr>
<tr>
<td>Gross profit</td>
<td>20,000</td>
</tr>
</tbody>
</table>

Selling expenses

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertizing</td>
<td>$1,500</td>
</tr>
<tr>
<td>Commissions</td>
<td>4,000</td>
</tr>
<tr>
<td>Delivery</td>
<td>1,000</td>
</tr>
<tr>
<td>Insurance</td>
<td>1,000</td>
</tr>
<tr>
<td>Rent</td>
<td>2,500</td>
</tr>
<tr>
<td>Salaries</td>
<td>5,000</td>
</tr>
<tr>
<td>Sales Returns and Allowances</td>
<td>15,000</td>
</tr>
<tr>
<td>Net income</td>
<td>$5,000</td>
</tr>
</tbody>
</table>

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 statement of profit and loss 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 statement of profit and loss 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

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening inventory</td>
<td>$375</td>
</tr>
<tr>
<td>Purchases</td>
<td>$2,930</td>
</tr>
<tr>
<td>Purchase discounts</td>
<td>(5)</td>
</tr>
<tr>
<td>Purchase returns and allowances</td>
<td>(20)</td>
</tr>
<tr>
<td>Transportation-in</td>
<td>105</td>
</tr>
<tr>
<td>Goods available for sale</td>
<td>3,010</td>
</tr>
<tr>
<td>Less: Ending inventory</td>
<td>(440)</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>$2,945</td>
</tr>
</tbody>
</table>
1. 

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (a)</td>
<td>$300</td>
<td>$150</td>
<td>$300</td>
<td>$90</td>
</tr>
<tr>
<td>Opening Inventory</td>
<td>80</td>
<td>40</td>
<td>40</td>
<td>12</td>
</tr>
<tr>
<td>Purchases</td>
<td>240</td>
<td>120</td>
<td>220</td>
<td>63</td>
</tr>
<tr>
<td>Cost of Goods Available</td>
<td>320</td>
<td>160</td>
<td>260</td>
<td>75</td>
</tr>
<tr>
<td>Less: Ending Inventory</td>
<td>(120)</td>
<td>(60)</td>
<td>(60)</td>
<td>(15)</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>200</td>
<td>100</td>
<td>200</td>
<td>60</td>
</tr>
<tr>
<td>Gross Profit (b)</td>
<td>$100</td>
<td>$ 50</td>
<td>$100</td>
<td>$ 30</td>
</tr>
<tr>
<td>Gross Profit percentage (a/b)</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
</tr>
</tbody>
</table>

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.  
**Statement of Profit and Loss**  
For the Year Ended December 31, 2018

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$25,000</td>
</tr>
<tr>
<td>Less: Sales discounts</td>
<td>(400)</td>
</tr>
<tr>
<td>Sales returns and allowances</td>
<td>(2,000)</td>
</tr>
<tr>
<td>Net sales</td>
<td>22,600</td>
</tr>
</tbody>
</table>

**Cost of goods sold**

- Purchases          $20,000
- Purchase returns and allowances (1,000)
- Purchase discounts (300)
- Transportation-in  500

**Less: Ending inventory** (7,900)

Cost of goods sold  11,300

Gross profit $11,300

2. Gross profit percentage = $11,300/$22,600 = 50%
1. O’Donnell Corp.
Statement of Profit and Loss
For the Year Ended June 30, 2018

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

2. Gross profit percentage = $40,000/70,000 = 57.1%
### (a) Dec. 31

<table>
<thead>
<tr>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merchandise Inventory (ending)</td>
<td>150</td>
<td>10,000</td>
</tr>
<tr>
<td>Sales</td>
<td>500</td>
<td>72,000</td>
</tr>
<tr>
<td>Purchase Returns and Allowances</td>
<td>558</td>
<td>2,000</td>
</tr>
<tr>
<td>Income Summary</td>
<td>360</td>
<td>84,000</td>
</tr>
</tbody>
</table>

To close all statement of profit and loss accounts with credit balances to the Income Summary account and record ending inventory balance.

### (b) Dec. 31

<table>
<thead>
<tr>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Summary</td>
<td>360</td>
<td>59,000</td>
</tr>
<tr>
<td>Merchandise Inventory (opening)</td>
<td>150</td>
<td>6,000</td>
</tr>
<tr>
<td>Advertising Expense</td>
<td>610</td>
<td>1,500</td>
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<tr>
<td>Commissions Expense</td>
<td>615</td>
<td>4,000</td>
</tr>
<tr>
<td>Delivery Expense</td>
<td>620</td>
<td>1,000</td>
</tr>
<tr>
<td>Insurance Expense</td>
<td>631</td>
<td>1,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>550</td>
<td>35,000</td>
</tr>
<tr>
<td>Rent Expense</td>
<td>654</td>
<td>2,500</td>
</tr>
<tr>
<td>Salaries Expense</td>
<td>656</td>
<td>5,000</td>
</tr>
<tr>
<td>Sales Returns and Allowances</td>
<td>508</td>
<td>2,000</td>
</tr>
<tr>
<td>Transportation-In</td>
<td>560</td>
<td>1,000</td>
</tr>
</tbody>
</table>

To close all statement of profit and loss accounts with debit balances to the Income Summary and remove opening inventory from the Merchandise Inventory account.

### (c) Dec. 31

<table>
<thead>
<tr>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Summary</td>
<td>360</td>
<td>15,000</td>
</tr>
<tr>
<td>Retained Earnings</td>
<td>340</td>
<td>15,000</td>
</tr>
</tbody>
</table>

To close the Income Summary account to the Retained Earnings account.
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
CHAPTER SIX
Assigning Costs to Merchandize

Concept Self-check

1. The three inventory cost flow assumptions that are allowed under GAAP 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:

<table>
<thead>
<tr>
<th></th>
<th>FIFO</th>
<th>Wtd. avg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$20</td>
<td>$20</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>10</td>
<td>12 *</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>$10</td>
<td>$ 8</td>
</tr>
</tbody>
</table>

   *(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 purchases 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:

<table>
<thead>
<tr>
<th>Sales</th>
<th>$100</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost of Goods Sold:</strong></td>
<td></td>
</tr>
<tr>
<td>Opening Inventory (from records)</td>
<td>80</td>
</tr>
<tr>
<td>Purchases (from records)</td>
<td>70</td>
</tr>
<tr>
<td>Cost of Goods Available for Sale</td>
<td>150</td>
</tr>
<tr>
<td>Ending Inventory</td>
<td>(a)? (b)?</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>$(c)?</td>
</tr>
</tbody>
</table>

If the gross profit percentage average is 25%, the following can be estimated:
(c) Gross profit = 25% of $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%:

<table>
<thead>
<tr>
<th></th>
<th>At Retail</th>
<th>At Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$500</td>
<td>$500</td>
</tr>
<tr>
<td>Cost of Goods Sold:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opening Inventory (records)</td>
<td>(b)</td>
<td>$80</td>
</tr>
<tr>
<td>Purchases (records)</td>
<td>(b)</td>
<td>300</td>
</tr>
<tr>
<td>Cost of Goods Available for Sale</td>
<td>(c)</td>
<td>380</td>
</tr>
<tr>
<td>Ending Inventory (d)?</td>
<td>(e)?</td>
<td></td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>(a)?</td>
<td>(f)?</td>
</tr>
<tr>
<td>Gross Profit (same as Sales)</td>
<td>$0-</td>
<td>(g)?</td>
</tr>
</tbody>
</table>

(a) Cost of Goods restated at retail to equal sales = $100
(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
(e) 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.
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 Merchandise 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 Merchandise Inventory when each sale transaction occurs.

### CP 6–1

1. **FIFO**

<table>
<thead>
<tr>
<th>Date</th>
<th>Purchased</th>
<th>Sold</th>
<th>Balance in Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Units</td>
<td>Unit Cost</td>
<td>Total $</td>
</tr>
<tr>
<td>Jan. 1</td>
<td>100</td>
<td>$1</td>
<td>$100</td>
</tr>
<tr>
<td>7</td>
<td>10</td>
<td>$2</td>
<td>$20</td>
</tr>
<tr>
<td>9</td>
<td>80</td>
<td>$1</td>
<td>$80</td>
</tr>
<tr>
<td>21</td>
<td>20</td>
<td>$3</td>
<td>$60</td>
</tr>
<tr>
<td>24</td>
<td>20</td>
<td>$1</td>
<td>$20</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Purchased</th>
<th>Sold</th>
<th>Balance in Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Units</td>
<td>Unit Cost</td>
<td>Total $</td>
</tr>
<tr>
<td>Jan. 1</td>
<td>100</td>
<td>$1.00</td>
<td>$100.00</td>
</tr>
<tr>
<td>7</td>
<td>10</td>
<td>$2.10</td>
<td>$20.20</td>
</tr>
<tr>
<td>9</td>
<td>80</td>
<td>$1.09</td>
<td>$87.20</td>
</tr>
<tr>
<td>21</td>
<td>20</td>
<td>$1.86</td>
<td>$37.20</td>
</tr>
<tr>
<td>24</td>
<td>40</td>
<td>$1.86</td>
<td>$74.40</td>
</tr>
</tbody>
</table>

---

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Total ($)</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Total ($)</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Total ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 1</td>
<td>2,000</td>
<td>$.50</td>
<td>$1,000</td>
<td>800</td>
<td>$.50</td>
<td>$400</td>
<td>1,200</td>
<td>$.50</td>
<td>$600</td>
</tr>
<tr>
<td>5</td>
<td>1,200</td>
<td>$.50</td>
<td>$600</td>
<td>800</td>
<td>$.50</td>
<td>$400</td>
<td>800</td>
<td>$.50</td>
<td>$400</td>
</tr>
<tr>
<td>6</td>
<td>1,000</td>
<td>$2</td>
<td>$2,000</td>
<td>800</td>
<td>$.50</td>
<td>$400</td>
<td>1,000</td>
<td>$.20</td>
<td>$200</td>
</tr>
<tr>
<td>10</td>
<td>500</td>
<td>$1</td>
<td>$500</td>
<td>800</td>
<td>$.50</td>
<td>$400</td>
<td>1,000</td>
<td>$.20</td>
<td>$200</td>
</tr>
<tr>
<td>16</td>
<td>1,000</td>
<td>$1.26</td>
<td>$1,260</td>
<td>300</td>
<td>$1.00</td>
<td>$300</td>
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<td>$2.50</td>
<td>$3,250</td>
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<td>21</td>
<td>1,000</td>
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<td>$2,500</td>
<td>300</td>
<td>$1.00</td>
<td>$300</td>
<td>1,300</td>
<td>$2.50</td>
<td>$3,250</td>
</tr>
</tbody>
</table>

**a. Jan. 5**
Accounts Receivable: 110
Sales: 550
Cost of Goods Sold: 570
Merchandize Inventory: 150
To record Jan. 5 sales; COGS at FIFO.

**b. Jan. 16**
Accounts Receivable: 110
Sales: 550
Cost of Goods Sold: 570
Merchandize Inventory: 150
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)

<table>
<thead>
<tr>
<th>Date</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Total ($)</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Total ($)</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Total ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 1</td>
<td>2,000</td>
<td>$.50</td>
<td>$1,000</td>
<td>800</td>
<td>$.50</td>
<td>$400</td>
<td>1,200</td>
<td>$.50</td>
<td>$600</td>
</tr>
<tr>
<td>5</td>
<td>1,200</td>
<td>$.50</td>
<td>$600</td>
<td>800</td>
<td>$.50</td>
<td>$400</td>
<td>800</td>
<td>$.50</td>
<td>$400</td>
</tr>
<tr>
<td>6</td>
<td>1,000</td>
<td>$2</td>
<td>$2,000</td>
<td>800</td>
<td>$.50</td>
<td>$400</td>
<td>1,000</td>
<td>$.20</td>
<td>$200</td>
</tr>
<tr>
<td>10</td>
<td>500</td>
<td>$1</td>
<td>$500</td>
<td>800</td>
<td>$.50</td>
<td>$400</td>
<td>1,000</td>
<td>$.20</td>
<td>$200</td>
</tr>
<tr>
<td>16</td>
<td>1,000</td>
<td>$1.26</td>
<td>$1,260</td>
<td>300</td>
<td>$1.00</td>
<td>$300</td>
<td>1,300</td>
<td>$2.50</td>
<td>$3,250</td>
</tr>
<tr>
<td>21</td>
<td>1,000</td>
<td>$2.50</td>
<td>$2,500</td>
<td>300</td>
<td>$1.00</td>
<td>$300</td>
<td>1,300</td>
<td>$2.50</td>
<td>$3,250</td>
</tr>
</tbody>
</table>

$1$(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

<table>
<thead>
<tr>
<th>Accounts Receivable</th>
<th>110</th>
<th>6,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>550</td>
<td>6,000</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>570</td>
<td>600</td>
</tr>
<tr>
<td>Merchandise Inventory</td>
<td>150</td>
<td>600</td>
</tr>
</tbody>
</table>

To record Jan. 5 sales; COGS at weighted average.

b. Jan. 16

<table>
<thead>
<tr>
<th>Accounts Receivable</th>
<th>110</th>
<th>12,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>550</td>
<td>12,000</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>570</td>
<td>2,520</td>
</tr>
<tr>
<td>Merchandise Inventory</td>
<td>150</td>
<td>2,520</td>
</tr>
</tbody>
</table>

To record Jan. 16 sales; COGS at weighted average.

c. Per the above table, there are 1,300 units on hand @ $2.21, for a total ending inventory cost of $2,880.

CP 6–3

1. a. FIFO

<table>
<thead>
<tr>
<th>Date</th>
<th>Purchased</th>
<th>Sold</th>
<th>Balance in Inventory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Units</td>
<td>Unit</td>
<td>Total $</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cost</td>
<td></td>
</tr>
<tr>
<td>May 1</td>
<td>100</td>
<td>$1</td>
<td>$100</td>
</tr>
<tr>
<td>5</td>
<td>200</td>
<td>$2</td>
<td>$400</td>
</tr>
<tr>
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<td>125</td>
<td>$3</td>
<td>$375</td>
</tr>
<tr>
<td>12</td>
<td>350</td>
<td>$2</td>
<td>$700</td>
</tr>
<tr>
<td>13</td>
<td>200</td>
<td>$2</td>
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</tr>
<tr>
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<td>29</td>
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<td>30</td>
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<td>$3</td>
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</tr>
<tr>
<td></td>
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<td>$840</td>
</tr>
</tbody>
</table>

Total COGS $1,580
### Specific Identification

<table>
<thead>
<tr>
<th>Date</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Total $</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Total $</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Total $</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 1</td>
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<td>$1</td>
<td>$100</td>
<td>20</td>
<td>$1</td>
<td>$20</td>
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<td>$1</td>
<td>$80</td>
<td>20</td>
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<td></td>
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</tr>
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</tr>
<tr>
<td>12</td>
<td>125</td>
<td>$3</td>
<td>$375</td>
<td>20</td>
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<tr>
<td>13</td>
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<td>$3</td>
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<td>$2</td>
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<td>$1</td>
<td>$150</td>
<td>20</td>
<td>$1</td>
<td>$20</td>
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<tr>
<td>30</td>
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<td>$50</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$1,505</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. May 6 purchase  
2. May 19 purchase  
3. May 29 purchase

### Weighted Average

<table>
<thead>
<tr>
<th>Date</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Total $</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Total $</th>
<th>Units</th>
<th>Unit Cost</th>
<th>Total $</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 1</td>
<td>100</td>
<td>$1.00</td>
<td>$100</td>
<td>20</td>
<td>$1.00</td>
<td>$20</td>
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<tr>
<td>5</td>
<td>80</td>
<td>$1.00</td>
<td>$80</td>
<td>20</td>
<td>$1.00</td>
<td>$20</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6</td>
<td>200</td>
<td>$2.00</td>
<td>$400</td>
<td>220</td>
<td>$1.91</td>
<td>$420</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>12</td>
<td>125</td>
<td>$3.00</td>
<td>$375</td>
<td>345</td>
<td>$2.30</td>
<td>$795</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>300</td>
<td>$2.30</td>
<td>$690</td>
<td>45</td>
<td>$2.30</td>
<td>$105</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>350</td>
<td>$2.00</td>
<td>$700</td>
<td>395</td>
<td>$2.04</td>
<td>$805</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>150</td>
<td>$1.75</td>
<td>$150</td>
<td>545</td>
<td>$1.75</td>
<td>$955</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>30</td>
<td>400</td>
<td>$1.75</td>
<td>$700</td>
<td>145</td>
<td>$1.75</td>
<td>$255</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$1,470</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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)
CP 6–3 continued

2.

<table>
<thead>
<tr>
<th></th>
<th>FIFO</th>
<th>Spec. ident.</th>
<th>Wtd. avg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$3,900</td>
<td>$3,900</td>
<td>$3,900</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>(1,580)</td>
<td>(1,505)</td>
<td>(1,470)</td>
</tr>
<tr>
<td>Gross profit</td>
<td>$2,320</td>
<td>$2,395</td>
<td>$2,430</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Errors</th>
<th>2017 Statements</th>
<th>2018 Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Goods purchased in 2017 were included in December 31 inventory, but</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>the transaction was not recorded until early 2018.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Goods purchased in 2018 were included in December 31, 2017 inventory,</td>
<td>0</td>
<td>+</td>
</tr>
<tr>
<td>and the transaction was recorded in 2017.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Goods were purchased in 2017 and the transaction recorded in that</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>year; however, the goods were not included in the December 31 inventory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>as they should have been.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Goods purchased in 2017 were excluded from December 31 inventory,</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>and the transaction was recorded early in 2018.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* 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:
   \[(2 \times 50) + (3 \times 75) + (4 \times 20) = 405\]

2. LCNRV on a group inventory basis:
   \[(2 \times 50) + (3 \times 150) + (4 \times 25) = 650\]
   \[(2 \times 60) + (3 \times 75) + (4 \times 20) = 425\]

   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. 

   Sales
   
   \[\text{At retail} \quad \text{At cost}\]
   
   $ 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 (d)
   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%.
The estimated ending inventory at cost is $25,000, calculated as follows:

<table>
<thead>
<tr>
<th></th>
<th>At retail</th>
<th>At cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (given)</td>
<td>$250,000</td>
<td>$250,000</td>
</tr>
<tr>
<td><strong>Cost of goods sold</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opening inventory</td>
<td>$20,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>280,000</td>
<td>140,000</td>
</tr>
<tr>
<td>Cost of goods available for sale</td>
<td>300,000 (a)</td>
<td>150,000</td>
</tr>
<tr>
<td>Less: Ending inventory</td>
<td>(50,000) (c)</td>
<td>(25,000) (d)</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>250,000 (b)</td>
<td>125,000</td>
</tr>
<tr>
<td>Gross profit</td>
<td>$0</td>
<td>$125,000</td>
</tr>
</tbody>
</table>

### CP 6–11

<table>
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<tr>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening inventory</td>
<td>$0</td>
<td>$3,000</td>
<td>$1,000</td>
<td>$2,000</td>
</tr>
<tr>
<td>Purchases</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Ending inventory</td>
<td>(2,000)</td>
<td>(4,000)</td>
<td>(1,500)</td>
<td>(0)</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>$3,000</td>
<td>$4,000</td>
<td>$4,500</td>
<td>$7,000</td>
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</tbody>
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### CP 6–12

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</thead>
<tbody>
<tr>
<td>Sales</td>
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<td>$1,200</td>
<td>$1,200</td>
</tr>
<tr>
<td><strong>Cost of goods sold</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opening inventory</td>
<td>$100</td>
<td>$100</td>
<td>$100</td>
</tr>
<tr>
<td>Purchases</td>
<td>550(^1)</td>
<td>550</td>
<td>550</td>
</tr>
<tr>
<td>Goods avail. for sale(^2)</td>
<td>650</td>
<td>650</td>
<td>650</td>
</tr>
<tr>
<td>Less: Ending inv.</td>
<td>(250)(^3)</td>
<td>(140)(^4)</td>
<td>(130)(^5)</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>400</td>
<td>510</td>
<td>520</td>
</tr>
<tr>
<td>Gross profit</td>
<td>$800</td>
<td>$690</td>
<td>$680</td>
</tr>
</tbody>
</table>

\(^1\) ($10 + $40 + $90 + $160 + $250) = $550

\(^2\) Total units available

\[(100 + 10 + 20 + 30 + 40 + 50) = 250 \text{ units}\]

\(^3\) 50 units @ $5 = $250

\(^4\) Purchase

\[\begin{array}{ccc}
\text{#1} & 10 @ $1 & $10 \\
\text{#2} & 20 @ $2 & 40 \\
\text{#4} & 10 @ $4 & 40 \\
\text{#5} & 10 @ $5 & 50 \\
\end{array}\]

\[^5\] $650/250 units = $2.60 per unit x 50 units = $130
1. Specific identification ending Inventory:

\[
\begin{align*}
&1,200 \text{ units @ $0.50} = \$600 \\
&1,000 \text{ units @ $2.00} = \$2,000 \\
&300 \text{ units @ $1.00} = \$300 \\
&\text{2,500 units} \quad \$2,900
\end{align*}
\]

2. FIFO ending inventory:

\[
\begin{align*}
&1,000 \text{ units @ $2.00} = \$2,000 \\
&500 \text{ units @ $1.00} = \$500 \\
&1,000 \text{ units @ $2.50} = \$2,500 \\
&\text{2,500 units} \quad \$5,000
\end{align*}
\]

3. Weighted average ending inventory:

\[
\begin{align*}
&2,000 \text{ units @ $0.50} = \$1,000 \\
&1,000 \text{ units @ $2.00} = \$2,000 \\
&500 \text{ units @ $1.00} = \$500 \\
&1,000 \text{ units @ $2.50} = \$2,500 \\
&\text{4,500 units} \quad \$6,000
\end{align*}
\]

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:

\[
\begin{align*}
&800 \text{ units @ $.50} = \$400 \\
&200 \text{ units @ $1.00} = \$200 \\
&1,000 \text{ units @ $2.50} = \$2,500 \\
&\text{2,000 units} \quad \$3,100
\end{align*}
\]

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

6. Weighted average cost of goods sold:

\[
\begin{align*}
&2,000 \text{ units @ $0.50} = \$1,000 \\
&1,000 \text{ units @ $2.00} = \$2,000 \\
&500 \text{ units @ $1.00} = \$500 \\
&1,000 \text{ units @ $2.50} = \$2,500 \\
&\text{4,500 units} \quad \$6,000
\end{align*}
\]

Weighted average cost = $6,000/4,500 units = $1.33/unit x 2,000 units = $2,667 (rounded)
1. a. FIFO ending inventory = \((150 \times $3) + (50 \times $2) = $550\)
   
   b. Specific identification ending inventory = \((100 \times $1) + (100 \times $3) = $400\)
   
   c. Weighted average = \((100 \times $1) + (200 \times $1) + (125 \times $2) + (350 \times $2) + (150 \times $3) = $1,700\)\(925 = $1.84/\text{unit (rounded)}\)

   Weighted average ending inventory = \(1.84 \times 200 = $368\)

2. Units sold = 925 – 200 = 725 units \(\times \$2 = $1,450\) total sales.

<table>
<thead>
<tr>
<th></th>
<th>FIFO</th>
<th>Spec. ident</th>
<th>Wtd. avg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
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<td>$1,450</td>
<td>$1,450</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opening inventory</td>
<td>$100</td>
<td>$100</td>
<td>$100</td>
</tr>
<tr>
<td>Purchases</td>
<td>1,600</td>
<td>1,600</td>
<td>1,600</td>
</tr>
<tr>
<td>Cost of goods available for sale</td>
<td>1,700</td>
<td>1,700</td>
<td>1,700</td>
</tr>
<tr>
<td>Less: Ending inventory</td>
<td>(550)</td>
<td>(400)</td>
<td>(368)</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>1,150</td>
<td>1,300</td>
<td>1,332</td>
</tr>
<tr>
<td>Gross profit</td>
<td>$300</td>
<td>$150</td>
<td>$118</td>
</tr>
</tbody>
</table>
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:

<table>
<thead>
<tr>
<th>Book Reconciling Items</th>
<th>Bank Reconciling Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Book errors</td>
<td>Outstanding deposits</td>
</tr>
<tr>
<td>NSF cheques</td>
<td>Outstanding cheques</td>
</tr>
<tr>
<td>Bank charges</td>
<td>Bank errors</td>
</tr>
</tbody>
</table>

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 statement of profit and loss 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.
11. The usual balance in the Accounts Receivable general ledger account is a debit. Occasionally, as a result of double payments, merchandise 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:

\[
\begin{align*}
\text{Dr. Notes Receivable – Customer A} & \quad \text{xxxx} \\
\text{Cr. Sales (or, e.g., Service Revenue)} & \quad \text{xxx}
\end{align*}
\]

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

\[
\begin{align*}
\text{Dr. Notes Receivable – Customer A} & \quad \text{xxxx} \\
\text{Cr. Accounts Receivable – Customer A} & \quad \text{xxx}
\end{align*}
\]
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.

Ferguson Corp.
Bank Reconciliation
At December 31, 2017

Cash per general ledger, Dec. 31 $5,005
Add: Note collected by bank 1,300
Interest on note 25
Adjusted Cash balance, Dec. 31 $6,330

Cash per bank statement, Dec. 31 $7,000
Add: Error Fluet Inc. cheque 200
Outstanding deposit 700
Less: Outstanding cheques (1,600)
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.
## Bank Reconciliation

Gladstone Ltd.

Bank Reconciliation
At March 31, 2017

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash per general ledger, Mar. 31</td>
<td>$2,531</td>
</tr>
<tr>
<td>Cash per bank statement, Mar. 31</td>
<td>$1,500</td>
</tr>
</tbody>
</table>

**Add:**
- Error cheque No. 4302: 27
- Note receivable: 250
- Interest on note: 50

**Less:**
- Service charges—March: (20)
- Service charges—note: (10)
- NSF cheque: (700)

Adjusted cash balance, Mar. 31: $2,128

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash per general ledger, Mar. 31</td>
<td>$2,531</td>
</tr>
<tr>
<td>Cash per bank statement, Mar. 31</td>
<td>$1,500</td>
</tr>
</tbody>
</table>

**Add:**
- Error cheque No. 4302: 27
- Outstanding deposit: 1,000
- Error re. Global: 250

**Less:**
- Outstanding cheques: (622)

Adjusted cash balance, Mar. 31: $2,128

### 2017 Adjusting Entries:

<table>
<thead>
<tr>
<th>Description</th>
<th>Date</th>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>To correct ck. no. 4302</td>
<td>Mar. 31</td>
<td>Cash</td>
<td>27</td>
</tr>
<tr>
<td>To record note collected by the bank.</td>
<td></td>
<td>Cash</td>
<td>290</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note Receivable</td>
<td>250</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Interest Earned</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bank Charges Expense</td>
<td>10</td>
</tr>
<tr>
<td>To record service charges for March.</td>
<td></td>
<td>Cash</td>
<td>20</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td></td>
<td>Cash</td>
<td>700</td>
</tr>
<tr>
<td>To record NSF cheque returned.</td>
<td></td>
<td>Cash</td>
<td>700</td>
</tr>
</tbody>
</table>
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**

<table>
<thead>
<tr>
<th>Assets</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts receivable</td>
<td>$125,000</td>
</tr>
<tr>
<td>Less: Allowance for doubtful accounts</td>
<td>6,250</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>Accounts receivable (net of $6,250 AFDA)</td>
<td>$118,750</td>
</tr>
</tbody>
</table>
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

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.

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

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

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.
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:

<table>
<thead>
<tr>
<th>Year</th>
<th>Straight-line</th>
<th>Double-declining balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$378*</td>
<td>$1,610</td>
</tr>
<tr>
<td>2</td>
<td>$755</td>
<td>966</td>
</tr>
<tr>
<td>3</td>
<td>$755</td>
<td>580</td>
</tr>
<tr>
<td>4</td>
<td>$755</td>
<td>348</td>
</tr>
<tr>
<td>5</td>
<td>$755</td>
<td>208</td>
</tr>
</tbody>
</table>

*($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:

\[
\frac{(110,000 - 10,000)}{10 \text{ years}} = 10,000 \text{ per year}
\]

2018 depreciation = $10,000 x \(\frac{1}{2}\) = $5,000
2019 depreciation = $10,000

2. Double–declining balance method:

\[
\frac{100\%}{2} = 50\%
\]

2018 depreciation = $110,000 x 50% x \(\frac{1}{2}\) = $11,000
2019 depreciation = ($110,000 – 11,000) x 50% = $19,800

CP 8–5

1. Straight–line method:

\[
\frac{(25,000 - 5,000)}{5 \text{ years}} = 4,000 \text{ per year}
\]

2018 depreciation = $4,000 x \(\frac{1}{2}\) = $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 \(\frac{1}{2}\) year rule does not apply under usage methods of calculating depreciation.

3. Double–declining balance method:

\[
\frac{100\%}{2} = 50\% \times 2 = 100\% \text{ per year}
\]

2018 depreciation = $25,000 x 100% x \(\frac{1}{2}\) yr. = $10,000
2019 depreciation = ($25,000 – 5,000) x 100% = $8,000
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: \((3,000 + 1,000) \times \frac{1}{3} \text{ yrs.} \times \frac{1}{2} \text{ yr.}\).

   Dec. 31, 2019
   Depreciation Expense 2,667
   Accumulated Depreciation – Equipment 2,667
   To record 2019 depreciation:
   \((3,000 + 1,000 + 2,000 - 667) \times \frac{1}{2} \text{ yrs.} \times \frac{1}{2} \text{ yr.}\) $2,667

CP 8–7

1. Straight–line method:
   Balance at end of 2019 = $110,000 – 5,000 – 10,000 = $95,000

   $95,000 = $23,750 per year
   4 years

   2020 depreciation = $23,750

2. Double–declining balance method:
   Balance at end of 2019 = $110,000 – 11,000 – 19,800 = $79,200

   100% \times 2 = 50% per year
   4 years

   2020 depreciation = $79,200 \times 50% = $39,600
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.
Equipment* 145,000
Accumulated Depreciation 50,625
  Equipment 110,000
  Cash 50,000
  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) (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

Cost of new asset = Cash paid + fair value of asset traded in
  = $50,000 + 95,000
  = $145,000

CP 8–10

1. Depreciation Method Calculation Year 1 Year 2 Year 3
   A: Straight–Line $30,000/5 = $6,000 $6,000 $6,000
   B: Declining Balance 40% x $30,000 $6,000
      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%
   312,000 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 depreciating 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 GAAP 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).
1. 2020

Jan. 1  Accumulated Depreciation — Machine 1  7,500
Cash
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

Dec. 31  Depreciation Expense — Machine 2  788
Accumulated Depreciation — Machine 2  788

Revised depreciation = (Remaining carrying amount – residual value)
Revised remaining useful life
= ($2,7751 – 1,200)
2 years
= $788 (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  $2,7751

3. 2020

Dec. 31  Depreciation Expense — Machine 3  690
Accumulated Depreciation — Machine 3  690

Revised depreciation = (Remaining carrying amount – residual value)
Revised remaining useful life
= ($3,450* – 0)
5 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*
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

<table>
<thead>
<tr>
<th>Date 2018</th>
<th>Description</th>
<th>F</th>
<th>Debit</th>
<th>Credit</th>
<th>DR or CR</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 31</td>
<td>Bal. Fwd.</td>
<td></td>
<td></td>
<td>1,500</td>
<td>Cr</td>
<td>2,250</td>
</tr>
<tr>
<td>2019</td>
<td>Depreciation for 2018</td>
<td></td>
<td></td>
<td></td>
<td>Cr</td>
<td>3,750</td>
</tr>
<tr>
<td>Dec. 31</td>
<td>Depreciation for 2019</td>
<td></td>
<td>2,813</td>
<td></td>
<td>Cr</td>
<td>6,563</td>
</tr>
</tbody>
</table>

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.
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%/5 yrs. = 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:

<table>
<thead>
<tr>
<th>Year</th>
<th>Carrying amount</th>
<th>DDB rate</th>
<th>Depreciation expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>$10,500</td>
<td>40% x ½ yr.</td>
<td>$2,100</td>
</tr>
<tr>
<td>2019</td>
<td>$12,400*</td>
<td>40%</td>
<td>4,960</td>
</tr>
</tbody>
</table>

   *(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
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 20,000¹
Depreciation Expense – Machinery 37,500²
Amortization Expense – Patents 2,500³

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: 100% x 2 = 20%
10 yrs.
2018 building depreciation = $200,000 x 20% x ½ yr. = $20,000

² 2018 machinery depreciation
   = ($250,000 – 25,000) x 10,000
   60,000
   = $37,500

³ 2018 patent amortization = $100,000 x ½ yr. = $2,500
   20 yrs.

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
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) x 20,000 x ½ yr. = $37,500  

$^2$ ($250,000 – 25,000) x 15,000 = $56,250  

60,000  

60,000
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

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>F</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td><strong>Adjusting Entries</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Dec. 31</td>
<td>Supplies Expense</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unused Office Supplies</td>
<td></td>
<td></td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>To record additional accounts payable at year-end.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>Interest Expense</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interest Payable</td>
<td></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>To adjust interest payable for the year.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td>Unearned Rent Revenue</td>
<td>500</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rent Earned</td>
<td></td>
<td></td>
<td>500</td>
</tr>
<tr>
<td></td>
<td>To adjust rent revenue at year-end.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CP 9–3

1. **2018**
   - **Dec. 31** Salaries Expense 2,000
     - Employment Insurance Expense 56
     - Government Pension Expense 80
     - Employee Income Taxes Payable 500
     - Employment Insurance Payable 96
     - Government Pension Payable 160
     - Salaries Payable 1,380
   
   To record unpaid salary and benefits re. J. Smith at December 31.
   
   \[\begin{align*}
   1. & \quad 2,000 \times 2\% = 40 \times 1.4 \text{ times} = 56 \\
   2. & \quad 2,000 \times 4\% = 80 \\
   3. & \quad 40 + 56 = 96 \\
   4. & \quad 80 + 80 = 160
   \end{align*}\]

2. **2019**
   - **Jan. 5** Salaries Payable 1,380
     - Cash 1,380
   
   To record payment of Dec. 31 salary payable to J. Smith.

   - **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
     - \[(4,000 \times 5\% = $200)\]

2. **2018**
   - **Jul. 5** Accounts Receivable 5,250
     - Sales 5,000
     - GST Payable 250
     - Cost of Goods Sold 4,000
     - Merchandize Inventory 4,000
     - \[(50,000 \times 5\% = $250)\]
CP 9–4 continued

3. 2018
   Jul. 31   GST Payable 50
   Cash      50

4. No expense is recorded on the statement of profit and loss. 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

<table>
<thead>
<tr>
<th>Year</th>
<th>Beginning loan balance</th>
<th>(A x 6%) Interest expense</th>
<th>Reduction of loan payable</th>
<th>Total loan payment</th>
<th>Ending loan balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2021</td>
<td>$50,000</td>
<td>$3,000</td>
<td>$15,705</td>
<td>$18,705</td>
<td>$34,295</td>
</tr>
<tr>
<td>2022</td>
<td>34,295</td>
<td>2,058</td>
<td>16,647</td>
<td>18,705</td>
<td>17,648</td>
</tr>
<tr>
<td>2023</td>
<td>17,648</td>
<td>1,057</td>
<td>17,648</td>
<td>18,705</td>
<td>-0-</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Year</th>
<th>Beginning lease balance</th>
<th>(A x 8%) Interest expense</th>
<th>Reduction of finance lease</th>
<th>Total lease payment</th>
<th>Ending lease balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>$80,000</td>
<td>$6,400</td>
<td>$17,754</td>
<td>$24,154</td>
<td>$62,246</td>
</tr>
<tr>
<td>2019</td>
<td>62,246</td>
<td>4,980</td>
<td>19,174</td>
<td>24,154</td>
<td>43,072</td>
</tr>
<tr>
<td>2020</td>
<td>43,072</td>
<td>3,446</td>
<td>20,708</td>
<td>24,154</td>
<td>22,364</td>
</tr>
<tr>
<td>2021</td>
<td>22,364</td>
<td>1,790</td>
<td>22,364</td>
<td>24,154</td>
<td>-0-</td>
</tr>
</tbody>
</table>
3. **Day Corp.**  
**Partial Statement of Financial Position**  
**At December 31, 2018**

**Liabilities**

<table>
<thead>
<tr>
<th>Current</th>
<th>Non-current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current portion of finance lease</td>
<td>Finance lease (Note X)</td>
</tr>
<tr>
<td>$19,174</td>
<td>43,072</td>
</tr>
</tbody>
</table>

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.
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...
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

<table>
<thead>
<tr>
<th>Year</th>
<th>Beginning bond carrying amount</th>
<th>Using 8% market rate to calculate 6-month interest expense</th>
<th>Actual cash interest paid</th>
<th>(B – C)</th>
<th>Periodic premium amort.</th>
<th>(A – D) Ending bond carrying amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>Jun. 30 $55,242</td>
<td>$2,210</td>
<td>$3,000</td>
<td>$790</td>
<td>$54,452</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dec. 31 54,452</td>
<td>4% x 54,452 = 2,178</td>
<td>3,000</td>
<td>822</td>
<td>53,630</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>Jun. 30 53,360</td>
<td>4% x 53,360 = 2,145</td>
<td>3,000</td>
<td>855</td>
<td>52,775</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dec. 31 52,775</td>
<td>4% x 52,775 = 2,111</td>
<td>3,000</td>
<td>889</td>
<td>51,886</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>Jun. 30 51,886</td>
<td>4% x 51,886 = 2,075</td>
<td>3,000</td>
<td>925</td>
<td>50,961</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dec. 31 50,961</td>
<td>4% x 50,961 = 2,039</td>
<td>3,000</td>
<td>961</td>
<td>50,000</td>
<td></td>
</tr>
</tbody>
</table>

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.
1. discount
2. premium
3. discount
4. premium
5. premium
6. discount

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.
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

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonds payable</td>
<td>$200,000</td>
</tr>
<tr>
<td>Premium on bonds</td>
<td>16,000</td>
</tr>
<tr>
<td>Carrying amount</td>
<td>$216,000</td>
</tr>
</tbody>
</table>

4. Calling of the bonds:
Cash paid = $200,000 x 106% = $212,000

2022

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 1</td>
<td>Bonds Payable</td>
<td>200,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Premium on Bonds</td>
<td>8,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cash</td>
<td>212,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Loss on Bond Retirement</td>
<td>4,000</td>
<td></td>
</tr>
</tbody>
</table>

To record retirement of bonds at 106 as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face value</td>
<td>$200,000</td>
</tr>
<tr>
<td>Unamortized premium</td>
<td>(8,000)</td>
</tr>
<tr>
<td>Carrying amount</td>
<td>208,000</td>
</tr>
<tr>
<td>Cash paid</td>
<td>212,000</td>
</tr>
<tr>
<td>Loss on retirement</td>
<td>(4,000)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 1</td>
<td>Discount on Bonds</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cash</td>
<td>272,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bonds Payable</td>
<td>275,000</td>
<td></td>
</tr>
</tbody>
</table>

CP 10–5

Premium = $100 x 12/6 x 3 years = $600
Bonds payable = ($18,000 x 12/6 months)/12% = $300,000

2018

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 1</td>
<td>Cash</td>
<td></td>
<td>300,600</td>
</tr>
<tr>
<td></td>
<td>Premium on Bonds</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bonds Payable</td>
<td>300,000</td>
<td></td>
</tr>
</tbody>
</table>
Case A

1. The corporation receives $100,000 cash for the bonds.
2. 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

Case B

1. The corporation receives $112,000 cash for the bonds.
2. 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 112,000
   - Premium on Bonds 12,000
   - Bonds Payable 100,000

Case C

1. 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.
3. The following journal entry records the sale of the bonds:
   - Cash 88,000
   - Discount on Bonds 12,000
   - Bonds Payable 100,000

Case 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 statement of profit and loss.

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”).
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

<table>
<thead>
<tr>
<th>Year</th>
<th>Six month period ending</th>
<th>Beginning bond carrying amount</th>
<th>($\frac{1}{2} \times 10%) = 5% \times A</th>
<th>Actual Using 10% market rate to calculate 6-month interest expense</th>
<th>(B – C) Periodic premium amort.</th>
<th>Ending bond carrying amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>Jun. 30</td>
<td>$210,152</td>
<td>5% x $210,152 = $10,507</td>
<td>$12,000</td>
<td>$1,493</td>
<td>$208,659</td>
</tr>
<tr>
<td></td>
<td>Dec. 31</td>
<td>208,659</td>
<td>5% x 208,659 = 10,433</td>
<td>12,000</td>
<td>(1,567)</td>
<td>207,092</td>
</tr>
<tr>
<td>2018</td>
<td>Jun. 30</td>
<td>207,092</td>
<td>5% x 207,092 = 10,355</td>
<td>12,000</td>
<td>(1,645)</td>
<td>205,447</td>
</tr>
<tr>
<td></td>
<td>Dec. 31</td>
<td>205,447</td>
<td>5% x 205,447 = 10,272</td>
<td>12,000</td>
<td>(1,728)</td>
<td>203,719</td>
</tr>
<tr>
<td>2019</td>
<td>Jun. 30</td>
<td>203,719</td>
<td>5% x 203,719 = 10,186</td>
<td>12,000</td>
<td>(1,814)</td>
<td>201,905</td>
</tr>
<tr>
<td></td>
<td>Dec. 31</td>
<td>201,905</td>
<td>5% x 201,905 = 10,095</td>
<td>12,000</td>
<td>(1,905)</td>
<td>200,000</td>
</tr>
</tbody>
</table>

3. Calculation of Effective Interest Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Six month period ending</th>
<th>Bond carrying amount</th>
<th>($\frac{1}{2} \times 10%) = 5% \times A</th>
<th>Using 10% market rate to calculate periodic interest expense</th>
<th>(B/A)</th>
<th>(B/C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>Jun. 30</td>
<td>$210,152</td>
<td>5% x $210,152 = $10,507</td>
<td>$12,000</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td></td>
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<td>208,659</td>
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<td>12,000</td>
<td>(1,567)</td>
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</tr>
<tr>
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<td>12,000</td>
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<td>10%</td>
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<td>(1,728)</td>
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</tr>
<tr>
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<td>(1,814)</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Dec. 31</td>
<td>201,905</td>
<td>5% x 201,905 = 10,095</td>
<td>12,000</td>
<td>(1,905)</td>
<td>10%</td>
</tr>
</tbody>
</table>

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.
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.
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.
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:

<table>
<thead>
<tr>
<th>Declaration Date</th>
<th>Payment/Distribution Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash Dividend</strong></td>
<td>Dividends X</td>
</tr>
<tr>
<td></td>
<td>Dividends Payable X</td>
</tr>
<tr>
<td></td>
<td>Cash X</td>
</tr>
<tr>
<td><strong>Share Dividend</strong></td>
<td>Share Dividend X</td>
</tr>
<tr>
<td></td>
<td>Share Dividend to be Issued X</td>
</tr>
<tr>
<td></td>
<td>Common Shares X</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Shareholders</th>
<th>Shares</th>
<th>%</th>
<th>Shares</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>W</td>
<td>250</td>
<td>25%</td>
<td>275</td>
<td>25%</td>
</tr>
<tr>
<td>X</td>
<td>250</td>
<td>25%</td>
<td>275</td>
<td>25%</td>
</tr>
<tr>
<td>Y</td>
<td>250</td>
<td>25%</td>
<td>275</td>
<td>25%</td>
</tr>
<tr>
<td>Z</td>
<td>250</td>
<td>25%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ownership

<table>
<thead>
<tr>
<th></th>
<th>Shares</th>
<th>%</th>
<th>Shares</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before Share Dividend</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>After Share Dividend</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shareholders</td>
<td>Shares</td>
<td>%</td>
<td>Shares</td>
<td>%</td>
</tr>
<tr>
<td>W</td>
<td>250</td>
<td>25%</td>
<td>275</td>
<td>25%</td>
</tr>
<tr>
<td>X</td>
<td>250</td>
<td>25%</td>
<td>275</td>
<td>25%</td>
</tr>
<tr>
<td>Y</td>
<td>250</td>
<td>25%</td>
<td>275</td>
<td>25%</td>
</tr>
<tr>
<td>Z</td>
<td>250</td>
<td>25%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Event</th>
<th>Total share capital</th>
<th>Retained earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Company is incorporated</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2. Issued shares with a stated value of $1</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>3. Split the common shares 2 for 1</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>4. Recorded net income for the year</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>5. Reacquired common shares previously outstanding</td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>6. Declared a cash dividend</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>7. Paid a cash dividend (retained earnings effect recorded when dividend declared)</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>8. Declared a share dividend</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Created a restriction on retained earnings</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

### CP 11–2

1. | 12% bonds | Preferred shares | Common shares |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Income before interest and income taxes</td>
<td>$12,000,000</td>
<td>$12,000,000</td>
</tr>
<tr>
<td>Less: Interest expense</td>
<td>4,800,000</td>
<td>-0-</td>
</tr>
<tr>
<td>Income before income taxes</td>
<td>7,200,000</td>
<td>12,000,000</td>
</tr>
<tr>
<td>Less: Income taxes at 50%</td>
<td>3,600,000</td>
<td>6,000,000</td>
</tr>
<tr>
<td>net available to common shareholders (a)</td>
<td>$3,600,000</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Number of common shares outstanding (b)</td>
<td>200,000</td>
<td>200,000</td>
</tr>
<tr>
<td>Earnings per common share (a/b)</td>
<td>$18</td>
<td>$10</td>
</tr>
</tbody>
</table>

1. $40,000,000 x 12% = $4,800,000
2. $40,000,000 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
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

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.

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.
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.
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) 92
Common share dividend declared (42)

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.
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 400,0001
   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

<table>
<thead>
<tr>
<th>Share capital</th>
<th>Retained earnings</th>
<th>Total equity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unrestricted</td>
<td>Restricted</td>
</tr>
<tr>
<td>Balance at Jan. 1, 2018</td>
<td>$ -0-</td>
<td>$ -0-</td>
</tr>
<tr>
<td>Common shares issued (Note X)</td>
<td>8,000</td>
<td></td>
</tr>
<tr>
<td>Net income</td>
<td>575,000</td>
<td></td>
</tr>
<tr>
<td>Cash dividends declared</td>
<td>(23,000)</td>
<td>(23,000)</td>
</tr>
<tr>
<td>Common share dividend declared</td>
<td>2,000</td>
<td>(2,000)</td>
</tr>
<tr>
<td>Restriction for plant addition (Note Y)</td>
<td>(150,000)</td>
<td>150,000</td>
</tr>
<tr>
<td>Balance at Dec. 31, 2018</td>
<td>$10,000</td>
<td>$400,000</td>
</tr>
</tbody>
</table>
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

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.
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.
1. An adjusting entry is needed to reallocate personal income taxes:

\[
\begin{align*}
\text{Proprietor’s Withdrawals} & \quad 5,000 \\
\text{Income Taxes Expense} & \quad 5,000
\end{align*}
\]

The statement of profit and loss would then appear as follows:

\[
\begin{align*}
\text{R. Black Proprietorship} \\
\text{Statement of Profit and Loss} \\
\text{For the Year Ended December 31, 2018}
\end{align*}
\]

\[
\begin{align*}
\text{Sales} & \quad $166,000 \\
\text{Cost of goods sold} & \quad 100,000 \\
\text{Gross profit} & \quad 66,000 \\
\text{Operating expenses} & \quad \\
\text{Rent} & \quad 24,000 \\
\text{Net income} & \quad $42,000
\end{align*}
\]

2. 

\[
\begin{align*}
\text{R. Black Proprietorship} \\
\text{Statement of Proprietor’s Capital} \\
\text{For the Year Ended December 31, 2018}
\end{align*}
\]

\[
\begin{align*}
\text{Balance at Jan. 1, 2018 (derived)} & \quad $0 \\
\text{Contributions} & \quad 5,000 \\
\text{Net income} & \quad 42,000 \\
\text{Withdrawals} & \quad (12,000) \\
\text{Balance at Dec. 31, 2018} & \quad $35,000
\end{align*}
\]
3. **R. Black Proprietorship**  
*Statement of Financial Position*  
*At December 31, 2018*

### Assets

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current</strong></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>$10,000</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>20,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>30,000</td>
</tr>
<tr>
<td>Total assets</td>
<td>$60,000</td>
</tr>
</tbody>
</table>

### Liabilities

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current</strong></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$25,000</td>
</tr>
</tbody>
</table>

### Proprietor’s Capital

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>R. Black, capital</td>
<td>35,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total liabilities and proprietor’s capital</td>
<td>$60,000</td>
</tr>
</tbody>
</table>

4. **Sales** 166,000

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Goods Sold</td>
<td>100,000</td>
</tr>
<tr>
<td>Rent Expense</td>
<td>24,000</td>
</tr>
<tr>
<td>Income Summary</td>
<td>42,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Summary</td>
<td>42,000</td>
</tr>
<tr>
<td>R. Black, Capital</td>
<td>42,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>R. Black, Capital</td>
<td>12,000</td>
</tr>
<tr>
<td>R. Black, Withdrawals</td>
<td>12,000</td>
</tr>
</tbody>
</table>
1.

R. Black Ltd.
Statement of Profit and Loss
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

<table>
<thead>
<tr>
<th>Share capital</th>
<th>Retained earnings</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at Jan. 1, 2018</td>
<td>$5,000</td>
<td>$0</td>
</tr>
<tr>
<td>Net income</td>
<td>37,000</td>
<td>37,000</td>
</tr>
<tr>
<td>Dividends</td>
<td>(7,000)</td>
<td>(7,000)</td>
</tr>
<tr>
<td>Balance at Dec. 31, 2018</td>
<td>$5,000</td>
<td>$30,000</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Share capital</th>
<th>Retained earnings</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital</td>
<td>$5,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Total liabilities and shareholders’ equity</td>
<td>$60,000</td>
<td></td>
</tr>
</tbody>
</table>
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

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.
1. Able, Brown, and Crown
Statement of Partnership Liquidation
For the Month Ending November 30, 2018

<table>
<thead>
<tr>
<th></th>
<th>Cash</th>
<th>Other assets</th>
<th>Liabilities</th>
<th>Partners' capital</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Able</td>
<td>Brown</td>
<td>Crown</td>
<td></td>
</tr>
<tr>
<td>Balance, November 1, 2018</td>
<td>$ 20,000</td>
<td>$180,000</td>
<td>$50,000</td>
<td>$37,000</td>
</tr>
<tr>
<td>Sale of other assets and allocation of loss ($80,000)</td>
<td>100,000</td>
<td>(180,000)</td>
<td></td>
<td>(32,000) (32,000) (16,000)</td>
</tr>
<tr>
<td></td>
<td>120,000</td>
<td>$ -0-</td>
<td>50,000</td>
<td>5,000 33,000 32,000</td>
</tr>
<tr>
<td>Payment of liabilities</td>
<td>(50,000)</td>
<td>(50,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>70,000</td>
<td>$ -0-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distribution of cash</td>
<td>(70,000)</td>
<td>(5,000)</td>
<td>(33,000)</td>
<td>(32,000)</td>
</tr>
<tr>
<td>Balance, November 30, 2018</td>
<td>$ -0-</td>
<td>$ -0-</td>
<td>$ -0-</td>
<td>$ -0-</td>
</tr>
</tbody>
</table>

2. a. Loss on Sale of Other Assets
Cash 80,000
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
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.
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.
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.
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.
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 statement of profit and loss 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:

\[
\frac{\text{Income from operations (after tax)}}{\text{Net sales}} \times \frac{\text{Net sales}}{\text{Operating capital}} + \frac{\text{Return on leveraging}}{\text{Shareholders’ equity}} = \frac{\text{Return on shareholders’ equity}}{\text{Net income}}
\]

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 \([\text{interest expense} \times (1-\text{income tax rate})]/\text{net financial debt}\).
Acid–test ratio
Current ratio
Return on shareholders’ equity
Times interest earned
Earnings per share
Accounts receivable collection period
Sales to total assets
Dividend yield
Price–to–earnings ratio
Number of days of sales in inventory
Debt to shareholders’ equity ratio
Net profit ratio
Accounts receivable collection period
Return on total assets
CP 13–2

1. Current ratio = \( \frac{\text{Current assets}}{\text{Current liabilities}} \)

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: \( \frac{10 + 35 + 200 + 600}{745} = 1.13 \) to 1
2017: \( \frac{15 + 35 + 150 + 400}{580} = 1.03 \) to 1

2. Acid–test ratio = \( \frac{\text{Quick assets}}{\text{Current liabilities}} \)

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: \( \frac{10 + 35 + 200}{745} = 0.33 \) to 1
2017: \( \frac{15 + 35 + 150}{580} = 0.34 \) 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.

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Working capital from operations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>$200</td>
<td>$150</td>
</tr>
<tr>
<td>Inventory</td>
<td>600</td>
<td>400</td>
</tr>
<tr>
<td>Less: Accounts payable</td>
<td>(500)</td>
<td>(400)</td>
</tr>
<tr>
<td></td>
<td>$300</td>
<td>$150</td>
</tr>
<tr>
<td><strong>Net financial debt</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borrowings</td>
<td>$245</td>
<td>$180</td>
</tr>
<tr>
<td>Less: Cash</td>
<td>(10)</td>
<td>(15)</td>
</tr>
<tr>
<td>Short-term investments</td>
<td>(35)</td>
<td>(35)</td>
</tr>
<tr>
<td></td>
<td>$200</td>
<td>$130</td>
</tr>
</tbody>
</table>
Gross profit ratio = \( \frac{\text{Gross profit}}{\text{Net sales}} \)

2019: \( \frac{63}{252} = 25\% \)
2018: \( \frac{48}{141} = 34\% \)
2017: \( \frac{54}{120} = 45\% \)

Net profit ratio = \( \frac{\text{Net income}}{\text{Net sales}} \)

2019: \( \frac{12}{252} = 4.7\% \)
2018: \( \frac{5}{141} = 3.6\% \)
2017: \( \frac{15}{120} = 12.5\% \)

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.

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: \( \frac{35}{11} = 3.2 \)
B: \( \frac{40}{5} = 8 \)
C: \( \frac{90}{10} = 9 \)

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: \( \frac{4}{40} = 10 \)
C: \( \frac{6}{90} = 6.7 \)

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

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
<th>Change</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(a)</td>
<td>(b)</td>
<td>(a – b)</td>
<td>(a – b)/b</td>
</tr>
<tr>
<td>Sales</td>
<td>$2,520</td>
<td>$1,440</td>
<td>$ +1,080</td>
<td>+75%</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>1,890</td>
<td>960</td>
<td>+930</td>
<td>+96.9%</td>
</tr>
<tr>
<td>Gross profit</td>
<td>$630</td>
<td>$480</td>
<td>+150</td>
<td>+31.3%</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>510</td>
<td>430</td>
<td>+80</td>
<td>+18.6%</td>
</tr>
<tr>
<td>Net income</td>
<td>$  120</td>
<td>$   50</td>
<td>+70</td>
<td>+140%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Ratio</th>
<th>Effect on ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declared a cash dividend</td>
<td>Current ratio</td>
<td>Inc. Dec. No change</td>
</tr>
<tr>
<td>Wrote-off an uncollectible account receivable</td>
<td>Accounts receivable collection period</td>
<td>X</td>
</tr>
<tr>
<td>Purchased inventory on account</td>
<td>Acid–test ratio</td>
<td>X</td>
</tr>
<tr>
<td>Issued 10–year bonds to acquire capital assets</td>
<td>Return on total assets</td>
<td>X</td>
</tr>
<tr>
<td>Issued additional shares for cash</td>
<td>Debt to shareholders’ equity ratio</td>
<td>X</td>
</tr>
<tr>
<td>Declared a share dividend on common shares</td>
<td>Earnings per share</td>
<td>X</td>
</tr>
<tr>
<td>Restricted part of retained earnings</td>
<td>Return on shareholders’ equity</td>
<td></td>
</tr>
<tr>
<td>Purchased supplies on account</td>
<td>Current ratio</td>
<td>X</td>
</tr>
<tr>
<td>Paid a short–term creditor in full</td>
<td>Acid–test ratio</td>
<td>X</td>
</tr>
<tr>
<td>Paid an account payable, taking the cash discount</td>
<td>Number of days sales in inventory</td>
<td>X</td>
</tr>
</tbody>
</table>
1.a. Return on total assets
   \[ \text{Return on total assets} = \frac{\text{Income from operations}}{\text{Average total assets}} \]
   \[ = \frac{\$36}{220} \]
   \[ = 16.4\% \]

b. Return on shareholders’ equity
   \[ \text{Return on shareholders’ equity} = \frac{\text{Net income}}{\text{Average shareholders’ equity}} \]
   \[ = \frac{\$20}{(80 + 60)} \]
   \[ = 14.3\% \]

c. Times interest earned ratio
   \[ \text{Times interest earned ratio} = \frac{\text{Income from operations}}{\text{Interest expense}} \]
   \[ = \frac{\$36}{6} \]
   \[ = 6 \text{ times} \]

d. Earnings per share
   \[ \text{Earnings per share} = \frac{\text{Net income}}{\text{Number of common shares outstanding}} \]
   \[ = \frac{\$20}{8 \text{ shares}} \]
   \[ = \$2.50 \]

e. Number of days of sales in inventory
   \[ \text{Number of days of sales in inventory} = \frac{\text{Average inventory}}{\text{Cost of goods sold}} \times 365 \text{ days} \]
   \[ = \frac{\$40}{50} \times 365 \text{ days} \]
   \[ = 292 \text{ days} \]

f. Accounts receivable collection period
   \[ \text{Accounts receivable collection period} = \frac{\text{Accounts receivable}}{\text{Net credit sales}} \times 365 \text{ days} \]
   \[ = \frac{\$20}{100} \times 365 \text{ days} \]
   \[ = 73 \text{ days} \]

g. Sales to total assets ratio
   \[ \text{Sales to total assets ratio} = \frac{\text{Net sales}}{\text{Average total assets}} \]
   \[ = \frac{\$100}{220} \]
   \[ = 45\% \]

h. Current ratio
   \[ \text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}} \]
   \[ = \frac{\$20 + 20 + 40}{20} \]
   \[ = 4:1 \]
i. Acid-test ratio
   \[ \text{Acid-test ratio} = \frac{\text{Quick assets}}{\text{Current liabilities}} = \frac{20 + 20}{20} = 2:1 \]

j. Debt to shareholders’ equity ratio
   \[ \text{Debt to shareholders’ equity ratio} = \frac{\text{Total liabilities}}{\text{Shareholders’ equity}} = \frac{20 + 60}{140} = .57:1 \]

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
   - Merchandise inventory 40
   - Less: Accounts payable (20)
   - 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
### Statement of Profit and Loss

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$100</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>50</td>
</tr>
<tr>
<td>Gross profit</td>
<td>50</td>
</tr>
<tr>
<td>Operating expenses</td>
<td>14</td>
</tr>
<tr>
<td>Income from operations</td>
<td>36</td>
</tr>
<tr>
<td>Less: Income taxes</td>
<td>(12)</td>
</tr>
<tr>
<td>Income from operations, after-tax</td>
<td>24</td>
</tr>
<tr>
<td>Interest</td>
<td>6</td>
</tr>
<tr>
<td>Less: Income tax savings</td>
<td>(2)</td>
</tr>
<tr>
<td>Net interest expense</td>
<td>4</td>
</tr>
<tr>
<td>Net income</td>
<td>$20</td>
</tr>
</tbody>
</table>

4. Scott formula

\[
\text{Return on operating capital} + \text{Return on leveraging} = \text{Return on shareholders' equity}
\]

\[
\left( \frac{\$24}{100} \times \frac{\$100}{180} \right) + \left[ \left( \frac{\$24}{180} - \frac{\$4}{40} \right) \times \frac{\$40}{140} \right] = \frac{\$20}{140}
\]

\[
= \left[ \frac{24\%}{100} \times \frac{1}{.6} \right] + \left[ \frac{3.3\%}{180} \times \frac{1}{.3} \right] = 14.3\%
\]

\[
= 13.3\% + 1.0\% = 14.3\%
\]
1. Current ratio
   \[
   \text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}} = \frac{\text{Cash + accounts receivable + inventory + prepaid expenses}}{\text{Current liabilities}} = \frac{($72 + 88 + 100 + 40)/60}{\text{Current liabilities}} = 5:1
   \]

2. Return on total assets
   \[
   \text{Return on total assets} = \frac{\text{Income from operations}}{\text{Average total assets}} = \frac{$46}{620} = 7.4\%
   \]

1. Sales to total assets ratio
   \[
   \text{Sales to total assets ratio} = \frac{\text{Net sales}}{\text{Average total assets}} = \frac{$240}{620} = 38.7\%
   \]

4. Acid-test ratio
   \[
   \text{Acid-test ratio} = \frac{\text{Quick assets}}{\text{Current liabilities}} = \frac{\text{Cash + accounts receivable}}{\text{Current liabilities}} = \frac{($72 + 88)/60}{\text{Current liabilities}} = 2.7:1
   \]

5. Times interest earned ratio
   \[
   \text{Times interest earned ratio} = \frac{\text{Income from operations}}{\text{Interest expense}} = \frac{$46}{8} = 5.75:1
   \]

6. Earnings per common share
   \[
   \text{Earnings per common share} = \frac{\text{Net income – preferred share dividends}}{\text{Number of common shares outstanding}} = \frac{[$20 – ($60 x 10%)]}{10 \text{ shares}} = $1.40 \text{ per share}
   \]
7. Accounts receivable collection period
   \[\text{Accounts receivable collection period} = \frac{\text{Average accounts receivable}}{\text{Net credit sales}} \times 365 \text{ days}\]
   Net credit sales
   \[= \frac{\$88}{(80\% \times \$240)} \times 365 \text{ days}\]
   \[= 167 \text{ days}\]

8. Return on shareholders’ equity
   \[\text{Return on shareholders’ equity} = \frac{\text{Net income}}{\text{Shareholders’ equity}}\]
   Shareholders’ equity
   \[= \frac{\text{Net income}}{\text{Preferred shares} + \text{common shares} + \text{retained earnings}}\]
   \[= \frac{\$20}{(60 + 250 + 100)}\]
   \[= 4.9\%\]

9. Scott formula
   \[\text{Return on operating capital} + \text{Return on leveraging} = \text{Return on shareholders’ equity}\]
   \[\begin{align*}
   \left(\frac{24}{240} \times \frac{\$240}{488}\right) + \left[\left(\frac{\$24}{488} - \frac{\$4}{78}\right) \times \frac{\$78}{410}\right] &= \frac{\$20}{410} \\
   &= 4.9\% + 0\% = 4.9\%
   \end{align*}\]

   \[\begin{align*}
   ^1 & \frac{\$46 \times (1 - .473^*)}{\$24} \quad ^2 \frac{\$620 - 72 - 60}{\$488} \\
   ^3 & \frac{\$8 \times (1 - .473)}{\$4} \quad ^4 \frac{\$150 - 72}{\$78} \\
   ^5 & \frac{\$60 + 250 + 100}{\$410}
   \end{align*}\]

   *income tax rate: $18/38 = 47.3\%
1. Current assets + capital assets = Total liabilities + shareholders’ equity
   Current assets + $90 = $40 + $140
   Current assets = $90
   Current ratio = Current assets
                   Current liabilities
   2.5 = $90/Current liabilities
   Current liabilities = $36

2. Per above: Current assets = $90; current liabilities = $36
   Acid-test Ratio = Quick current assets
                   Current liabilities
   Since the Acid-test Ratio is 1:1,
   Inventory = $90 – 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 = Average accounts receivable x 365 days
   Net credit sales
   = $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 = Average inventory x 365 days
   Net credit sales
   = $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
1. **Effect on current ratio**

<table>
<thead>
<tr>
<th>Transaction</th>
<th>Inc.</th>
<th>Dec.</th>
<th>No change</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Bought $20,000 of merchandize on account (the company uses a perpetual inventory system)</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>b. Sold for $10,000 cash, merchandize that cost $5,000</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>c. Collected a $2,500 account receivable</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>d. Paid a $10,000 account payable</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>e. Wrote off a $1,500 bad debt against the allowance for doubtful accounts</td>
<td></td>
<td></td>
<td>X*</td>
</tr>
<tr>
<td>f. Declared a $1 per–share cash dividend on the 10,000 outstanding common shares</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>g. Paid the dividend declared above</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Borrowed $10,000 from a bank by assuming a 60–day, 10 per cent loan</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>i. Borrowed $25,000 from a bank by placing a 10–year mortgage on the plant</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>j. Used the $25,000 proceeds of the mortgage to buy additional machinery</td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

* 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:

```
<table>
<thead>
<tr>
<th>May 1 Bal.</th>
<th>(a)</th>
<th>(b)</th>
<th>(c)</th>
<th>(d)</th>
<th>(e)</th>
<th>(f)</th>
<th>(g)</th>
<th>(h)</th>
<th>(i)</th>
<th>(j)</th>
<th>May 31 Bal.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current assets (given)</td>
<td>x</td>
<td>$200</td>
<td>+20</td>
<td>+10</td>
<td>+2.5</td>
<td>−10</td>
<td>+1.5</td>
<td>−10</td>
<td>+10</td>
<td>+25</td>
<td>−25</td>
</tr>
<tr>
<td>Current liabilities (derived)</td>
<td>y</td>
<td>$80</td>
<td>+20</td>
<td>−10</td>
<td>+10</td>
<td>−10</td>
<td>+10</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>100</td>
</tr>
<tr>
<td>Current ratio</td>
<td>x/y</td>
<td>2.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.15</td>
</tr>
</tbody>
</table>
```
b. The acid–test ratio was 1 to 1 calculated as follows:

<table>
<thead>
<tr>
<th></th>
<th>May 1 Bal.</th>
<th>(a)</th>
<th>(b)</th>
<th>(c)</th>
<th>(d)</th>
<th>(e)</th>
<th>(f)</th>
<th>(g)</th>
<th>(h)</th>
<th>(i)</th>
<th>(j)</th>
<th>May 31 Bal.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quick assets (derived)</td>
<td>x</td>
<td>$100</td>
<td>–</td>
<td>+10</td>
<td>+2.5</td>
<td>–10</td>
<td>+1.5</td>
<td>–</td>
<td>–10</td>
<td>+10</td>
<td>+25</td>
<td>–25</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>–2.5</td>
<td></td>
<td>–1.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current liabilities (see above)</td>
<td>y</td>
<td>$80</td>
<td>+20</td>
<td>–</td>
<td>–10</td>
<td>–</td>
<td>+10</td>
<td>–10</td>
<td>+10</td>
<td>–</td>
<td>–</td>
<td>100</td>
</tr>
<tr>
<td>Acid-test ratio</td>
<td>x/y</td>
<td>1.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.0</td>
</tr>
</tbody>
</table>
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.

A statement of profit and loss 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.
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 statement of profit and loss. 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 statement of profit and loss.

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 statement of profit and loss.

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.
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
A payment of $5,000 was made on a non-current bank loan.

Depreciation expense for equipment was $1,000.

$10,000 of share capital was issued for cash.

Cash dividends of $2,500 were declared and paid to shareholders.

A long-term bank loan was assumed in exchange for equipment costing $7,000.

Land was purchased for $25,000 cash.

$750 of accrued salaries was paid.

A $5,000 short-term demand loan was obtained.

$10,000 of accounts receivable was collected.

A building was purchased for $80,000. $30,000 was paid in cash and the rest was borrowed.

Land was sold for $50,000 cash.

Equipment was sold for $6,000. The original cost was $10,000. The accumulated depreciation was $3,000.

$1,200 was paid for a 14–month insurance policy to take effect next year.

A patent was amortized for $500.

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

<table>
<thead>
<tr>
<th>Operating activities</th>
<th>Financing activities</th>
<th>Investing activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In (out)</strong></td>
<td><strong>In (out)</strong></td>
<td><strong>In (out)</strong></td>
</tr>
<tr>
<td>1. Retired $100 of non-current debt with cash</td>
<td></td>
<td>(100)</td>
</tr>
<tr>
<td>2. Purchased a building for $90; $60 was loaned by a bank and the rest was paid in cash</td>
<td>60</td>
<td>(90)</td>
</tr>
<tr>
<td>3. Declared and paid cash dividends of $12 during the year</td>
<td></td>
<td>(12)</td>
</tr>
<tr>
<td>4. Purchased equipment by issuing $20 of common shares with the proceeds</td>
<td>20</td>
<td>(20)</td>
</tr>
<tr>
<td>5. Paid $50 in cash to pay off a non-current bank loan</td>
<td>(50)</td>
<td></td>
</tr>
<tr>
<td>6. Sold land for $30 cash</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>7. Earned net income of $75</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>8. Purchased equipment costing $15; of this, $5 was paid in cash and the rest with a 90–day note payable</td>
<td>10¹</td>
<td>(15)</td>
</tr>
<tr>
<td>9. Amortized a patent by $2</td>
<td>2²</td>
<td></td>
</tr>
<tr>
<td>10. Assumed $100 of non-current debt and repurchased common shares</td>
<td>100 (100)</td>
<td></td>
</tr>
<tr>
<td>11. Purchased short-term investments for $5 cash</td>
<td></td>
<td>(5)³</td>
</tr>
<tr>
<td>12. Sold a machine that cost $20 for $7 cash; the accumulated depreciation on it was $10</td>
<td>3⁴</td>
<td>7</td>
</tr>
<tr>
<td>13. Depreciation expense for building and equipment amounted to $8</td>
<td></td>
<td>8²</td>
</tr>
<tr>
<td>14. Paid in cash the note payable from transaction 8 above.</td>
<td></td>
<td>(10)¹</td>
</tr>
<tr>
<td>15. Issued $20 of preferred shares for cash</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>16. Purchased a patent for $25 cash</td>
<td></td>
<td>(25)</td>
</tr>
<tr>
<td>17. Prepaid $20 for the next two months of advertising</td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>18. Purchased land for $60 cash.</td>
<td></td>
<td>(60)</td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th>Cash Flow</th>
<th>No Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Earning net income for the year</td>
<td>X</td>
</tr>
<tr>
<td>2. Redemption of preferred shares at face value</td>
<td>X</td>
</tr>
<tr>
<td>3. Purchase of inventory</td>
<td></td>
</tr>
<tr>
<td>4. Issuing common shares for equipment</td>
<td>X</td>
</tr>
<tr>
<td>5. Assuming non-current debt</td>
<td></td>
</tr>
<tr>
<td>6. Declaring a cash dividend</td>
<td>X</td>
</tr>
<tr>
<td>7. Collection of an account receivable</td>
<td></td>
</tr>
<tr>
<td>8. Payment of an account payable</td>
<td>X</td>
</tr>
<tr>
<td>9. Purchase of land for cash</td>
<td></td>
</tr>
<tr>
<td>10. Issuing common shares for cash</td>
<td>X</td>
</tr>
<tr>
<td>11. Reclassifying non-current liabilities as current liabilities equal to the amount to be repaid in cash next year</td>
<td></td>
</tr>
<tr>
<td>12. Payment of a cash dividend declared last year</td>
<td>X</td>
</tr>
<tr>
<td>13. Decrease in market value of short-term investments</td>
<td></td>
</tr>
<tr>
<td>14. Calculation of amount owing for income taxes.</td>
<td>X</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Description</th>
<th>Balance</th>
<th>Change</th>
<th>Cash Effect</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening cash and cash equivalents ($50 – 50)</td>
<td>$ -0-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in cash and cash equivalents during the year</td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Ending cash and cash equivalents ($100 – 100)</td>
<td>$ -0-</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CP 14–6

Cash Flow Table:

<table>
<thead>
<tr>
<th>Balance</th>
<th>Change</th>
<th>Cash effect</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>2018</td>
<td>Dr. (Cr.)</td>
<td>Dr. (Cr.)</td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td>100</td>
<td>86</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>60</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>Inventory</td>
<td>36</td>
<td>30</td>
<td>6</td>
</tr>
<tr>
<td>Prepaid rent</td>
<td>10</td>
<td>-0-</td>
<td>10</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>(206)</td>
<td>(156)</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>-0-</td>
<td>-0-</td>
<td>50</td>
</tr>
</tbody>
</table>

$14 net cash inflow

Cash flow from operating activities would be calculated as:

Net income $ 50
Add (deduct) changes in non-cash working capital

<table>
<thead>
<tr>
<th>Description</th>
<th>Balance</th>
<th>Change</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in accounts receivable</td>
<td>(20)</td>
<td></td>
<td>Operating</td>
</tr>
<tr>
<td>Increase in inventory</td>
<td>(6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in prepaid rent</td>
<td>(10)</td>
<td>(36)</td>
<td></td>
</tr>
<tr>
<td>Cash flow from operating activities</td>
<td>$ 14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 statement of profit and loss. A $500 gain was realized when the equipment was sold per the statement of profit and loss. 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:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Balance 2019</th>
<th>Change</th>
<th>Cash effect</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dr. (Cr.)</td>
<td>Dr.</td>
<td>Cr.</td>
<td>Inflow</td>
</tr>
<tr>
<td>Cash</td>
<td>1,250</td>
<td>1,600</td>
<td>*350</td>
<td>To be explained</td>
</tr>
<tr>
<td>S/T investments</td>
<td>100</td>
<td>200</td>
<td>*100</td>
<td>To be explained</td>
</tr>
<tr>
<td>Borrowings</td>
<td>(600)</td>
<td>(1,000)</td>
<td>400</td>
<td>400</td>
</tr>
<tr>
<td>Common shares</td>
<td>(200)</td>
<td>(300)</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Ret. earnings</td>
<td>(550)</td>
<td>(500)</td>
<td>50</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>-0-</td>
<td>-0-</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>90</td>
<td>540</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>*$450 net cash outflow</td>
<td></td>
</tr>
</tbody>
</table>
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:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening retained earnings (given)</td>
<td>$500</td>
</tr>
<tr>
<td>Add: Net income (given)</td>
<td>90</td>
</tr>
<tr>
<td>Less: Dividends paid (derived)</td>
<td>(40)</td>
</tr>
<tr>
<td>Ending retained earnings (given)</td>
<td>$550</td>
</tr>
</tbody>
</table>

3. Cash used by financing activities

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repayment of borrowings</td>
<td>($400)</td>
</tr>
<tr>
<td>Redemption of common shares</td>
<td>(100)</td>
</tr>
<tr>
<td>Payment of dividends</td>
<td>(40)</td>
</tr>
<tr>
<td></td>
<td>($540)</td>
</tr>
</tbody>
</table>
1. Cash flow table:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Balance 2019</th>
<th>Change</th>
<th>Cash effect</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dr.</td>
<td>Cr.</td>
<td>Inflow</td>
<td>Outflow</td>
</tr>
<tr>
<td>Cash</td>
<td>10</td>
<td>8</td>
<td>2</td>
<td></td>
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<tr>
<td>Accounts receivable</td>
<td>18</td>
<td>10</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Merchandise inventory</td>
<td>24</td>
<td>20</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Land</td>
<td>10</td>
<td>24</td>
<td>14</td>
<td>(a) 10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(a) 4</td>
</tr>
<tr>
<td>Plant and equipment</td>
<td>94</td>
<td>60</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(b) 7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(b) 6</td>
</tr>
<tr>
<td>Accum. dep’n</td>
<td>(14)</td>
<td>(10)</td>
<td>(b) 2</td>
<td>(b) 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Accounts payable</td>
<td>(16)</td>
<td>(12)</td>
<td>4</td>
<td>4</td>
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<tr>
<td>Non-current borrowings</td>
<td>(40)</td>
<td>(32)</td>
<td>8</td>
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<tr>
<td>Common shares</td>
<td>(60)</td>
<td>(50)</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>(26)</td>
<td>(18)</td>
<td>8</td>
<td>14</td>
</tr>
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</tbody>
</table>

\$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 statement of profit and loss) \$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
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).