Chapter 2
Accounting and Financial Statements

REVIEW QUESTIONS

1. What activities are involved in bookkeeping?

   Bookkeeping involves activities related to collecting, classifying, and recording information that arises from the transactions that take place in a business. They are first recorded in journals and then in ledgers. This information is then used to prepare the trial balance.

2. Explain the accounting equation.

   The accounting equation describes the relationship between the assets, equity, and liabilities on the statement of financial position (Assets = Equity + Liabilities). The equation or the statement must always be in balance.

3. What are journals and ledgers?

   A *journal* is the book in which business transactions are first recorded, in chronological order. *Ledgers* are the books of final entry in which transactions recorded in journals are transferred to individual ledger accounts.

4. What is the purpose of a trial balance?

   The trial balance is prepared to make sure that the total debit balances in the accounts equals the total credit balances. This document is done before preparing the financial statements.

5. What are financial statements and what do they include?

   These are financial reports and include the dual statement of income and statement of comprehensive income, the statement of changes in equity, the statement of financial position, and the statement of cash flows. These financial statements are included in a company's annual report. (1) The *statement of income* presents a company's revenue and expenses. The *statement of comprehensive income* shows items of income and expense that are not recognized in the statement of income. (2) The *statement of changes in equity* shows the interest of shareholders of a business and indicates the cumulative net results in equity with respect to share capital, contributed surplus, retained earnings, and accumulated other comprehensive income/(loss). (3) The *statement of financial position* presents a company's assets, equity, and liabilities. (4) The *statement of cash flows* shows the cash flow in terms of operating activities, financing activities, and investing activities.

6. Explain the different sections of the statement of income.

   The statement of income includes two sections: operating and non-operating. There are two profit levels included in the operating section: (1) *gross profit* which is the difference between revenue and cost of sales, and (2) *profit before taxes* which is the difference between gross profit, other income, distribution costs, administrative expenses, and finance costs. The non-operating section shows the (3) *profit for the year,* which is the result when income tax expense is subtracted from profit before taxes.

7. What does the statement of changes in equity show?

   The statement of changes in equity shows the beginning of the year and end of the year balances for four equity accounts: share capital, contributed surplus, retained earnings, and other comprehensive income/(loss). In the retained earnings section of the statement, for example, it shows (1) the amount of profit retained in a business since it was started, (2) the profit earned and dividends paid during a current operating year, and (3) ends with the amount of earnings remaining in the business at the end of the fiscal period.

8. What is the connection between the retained earnings amount shown in the statement of changes in equity and the statement of financial position?

   The link between these two statements is *retained earnings*. The retained earnings amount shown in the statement of changes in equity indicates the amount of profit that was earned by a business during an operating period. This number is drawn from the statement of income. If a business pays dividends during the current operating period, it will be deducted from the company's profit for the year, which represents the amount retained in the business during the current operating year. This amount is than added to the company's beginning retained earnings which gives the ending retained earnings; this amount is subsequently brought forward to the statement of financial position under the heading "equity."

9. Is there a difference between the book value of accounts shown on the statement of financial position and market value? Explain.

   Answers should recognize that depreciation is a method of spreading the cost of an asset over the periods during which it will be used to generate revenue; therefore, the book value of an asset (original cost minus accumulated depreciation) does not necessarily reflect what an asset can be sold for at any particular time.

10. What is the basic structure of the statement of financial position?

    The statement of financial position shows assets on one side, with equity and liabilities on the other.

11. Differentiate between non-current assets and current assets.

    Non-current assets are not so liquid and are used by the business over an extended period of time while *current assets* are relatively liquid or can be converted into cash quickly.

12. What are the four sections included in the statement of cash flows?

    The sections of a statement of cash flows are: (1) operating activities, (2) financing activities, (3) investing activities, and (4) cash balance.

13. What is the purpose of the auditor’s report?

    An auditor's report gives the auditors' opinion on the financial statements, verifies that the financial statements are prepared in accordance with generally accepted accounting principles, and describes the scope of the audit.

14. Why do you think auditors write the following statement in a company’s annual report? “These consolidated financial statements are the responsibility of the company’s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.”

    Answers should reflect the point that an auditor's statement assigns ultimate responsibility for the financial statements to the company's management, while stating that as far as possible, they have been checked by the auditing team and found to be appropriate. It places the ultimate responsibility for the accuracy of the statements on the management team.

15. Differentiate between cash accounting and accrual accounting.

    The *cash method* records transactions when cash is received from sales and paid for expenses, while the *accrual method* records revenue when goods are sold or services rendered, regardless of when the cash is actually received and records expenses when they are incurred, regardless of when cash is actually paid for them.

16. What are future income taxes payable?

    Future income taxes payable are a tax liability postponed to the future due to differences in methods of calculating depreciation and capital cost allowance.

17. What is the difference between depreciation and capital cost allowance?

    Depreciation is an accounting entry allocating the cost of a non-current asset (property, plant, and equipment) against revenue over an asset’s life and an estimated decrease in the value of non-current assets due to wear and tear and/or obsolescence. This amount appears on the statement of income as a non-cash expense. *Capital cost* *allowance* is a tax-deductible expense that Canadian laws allow a business to claim for the loss in value of non-current assets due to wear and tear and/or obsolescence. The CCA amount does not appear anywhere on a company's financial statements but is used by accountants to determine the amount of taxes to be paid.

18. What are some of the techniques used to analyze financial statements?

    Typical techniques used to analyze financial statements include the statement of cash flows, horizontal analysis, vertical analysis, ratio analysis, break-even analysis, and operational analysis.

19. What kind of decisions can be made when analyzing financial statements?

    Typical decisions made when analyzing financial statements include answers to the following questions: How much money should we borrow? Should we borrow on a short-term or long-term basis? How much inventory should be kept on hand? Should we buy or lease an asset? How much credit should we extend? What price should we set for our products? What size of capital commitments should our company tackle this year? Next year?

20. What is a not-for-profit organization?

    Not-for-profit organizations are entities, normally without transferable ownership interests, organized and operated exclusively for social, educational, professional, religious, health, charitable, or any other not-for-profit purpose. A not-for-profit organization's members, contributors, and other resource providers do not, in such capacity, receive any financial return directly from the organization.

21. Name the financial statements prepared by not-for-profit organizations.

    The financial statements are: (1) the statement of financial position, (2) the statement of operations, (3) the statement of changes in net assets, and (4) the statement of cash flows.

LEARNING EXERCISES

EXERICSE 1: RECORDING TRANSACTIONS IN JOURNALS AND LEDGERS

Questions

Prepare the following:

1. The journal entries

	Debits	Credits
1. Cash	$100,000	
Equity		$100,000
2. Equipment	$ 50,000	
Bank loan		$ 50,000
3. Inventories	$ 60,000	
Cash		$ 30,000
Trade and other payables		30,000
4. Advertising	$ 5,000	
Cash		$ 5,000
5. Trade receivables	$ 20,000	
Revenue		$ 20,000
6. Salaries	$ 15,000	
Cash		$ 15,000
7. Bank loan	$ 10,000	
Cash		$ 10,000
8. Trade and other payables	$ 5,000	
Cash		$ 5,000
9. Trade and other payables	$ 13,000	
Cash		$ 13,000
10. Salaries	$ 3,000	
Cash		$ 3,000

2. The ledgers

Transaction 1

Cash	
$100,000	

Equity	
	$100,000

Transaction 2

Equipment	
$50,000	

Bank loan	
	$50,000

Transaction 3

Inventories	
$60,000	

Cash	
$100,000	$30,000

Trade and other payables	
	$30,000

Transaction 4

Advertising	
$5,000	

Cash	
$10,000	$30,000 5,000

Transaction 5

Trade receivables	
$20,000	

Revenue	
	$20,000

Transaction 6

Salaries	
$15,000	

Cash	
$100,000	$30,000 5,000 15,000

Transaction 7

Bank loan	
$10,000	$50,000

Cash	
$100,000	$30,000
	5,000
	15,000
	10,000

Transaction 8

Trade and other payables	
$5,000	$30,000

Cash	
$100,000	$30,000
	5,000
	15,000
	10,000
	5,000

Transaction 9

Trade and other payables	
$ 5,000	$30,000
13,000	

Cash	
$100,000	$30,000
	5,000
	15,000
	10,000
	5,000
	13,000

Transaction 10

Salaries	
$15,000	
3,000	

Cash	
$100,000	$30,000
	5,000
	15,000
	10,000
	5,000
	13,000
	3,000

The Bead Shop
Trial Balance
(in $)

Cash	19,000	
Trade receivables	20,000	
Trade and other payables		12,000
Bank loan		40,000
Inventories	60,000	
Equipment	50,000	
Equity		100,000
Revenue		20,000
Advertising	5,000	
Salaries	8,000	
Total	172,000	172,000

EXERCISE 2: PREPARING THE STATEMENT OF INCOME

Question

Prepare Cougar Inc.'s statement of income for the year ended December 31, 2012.

Cougar Inc.
Statement of Income
For the year ended December 31, 2012
(in $)

Gross revenue		520,000
Sales discounts		(20,000)
Net revenue		500,000
Cost of sales		(300,000)
Gross profit		200,000
Interest income		6,000
Distribution costs		
Sales salaries	(40,000)	
Advertising	(10,000)	
Promotional expenses	(2,000)	
Travel expenses	(3,000)	
Total distribution costs		(55,000)
Administrative expenses		
Office salaries	(30,000)	
Lease (administration)	(3,000)	
Depreciation (administration)	(2,000)	
Rental charges	(5,000)	
Total administrative expenses		(40,000)
Finance costs		(3,000)
Total		(92,000)
Profit before taxes		108,000
Income tax expense		(35,000)
Profit for the year		73,000

EXERCISE 3: DEPRECIATION AND CAPITAL COST ALLOWANCE

Question

For the first five years of operation, calculate the amount of depreciation and capital cost allowance for the non-current assets.

Buildings

Years	Beginning balance	Depreciation @ 7%	Ending balance	Beginning balance	CCA @ 5%	Ending balance
1	$700,000	$49,000	$651,000	$700,000	$17,500	$682,500
2	651,000	49,000	602,000	682,500	34,125	648,375
3	602,000	49,000	553,000	648,375	32,419	615,956
4	553,000	49,000	504,000	615,956	30,798	585,158
5	504,000	49,000	455,000	585,158	29,258	555,900

Equipment

Years	Beginning balance	Depreciation @ 25%	Ending balance	Beginning balance	CCA @ 20%	Ending balance
1	$350,000	$87,500	$262,500	$350,000	$35,000	$315,000
2	262,500	87,500	175,000	315,000	63,000	252,000
3	175,000	87,500	87,500	252,000	50,400	201,600
4	87,500	87,500	----	201,600	40,320	161,280
5	----	----	----	161,280	32,256	129,024

Machinery

Years	Beginning balance	Depreciation @ 30%	Ending balance	Beginning balance	CCA @ 15%	Ending balance
1	$170,000	$51,000	$119,000	$ 170,000	$12,750	$157,250
2	119,000	51,000	68,000	157,250	23,588	133,662
3	68,000	51,000	17,000	133,662	20,049	113,613
4	17,000	17,000	----	113,613	17,042	96,571
5	----	----	----	96,571	14,486	82,085

EXERCISE 4: FUTURE INCOME TAXES PAYABLE

Questions

1. Calculate the company's future income taxes payable during the first five years.

Years	CCA @ 30%	Internal depreciation (15%)	Difference between CCA and depreciation	Difference in annual future taxes payable (tax rate 50%)	Cumulative difference in future taxes payable
1	$15,000	$15,000	–	–	–
2	25,500	$15,000	$10,500	$5,250	$5,250
3	17,850	$15,000	2,850	1,425	6,675
4	12,495	$15,000	- 2,505	- 1,253	5,422
5	8,767	$15,000	- 6,253	- 3,127	2,295

2. Prepare the statement of income by using year two of the CCA and depreciation rates. Assume the same operating results as the current year.

	Accountants' Worksheet	Statement of Income	P & L Statement
Revenue	$500,000	$500,000	$500,000
Cost of sales	(300,000)	(300,000)	(300,000)
Gross profit	200,000	200,000	200,000
Operating expenses	(100,000)	(100,000)	(100,000)
CCA/depreciation	(25,500)	(15,000)	(15,000)
Total	(125,500)	(115,000)	(115,000)
Profit before taxes	74,500	85,000	85,000
Taxes - Current (50%)	(37,250)	(37,250)	(42,500)
- Future	(5,250)	(5,250)	---
	(42,500)	(42,500)	(42,500)
Profit for the year	$ 32,000	$ 42,500	$ 42,500

EXERCISE 5: PREPARING THE STATEMENT OF FINANCIAL POSITION

Question

Prepare Cougar Inc.'s statement of financial position as at December 31, 2012.

Cougar Inc.
Statement of Financial Position
As at December 31, 2012
(in $)

Assets		
Non-current assets (at cost)	300,000	
Accumulated depreciation	(100,000)	
Non-current assets (net)		200,000
Intangible assets		20,000
Current assets		
Inventories	90,000	
Trade receivables	60,000	
Prepaid expenses	10,000	
Cash and cash equivalents	25,000	
Total current assets		185,000
Total assets		405,000
Equity and liabilities		
Owners' equity		
Share capital	100,000	
Retained earnings	80,000	
Total equity		180,000
Non-current liabilities		
Mortgage	130,000	
Long-term borrowings	25,000	
Future income taxes payable	5,000	
Total non-current liabilities		160,000
Current liabilities		
Trade and other payables	40,000	
Short-term borrowings	10,000	
Accrued expenses	10,000	
Current income taxes payable	5,000	
Total current liabilities		65,000
Total liabilities		225,000
Total equity and liabilities		405,000

EXERCISE 6: PREPARING FINANCIAL STATEMENTS

Questions

1. Prepare the following financial statements:
   a. Statement of income

Zimmerman Electronics Inc.
Statement of Income
For the year ended December 31, 2012
(in $)

Gross revenue		650,000
Sales returns		(50,000)
Net revenue		600,000
Cost of sales		(300,000)
Gross profit		300,000
Interest income		15,000
Distribution costs		
Sales salaries	(100,000)	
Advertising	(50,000)	
Total distribution costs		(150,000)
Administrative expenses		
Office salaries	(70,000)	
Lease	(20,000)	
Insurance	(10,000)	
Depreciation	(20,000)	
Total administrative expenses		(120,000)
Finance costs		(10,000)
Total		(265,000)
Profit before taxes		35,000
Income tax expense		(10,000)
Profit for the year		25,000

b. Retained earnings (section of the statement of changes in equity)

Zimmerman Electronics Inc.
Statement of Changes in Equity
As at December 31, 2012
(in $)

Retained earnings: December 31, 2011		40,000
Profit for the year	25,000	
Dividends	(10,000)	15,000
Retained earnings: December 31, 2012		55,000

c. Statement of financial position

Zimmerman Electronics Inc.
Statement of Financial Position
As at December 31, 2012
(in $)

Non-current assets		Equity	
Land	25,000	Share capital	15,000
Buildings (net)	100,000	Retained earnings	55,000
		Total equity	70,000
Total non-current assets	125,000		
		Mortgage	80,000
Current assets		Current liabilities	
Inventories	20,000	Trade and other payables	12,000
Trade receivables	15,000	Notes payable	10,000
Prepaid insurance	2,000		
Marketable securities	5,000	Total current liabilities	22,000
Cash and cash equivalents	5,000		
Total current assets	47,000	Total liabilities	102,000
Total assets	172,000	Total equity and liabilities	172,000

2. Calculate the company's cash flow for the year.

Profit for the year	$25,000
Depreciation	20,000
Cash flow	$45,000

EXERCISE 7: PREPARING FINANCIAL STATEMENTS

Errata: On page 80, 'Increase in property revaluation' should read 'Decrease in property revaluation.'

The figures in italics denote the numbers that need to be plugged in (either by addition or subtraction, or a figure drawn from another financial statement) in order to complete the financial statements.

Questions

Prepare the following four financial statements for Linden International Inc. for 2012:

1. Statement of income

Linden International Inc.
Statement of Income
For the year ended December 31, 2012
(in $)

Revenue		*11,000,000*
Cost of sales		(7,500,000)
Gross profit		3,500,000
Other income		40,000
Distribution costs	(900,000)	
Administrative expenses	(800,000)	*(1,700,000)*
Finance costs		(90,000)
Total		*(1,750,000)*
Profit before taxes		1,750,000
Income tax expense		(600,000)
Profit for the year		*1,150,000*

2. Statement of comprehensive income

Linden International Inc.
Statement of Comprehensive Income
For the year ended December 31, 2012
(in $)

Profit for the year	*1,150,000*
Other comprehensive income/(loss)	
Change in currency translation	40,000
Change in property revaluation	(35,000)
Total other comprehensive income/(loss) for the year	*5,000*
Total comprehensive income	*1,155,000*

3. Statement of changes in equity

Linden International Inc.
Statement of Changes in Equity
For the year ended December 31, 2012
(in $)

Share capital		
Balance at beginning of year		*2,500,000*
Common shares issued		895,000
Balance at end of year		3,395,000
Contributed surplus		
Balance at beginning of year		60,000
Stock-option compensation		40,000
Balance at end of year		*100,000*
Retained earnings		
Balance at beginning of year		4,000,000
Profit for the year	*1,150,000*	
Dividends paid	150,000	1,000,000
Balance at end of the year		5,000,000
Accumulated Other Comprehensive Income/(Loss)		
Balance at beginning of period		---
Other comprehensive income/(loss)		*5,000*
Balance at end of year		*5,000*
Total equity		*8,500,000*

4. Statement of financial position

Linden International Inc.
Statement of Financial Position
As at December 31, 2012
(in $)

Assets		
Non-current assets	*10,000,000*	
Current assets	6,500,000	
Total assets		16,500,000
Equity and liabilities		
Equity		
Share capital	*3,395,000*	
Contributed surplus	*100,000*	
Retained earnings	*5,000,000*	
Other comprehensive income	*5,000*	
Total equity		*8,500,000*
Liabilities		
Non-current liabilities	5,000,000	
Current liabilities	*3,000,000*	
Total liabilities		8,000,000
Total equity and liabilities		*16,500,000*

EXERCISE 8: PREPARING FINANCIAL STATEMENTS FOR AN NFP ORGANIZATION

The italic figures denote the numbers that need to be plugged in (either by addition or subtraction, or a figure drawn from another financial statement) to complete the financial statements.

Questions

Prepare the following two financial statements for Housing Association Inc. for 2012.

1. Statement of operations

Housing Association Inc.
Statement of Operations
For the year ended December 31, 2012
(in $)

Revenues		
Direct public support	7,500,000	
Program service revenue	21,000,000	
Government grants	1,000,000	
Total		*29,500,000*
Expenses		
Services (salaries, etc.)	(21,000,000)	
Depreciation	(4,000,000)	
Finance costs	(2,000,000)	
Total		*(27,000,000)*
Excess of revenues over expenses		*2,500,000*

2. Statement of financial position

Housing Association Inc.
Statement of Financial Position
As at December 31, 2012
(in $)

Assets		
Non-current assets	32,000,000	
Current assets	14,500,000	
Total assets		*46,500,000*
Net assets and liabilities		
Net assets		
Net assets invested in capital assets	21,400,000	
Net assets restricted for endowment	1,600,000	
Total net assets		*23,000,000*
Liabilities		
Long-term borrowings		18,000,000
Current liabilities		
Trade and other payables	3,000,000	
Current mortgage payable	2,500,000	
Total current liabilities		*5,500,000*
Total liabilities		*23,500,000*
Total net assets and liabilities		*46,500,000*