

# THE ACCOUNTING EQUATION

A	=	L	+	OE
ASSETS	=	LIABILITIES	+	OWNER'S EQUITY
\$100 000		\$30 000		\$70 000

- Assets are the economic resources required to establish any business.
- Liabilities represent the debts of the business (claims of the creditors) *borrowed*
- Owner's equity is the claim of the owner against the assets *invested*
- Liabilities always come before Owner's equity on the right side of the equation; in Canadian courts the claims of creditors are considered before those of the owner(s)
- If you know the value of two elements of the equation you can figure out the value of the third:

## Assets (Economic Resources)

- land
- building
- cash
- equipment
- supplies
- vehicle
- accounts receivable

## Liabilities (Claims of Creditors)

- Bank Loan
- Mortgage Payable
- Accounts Payable

## Owner's Equity (Claims of Owner(s))

- Personal Investment (Capital)

## **SOME TERMS TO KNOW**

(relating to the Accounting Equation)

**Cash:** currency, cheques, money orders, and bank deposits

Asset

**Bank Loan Payable:** the claim of a bank against the assets of a borrowing business (Liability)

**Accounts Payable:** amounts owing to creditors (other than banks) for the purchase of goods or services (Liability)

**Mortgage Payable:** a long-term debt wherein the collateral consist of the property bought (Liability)

## 2.1 ► Financial Position

One of the most important uses of accounting data is to show the financial position of a person, a business, or other organization. The **financial position** of a business is the status of the business based on its assets, liabilities, and owner's equity. In fact, the concept of financial position is basic to the whole system of accounting.

The concept of financial position is simple and straightforward. If you wanted to determine your own financial position, how would you go about it?

You would likely decide that the following three steps were necessary:

- Step 1** List and total the things that you own that have dollar values. These are called assets. **Economic Resources**
- Step 2** List and total your debts. These are called liabilities. **Claims of Creditors**
- Step 3** Calculate the difference between total assets and total liabilities. This difference is called **equity**. Other terms for equity you might hear are capital, owner's equity, or net worth. **Claim of Owner**

$$E = A - L$$

*Example*

Let us follow the three steps given above to work out the financial position of Chris Turner, a student, on September 15, 20–.

**Step 1** List and total the things of value that Chris owns. These assets might be as follows:

Cash	\$ 55.00
Bank Balance	245.00
Canada Savings Bonds	3 000.00
Mountain Bike	620.00
Snowboard	750.00
Computer and Electronics	1 900.00
Mobile Phone	500.00
Clothes	2 700.00
Total Assets	<u>\$ 9 770.00</u>

} Assets  
(Economic Resources)

**Step 2** List and total Chris's debts. These liabilities might be as follows:

Owed to brother Philip	\$220.00
Owed to Dad	300.00
Mobile Phone Bill	400.00
Total Liabilities	<u>\$920.00</u>

} Liabilities  
(Claims of Creditors)

**Step 3** Calculate the difference between total assets and total liabilities. The calculation is as follows:

Total Assets	\$9 770.00
Total Liabilities	– 920.00
Difference	<u>\$8 850.00</u>

Equity / Capital / Net worth

This difference of \$8850.00 is the amount that Chris is worth. It is known as his equity, his capital, or his net worth.

The analysis just completed shows that three steps are needed to work out a person's financial position. These same three steps are needed to work out the financial position of a business or other organization.

## Homework

#1-6 on page 19

#1-6 on page 20

The Accounting Equation:

$$\text{Assets} = \text{Liabilities} + \text{Owners Equity}$$

$$A = L + OE$$



Net worth

$$OE = A - L$$

## CHAPTER 2

## The Balance Sheet

## SECTION 2.1 REVIEW QUESTIONS (page 19)

1. *To calculate a person's financial position, list and total the assets, list and total the liabilities, and then subtract the total liabilities from the total assets.*
2. *An asset is something you own that has a dollar value.*
3. *A liability is a debt or money owed.*
4. *Owner's equity is the difference between a person's total assets and total liabilities.*
5. *Another term that means the same as equity is capital or net worth.*
6. *Two forms of the fundamental accounting equation are  $A - L = OE$  and  $A = L + OE$ , where  $A$  represents assets,  $L$  represents liabilities, and  $OE$  represents owner's equity.*

## SECTION 2.1 EXERCISES (page 20)

## Exercise 1, p. 20

office furniture	<i>asset</i>	an amount loaned to R. Jonas	<i>asset</i>
land	<i>asset</i>	automobile	<i>asset</i>
bank loan	<i>liability</i>	mortgage payable	<i>liability</i>
house and lot	<i>asset</i>	a bank deposit	<i>asset</i>
an unpaid heating bill	<i>liability</i>		

## Exercise 2, p. 20

$$A - L = OE$$

$$\$150\,000 - \$65\,000 = \$85\,000$$

*Karen Lipka's equity is \$85 000.*

## Exercise 3, p. 20

$$A - L = OE$$

$$\$37\,486.49 - \$11\,547.80 = \$25\,938.69$$

*The owner's equity of the business is \$25 938.69.*

**SECTION 2.1 EXERCISES** (continued)**Exercise 5, p. 20**

## Assets

<i>Bank balance</i>	\$	3	6	5	0	–
<i>Home</i>		492	0	0	0	–
<i>Furniture and household equipment</i>		55	0	0	0	–
<i>Summer property</i>		225	0	0	0	–
		<b>\$775</b>	<b>6</b>	<b>5</b>	<b>0</b>	<b>–</b>

## Liabilities

<i>Mortgage on home</i>	\$162	3	6	0	–
<i>Bank loan on summer property</i>	145	0	0	0	–
<i>Unpaid bills</i>	4	2	0	0	–
<i>Amount owed to M. Dupuis</i>	50	0	0	0	–
	<b>\$361</b>	<b>5</b>	<b>6</b>	<b>0</b>	<b>–</b>

## Equity

$$\$775\ 650 - \$361\ 560 = \$414\ 090$$

*Claude Pineau's equity is \$414 090.*

**Exercise 6, p. 20**

## A. Assets

<i>Bank balance</i>	\$	8	5	6	25
<i>House and lot</i>	185	0	0	0	–
<i>Cash on hand</i>			8	5	35
<i>Miscellaneous equipment</i>	1	8	5	0	–
<i>Household furniture and furnishings</i>	4	8	0	0	–
<i>Amount loaned to Phil Silva</i>	2	0	0	0	–
	<b>\$194</b>	<b>5</b>	<b>9</b>	<b>1</b>	<b>60</b>

## B. Liabilities

<i>Bank loan</i>	\$	5	0	0	0	–
<i>Amount owed to Imperial Oil</i>		1	3	5	60	
<i>Amount owed to Weston Hydro</i>			8	5	50	
<i>Mortgage on house and lot</i>	90	0	0	0	–	
	<b>\$95</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>10</b>	

## The Balance Sheet

Owner's Equity Capital Net worth

The formal way of presenting financial position is by means of a balance sheet. A **balance sheet** is a statement showing the financial position of a person, business, or other organization. Figure 2.1 contains the balance sheet that shows the financial position of Chris Turner whom you met on page 18.

Assets = Liabilities + Owner's Equity

Chris Turner									
Balance Sheet									
September 15, 20--									
Assets					Liabilities				
Cash	\$	5	5	00	Owed to brother Philip	\$	2	2	00
Bank Balance		2	4	00	Owed to Dad		3	0	00
Canada Savings Bonds		3	0	00	Mobile Phone Bill		4	0	00
Mountain Bike		6	2	00	Total Liabilities	\$	9	2	00
Snowboard		7	5	00					
Computer and Electronics		1	9	00	Owner's Equity				
Mobile Phone		5	0	00	Chris Turner, Capital		8	8	00
Clothes		2	7	00					
Total Assets	\$	9	7	00	Total Liabilities and Equity	\$	9	7	00

**Figure 2.1**  
A personal balance sheet

Always have to be equal



Formats of balance sheets vary. The slight differences are due in part to the accounting standards that govern private businesses and public companies. You will learn more about these standards in Section 2.4.

Although you will work with balance sheets that have small differences in appearance, remember that they all share a common purpose—that is, to show financial position. The balance sheet in Figure 2.2 shows the financial position for a small business.

Easy Rent-Alls														
Balance Sheet														
September 30, 20–														
<u>Assets</u>					<u>Liabilities</u>									
Cash	\$	6	7	5	0	20	Accounts Payable							
Accounts Receivable							– Arrow Supply	\$	3	9	5	0	40	
– W. Boa		2	2	3	1	50	– Best Repairs		6	2	5	0	00	
– T. Burns		4	3	5	0	00	Bank Loan		35	0	0	0	00	
Supplies		2	9	6	5	10	Mortgage Payable		95	2	0	0	00	
Land		148	0	0	0	00	Total Liabilities	\$	140	4	0	0	40	
Buildings		134	0	0	0	00								
Rental Equipment		75	3	6	4	70	<u>Owner's Equity</u>							
							J. Salas, Capital		233	2	6	1	10	
Total Assets	\$	373	6	6	1	50	Total Liabilities and Equity	\$	373	6	6	1	50	

**Figure 2.2**

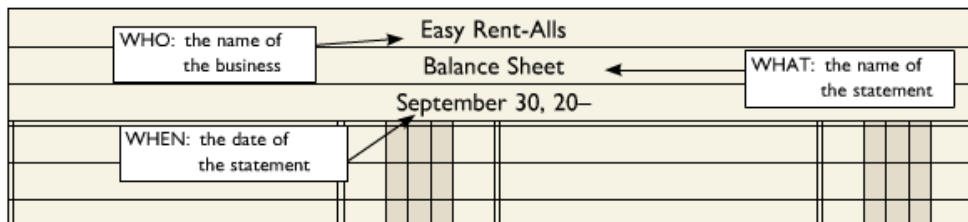
A balance sheet of a small business

### Preparing a Balance Sheet

The steps in preparing a simple balance sheet are shown in the following illustrations. The balance sheet of Easy Rent-Alls is used in the example.


**Step 1** Write in the statement heading on columnar paper as shown in Figure 2.3 below. The heading must indicate the name of the business, the name of the statement, and the date of the statement.

- Who
- What
- When



**Figure 2.3**  
The heading on a balance sheet

**Step 2** Write in the subheading “Assets” at the top of the left-side column. Underline the sub-heading or make it stand out by using a different writing style or colour. Then write in the individual assets on the left side as shown in Figure 2.4 below.

Easy Rent-Alls												
Balance Sheet												
September 30, 20--												
<u>Assets</u>												
Cash	6	7	5	0	20							
Accounts Receivable												
– W. Boa	2	2	3	1	50							
– T. Burns	4	3	5	0	00							
Supplies	2	9	6	5	10							
Land	1	48	0	0	00							
Buildings	1	34	0	0	00							
Rental Equipment	75	3	6	4	70							
 Do not enter total assets figure at this time.												

**Figure 2.4**  
The assets listed on a balance sheet

Small businesses generally list their assets in the order of their liquidity. Cash is listed first. Accounts receivable are listed next because they are usually collected within 30 days. (The balance sheets in the first part of this text show the names of customers and list them in alphabetical order.) Supplies and long-lasting assets, such as delivery trucks, equipment, and buildings, are listed later because normally they are not converted into cash.

*Liquidity order*

*A/R listed in alphabetical order*

order of retiring debts

**Step 3** Write in the subheading “Liabilities” at the top of the right-side column. Format the subheading the same way you formatted “Assets.” Then write in the liabilities on the right side as shown in Figure 2.5. The liabilities are listed in the order in which they will be paid. Suppliers’ names are usually placed in alphabetical order. (A/P)

Draw a line below the last liability amount to indicate that you are adding up the figures above the line. Then write in “Total Liabilities” and the total.

Liabilities are listed in the order in which they must be paid.

\* this text and in business, you will see several balance sheets showing Bank Loan before Accounts Payable. This is because the loan may be repayable on demand, which gives the bank the right to call in the loan at any time. Bank management will occasionally use this right to demand repayment if they think the funds they lent are at significant risk.

Easy Rent-Alls										
Balance Sheet										
					Subheading					
September 30, 20--										
<u>Assets</u>					<u>Liabilities</u>					
Cash	6	7	5	0	20	Accounts Payable				
Accounts Receivable						- Arrow Supply	3	9	5	0
- W. Boa	2	2	3	1	50	- Best Repairs	6	2	5	0
- T. Burns	4	3	5	0	00	Bank Loan	35	0	0	0
Supplies	2	9	6	5	10	Mortgage Payable	95	2	0	0
Land	148	0	0	0	00	Total Liabilities	140	4	0	0
Buildings	134	0	0	0	00					
Rental Equipment	75	3	6	4	70					

**Figure 2.5**  
The liabilities listed on a balance sheet

↙ Skip a line

**Step 4** Beneath the liabilities, write in the subheading "Owner's Equity" and format it so it looks like the subheadings for "Assets" and "Liabilities." Then write in the owner's name plus the word "Capital" and the equity figure, as shown in Figure 2.6 on the next page. As you know, the equity figure is the difference between the total assets and the total liabilities. You have to know the amount of total assets to calculate equity, but do not write it in until step 5 on the next page.

Easy Rent-Alls										
Balance Sheet										
September 30, 20--										
Assets					Liabilities					
Cash	6	7	5	0	20	Accounts Payable				
Accounts Receivable						- Arrow Supply	3	9	5	0
- W. Boa	2	2	3	1	50	- Best Repairs	6	2	5	0
- T. Burns	4	3	5	0	00	Bank Loan	35	0	0	0
Supplies	2	9	6	5	10	Mortgage Payable	95	2	0	0
Land	148	0	0	0	00	Total Liabilities	140	4	0	0
Buildings	134	0	0	0	00					
Rental Equipment	75	3	6	4	70	Owner's Equity				
						J. Salas, Capital	233	2	6	1

Claims of creditors (borrowed)

the owner

Claim of owner (investment)

**Figure 2.6**  
The owner's equity recorded on a balance sheet

on same line  
↑

**Step 5** Complete the balance sheet by writing in the final totals as shown in Figure 2.7. These totals are written on the first fully open line.

On this line, write in “Total Assets” on the left side and “Total Liabilities and Equity” on the right side. Write in the totals. The two totals must be on the same line and must agree. Place a single ruled line above and a double ruled line below each of the two totals.

**Step 6** To help you develop the habit of correctly using dollar signs, this text shows them on most balance sheets. In Figure 2.7, notice a dollar sign is placed with the first amount in every column. A dollar sign is also used beneath each single ruled line in each column.



For an online demonstration of the steps to follow to create a balance sheet, visit the *Accounting 1* website.

Easy Rent-Alls													
Balance Sheet													
September 30, 20--													
<u>Assets</u>					<u>Liabilities</u>								
Cash	\$	6	7	5	0	20	Accounts Payable						
Accounts Receivable							– Arrow Supply	\$	3	9	5	0	40
– W. Boa		2	2	3	1	50	– Best Repairs		6	2	5	0	00
– T. Burns		4	3	5	0	00	Bank Loan		35	0	0	0	00
Supplies		2	9	6	5	10	Mortgage Payable		95	2	0	0	00
Land		148	0	0	0	00	Total Liabilities		<u>\$140</u>	<u>4</u>	<u>0</u>	<u>0</u>	<u>40</u>
Buildings		134	0	0	0	00							
Rental Equipment		75	3	6	4	70	<u>Owner's Equity</u>						
							J. Salas, Capital		233	2	6	1	10
Total Assets		<u>\$373</u>	<u>6</u>	<u>6</u>	<u>1</u>	<u>50</u>	Total Liabilities and Equity		<u>\$373</u>	<u>6</u>	<u>6</u>	<u>1</u>	<u>50</u>

**Figure 2.7**

The completed balance sheet for a business with dollar signs included

## Important Features of the Balance Sheet

Examine the two balance sheets (Figures 2.1 and 2.2) carefully. In particular, observe the following:

1. The balance sheet is set up in the form of the fundamental accounting equation

$$A = L + OE$$

The assets appear on the left side, and the liabilities and the owner's equity appear on the right side.

2. A three-line heading is used. The heading tells
  - WHO?—the name of the individual, business, or other organization
  - WHAT?—the name of the financial statement (in this case, the balance sheet)
  - WHEN?—the date on which the financial position is determined

- \* 3. The assets are generally listed in the order of their *liquidity*. **Liquidity** means the order in which the assets could be most quickly converted into cash. Accordingly, Cash is listed first. Accounts Receivable are amounts that will be paid to the business by customers in a month or two. They appear on the balance sheet soon after Cash. Long-lasting assets, such as equipment and buildings, are listed later because normally they are not converted into cash but are used in the operation of the business.

Liquidity  
Order

- \* 4. The liabilities are generally listed in the order in which they are normally paid. *The order of retiring debts*

5. The financial details of any item are fully disclosed on a balance sheet. For example, on the balance sheet for Easy Rent-Alls, Land and Buildings are listed in the Assets section at their respective values of \$148 000 and \$134 000. The amount that is owed against the property, the Mortgage Payable of \$95 200, is listed in the Liabilities section. This is a more informative presentation than if, for example, Land and Buildings had just been shown as a total of \$186 800 (\$148 000 + \$134 000 - \$95 200).

6. The two final totals, one on each side of the balance sheet, are recorded on the same line and underlined with a double line.

## Homework

Page 28 Section 2.2

Review # 1-17

Exercise 1

Balance Sheet:

- ① Heading
- ② Assets
- ③ Liabilities
- ④ Owner's Equity
- ⑤ Totals
- ⑥ Dollar Signs



**SECTION 2.2 REVIEW QUESTIONS** (page 28)

1. *A balance sheet is a statement showing the financial position of a person, business, or other organization.*
2. *The name of the business appears in the first line of the heading of the balance sheet.*
3. *The assets are listed on the left side of the balance sheet. The liabilities are listed on the right side of the balance sheet.*
4. *The full cost of the automobile is listed as an asset, and the amount owed on the automobile is listed as a liability.*
5. *Dollar signs are placed with the first amount in every column and beneath each single ruled line on a balance sheet.*
6. *A creditor appears under the liabilities on the right-hand side of the balance sheet.*
7. *A single ruled line drawn beneath a column of figures means that the column is to be totalled.*
8. *An accountant's work must be neat because the financial information prepared by an accountant must not be misinterpreted and therefore must be perfectly legible.*
9. *A double ruled line is drawn beneath a total in a column of figures to indicate a final total.*
10. *A short form or abbreviation may be used on financial statements when it is part of a company's formal name.*
11. *The most liquid asset is cash. Liquidity is based on how quickly and easily an asset can be converted to cash, so something that is already cash has the most liquidity.*
12. *Liabilities are listed on the balance sheet in the order in which they will be paid.*
13. *Assets are generally listed on the balance sheet in the order of their liquidity.*
14. *Accounts receivable are the debts owed to a business by its customers.*
15. *Accounts payable are the debts owed by a business to its suppliers.*
16. *Any supplier to whom the business owes money is called a creditor.*
17. *Any company or person who owes money to the business is called a debtor.*

**SECTION 2.2 EXERCISES** (page 28)

**Exercise 1, p. 28**

A.

*THE KRAMER COMPANY*

*BALANCE SHEET*

*SEPTEMBER 30, 20-*

<i>Assets</i>					<i>Liabilities</i>								
<i>Cash</i>	\$	1	6	3	6	-	<i>Accounts Payable</i>						
<i>Accounts Receivable</i>							<i>—Able Supply Company</i>	\$	4	7	4	0	-
<i>—J. Crothers</i>		1	1	0	0	-	<i>—C.P. Gregg</i>		3	0	0	0	-
<i>—R. Zack</i>			3	7	0	-	<i>Bank Loan</i>		10	0	0	0	-
<i>Supplies</i>		1	2	0	0	-	<i>Total Liabilities</i>	\$	17	7	4	0	-
<i>Furniture and Equipment</i>		14	7	0	0	-							
<i>Delivery Equipment</i>		20	1	0	0	-	<i>Owner's Equity</i>						
							<i>Kate Kramer, Capital</i>		21	3	6	6	-
<i>Total Assets</i>	\$	39	1	0	6	-	<i>Total Liabilities and Equity</i>	\$	39	1	0	6	-

B. A retailing business buys goods and resells them at a higher price. Merchandise Inventory is the cost of the goods that will be resold. If sales are brisk, Merchandise Inventory is turned into cash quickly and is therefore quite liquid. So Merchandise Inventory should probably be listed right after Cash and Accounts Receivable.