4.1 ▶ Ledger Accounts

In this chapter, you will be learning the system used to maintain an up-to-date financial position. For this purpose, accountants long ago developed the account and the ledger.

An **account** is a record that documents each change to items in the accounting equation. There is one account for each asset, each liability, and each type of equity. (Currently, you know only one classification of equity, that is, capital.) All the accounts together are called the ledger. A **ledger** is a group or file of accounts.

Accounts can be prepared in different ways. They can be designed on cards to form a card ledger. They can be prepared on paper to form a paper ledger, or they can be created electronically in a software program. While all these methods may still be used, computer software accounts and ledgers now dominate the business world. The ledger illustrated in Figure 4.1 was created with an accounting software program called Sage Simply Accounting. This ledger contains 10 accounts: six assets, three liabilities, and one equity.

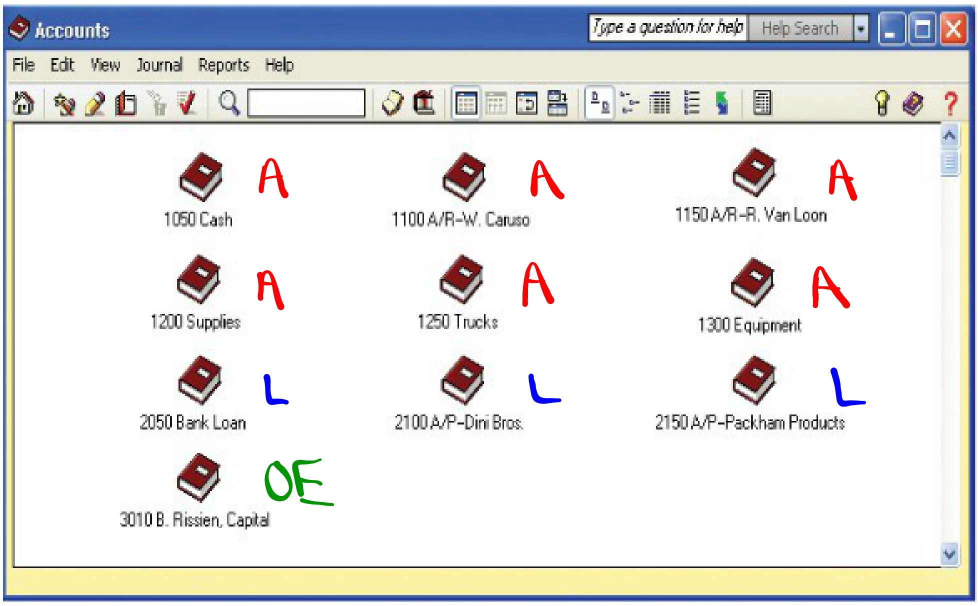


Figure 4.1

A ledger created with Sage Simply Accounting software

The accounts in Figure 4.1 refer to the records of Pacific Trucking, owned by Byron Rissien of Kelowna, British Columbia. The balance sheet of this business is shown in Figure 4.2 below.

PACIFIC TRUCKING
BALANCE SHEET
JUNE 30, 20–

Assets		*Liabilities*	
Cash	$ 3 265	Bank Loan	$18 000
A/R – W. Caruso	150	A/P – Dini Bros.	1 516
A/R – R. Van Loon	620	A/P – Packham Products	3 946
Supplies	2 465	Total Liabilities	$23 462
Trucks	55 075		
Equipment	22 174	*Owner's Equity*	
		B. Rissien, Capital	60 287
Total Assets	$83 749	Total Liabilities and Equity	$83 749

Figure 4.2
The balance sheet of Pacific Trucking

The information from this balance sheet is used to set up the separate accounts. The dollar value for each item on the balance sheet gives the beginning value for that item's account.

Using manual methods instead of electronic, we will now examine the ledger for Pacific Trucking. There are 10 accounts, one for each item on the balance sheet. These accounts are Cash; Accounts Receivable–W. Caruso; Accounts Receivable–R. Van Loon; Supplies; Trucks; Equipment; Bank Loan; Accounts Payable–Dini Bros.; Accounts Payable–Packham Products; and B. Rissien, Capital. All these accounts together form the ledger for Pacific Trucking.

Assets = Liabilities + Owner's Equity

Cash		A/R W. Caruso		Bank Loan		B. Rissien, Capital	
3 265		150			18 000		60 287

A/R R. Van Loon		Supplies		A/P Dini Bros.	
620		2 465			1 516

Trucks		Equipment		A/P Packham Products	
55 075		22 174			3 946

Figure 4.3
The simple ledger accounts of Pacific Trucking

Figure 4.3 above shows the information from the balance sheet of Pacific Trucking presented as accounts in a ledger. These accounts are called T-accounts because, as you can see, each one looks like a T. The T-account is a simple type of account, used mainly to help you understand accounting theory. A more formal account for recording business entries will be introduced in Chapter 6.

Since accounts are internal records and not normally shown to outsiders, dollar signs beside the beginning values are unnecessary.

- Asset balances are shown on the left or debit (DR.) side.
- Liability balances are show on the right or credit (CR.) side.
- Owner's Equity balances are shown. like so:

→ Capital and Revenues/Sales are on the right

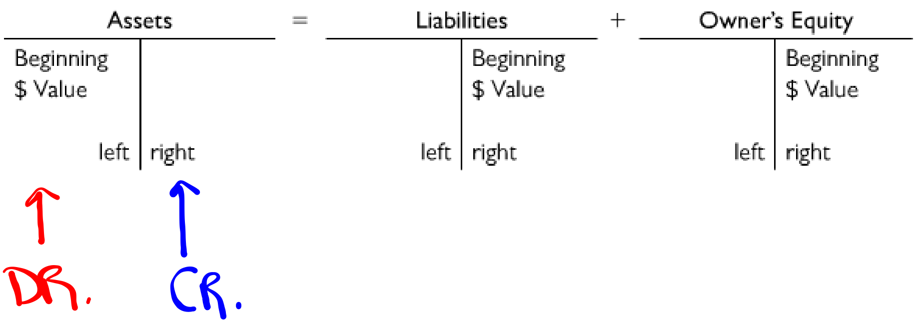
→ Drawings & Expenses are on the left.

Important Features of Ledger Accounts

Using the ledger shown in Figure 4.3 on page 89 as a guide, let us look at important features shared by simple ledger accounts.

1. Each individual balance sheet item is given its own T-account with the name of the item at the top. In Figure 4.3, there are 10 accounts. Learn to call them the Cash account, the R. Van Loon account, the Packham Products account, the Bank Loan account, and so on.
2. The dollar figure for each item is recorded in the account on the first line. This is the beginning value for the account.
3. For any item, the correct side for its beginning value is the side on which the item itself would appear in the accounting equation (A = L + OE). For *assets*, like cash or supplies, beginning values are on the *left* side of the T because assets are on the left side of the equation. For *liabilities* and *equity* items, like bank loan or capital, beginning values are on the *right* side of the T because liabilities and equity are on the right side of the equation.

Each account in Pacific Trucking's ledger follows these three rules, which are summarized in the diagram below.



Homework

Section 4.1 on pages 90 - 92

Review Questions 1-7.

Exercises 1-4.

SECTION 4.1 REVIEW QUESTIONS (page 90)

1. *An account is a record that documents each change to items in the accounting equation.*
2. *A ledger is a group or file of accounts.*
3. *A ledger can be an electronic computer file, loose-leaf pages in a binder, or cards in a tray.*
4. *The accounting records are often referred to as the books because accounting was done in ledger books until recently. Accounting software frequently identifies ledger accounts with a book symbol.*
5. *The beginning amounts for a ledger are usually taken from a balance sheet because a balance sheet is prepared at the start of a business to give a balanced record of the company's assets and liabilities.*
6. *The principle use of T-accounts is to help students understand accounting theory.*
7. *For any item, the correct side for its beginning value is the side on which the item itself would appear in the accounting equation. The beginning dollar amounts for the assets are placed on the left side of their T-accounts. The beginning dollar amounts for the liabilities and the owner's equity are placed on the right side of their T-accounts.*

SECTION 4.1 EXERCISES (page 91)
Exercise 1, p. 91

Account	Debit	Credit
Cash	2 000	
A/R—A. Marks	375	
A/R—C. Prentice	1 150	
Land	130 000	
Building	245 000	
Equipment	27 800	
Truck	14 500	
Bank Loan		20 000
A/P—Gem Lumber		2 500
Mortgage Payable		255 000
T. Stevens, Capital		143 325

Exercise 2, p. 91

Cash	
500	

A/R—P. Auul	
350	

A/R—S. Wouke	
1 250	

Supplies	
3 900	

Furniture and Equipment	
18 320	

Automobile	
21 040	

A/P—A.B. Associates	
	1 200

A/P—Medico Supply	
	2 300

Pauline Inaba, Capital	
	41 860

Exercise 3, p. 92

Assets: 500 + 2100 + 1545 + 500 = 4645

Liabilities: 1350 + 2400 = 3750

Lilly Wall's Capital: 4645 – 3750 = 895

The fundamental accounting equation for Lilly Wall is Assets = Liabilities + Owner's Equity or 4645 = 3750 + 895.

Exercise 4, p. 92

A. *Assets: 1386 + 320 + 480 + 655 + 6809 + 3300 = 12 950*

Liabilities: 1345 + 984 + 6000 = 8329

Marcy Vigiani's Capital: 12 950 – 8329 = 4621

Account	Debit	Credit
Cash	*1 386*	
A/R—J. Goertzen	*320*	
A/R—L. Tyler	*480*	
Supplies	*655*	
Equipment	*6 809*	
Furniture	*3 300*	
A/P—Body-Works Supply		*1 345*
A/P—Live Well Equipment		*984*
Bank Loan		*6 000*
M. Vigiani, Capital		*4 621*

Exercise 4, p. 92 (continued)

B.

MARCI'S MASSAGE THERAPIES

BALANCE SHEET

JUNE 30, 20–

Assets		*Liabilities*	
Cash	*$ 1 386 –*	*A/P—Body-Works Supply*	*$ 1 345 –*
A/R—J. Goertzen	*320 –*	*A/P—Live Well Equipment*	*984 –*
A/R—L. Tyler	*480 –*	*Bank Loan*	*6 000 –*
Supplies	*655 –*	*Total Liabilities*	*$ 8 329 –*
Equipment	*6 809 –*		
Furniture	*3 300 –*	*Owner's Equity*	
		M. Vigiani, Capital	*4 621 –*
Total Assets	*$12 950 –*	*Total Liabilities and Equity*	*$12 950 –*

4.2 ▶ Debit and Credit Theory

So far, you have learned that the idea that there is a "left side" and a "right side" is important in accounting. This is especially true when using ledger accounts. The theory of accounting using ledger accounts is based entirely on the understanding that every account has these two distinct sides.

The two sides of an account are described in the same way by accountants everywhere. **Debit** is the word associated with the left side of an account. **Credit** is the word associated with the right side of an account. In accounting terms, debit means left, credit means right.

Remember that the two new terms apply to every account, as shown below.

Any Account

left side	right side
debit (short form dr or Dr)	credit (short form cr or Cr)

The Rules of Debit and Credit

You are familiar with the simple ledger and the terms debit and credit. You have also discovered which side of the account to use to record the beginning value for each type of account. Now you are ready to learn how changes are recorded in the accounts. There is a simple set of rules for recording changes in accounts. *For each type of account, record increases on its beginning value side and decreases on the other side.* These rules are summarized, using the terms debit and credit, in the chart below.

A = L + OE

*

Type of Accounts	Beginning Value Side	Increases	Decreases
ASSET accounts	DEBIT	DEBIT	CREDIT
LIABILITY and OWNER'S EQUITY accounts	CREDIT	CREDIT	DEBIT

In T-account form, the rules of debit and credit can be simplified even further, using the fundamental accounting equation as shown.

Assets		=	Liabilities		+	Owner's Equity	
Debit	Credit		Debit	Credit		Debit	Credit
+	–		–	+		–	+

TRANSACTION 1 The company purchases $200 worth of supplies from Packham Products, to be paid for later.

Analysis

When learning to analyze a transaction correctly, it is helpful to use a transaction analysis sheet. This sheet, shown below, provides a place to organize your thoughts about the transaction. Proceed according to the following steps:

(A) Account Names	(B) Asset, Liability, or Owner's Equity	(C) Increase (+) or Decrease (−)	(D) Debit or Credit	(E) Amount
Supplies	Asset	+	Dr	200
A/P – Packham Products	Liability	+	Cr	200

This final step completes what is known as the accounting entry for the transaction. An **accounting entry** may be defined as all of the changes in the accounts caused by one business transaction, expressed in terms of debits and credits.

An accountant would express the accounting entry for transaction 1 in the following way: debit Supplies and credit A/P–Packham Products, $200. Notice that the debited account is stated first. The credited account is stated second. After the changes are recorded in the appropriate accounts, the two accounts affected appear as shown below.

Supplies	
2 465	
(1) 200	

A/P Packham Products	
	3 946
	200 (1)

Transaction #1

Notice that the transaction includes both a debit and a credit, and that the totals of the debit and credit amounts are equal. This is the case with every transaction. The accounting equation remains in balance after the transaction is recorded, as shown in the illustration on the next page.

TRANSACTION 2 The company pays $500 to Dini Bros. in partial payment of the amount owed to them.

Analysis

This transaction is recorded on a transaction analysis sheet as follows:

(A) Account Names	(B) Asset, Liability, or Owner's Equity	(C) Increase (+) or Decrease (–)	(D) Debit or Credit	(E) Amount
A/P – Dini Bros.	*Liability*	–	*Dr*	② *500–*
Cash	*Asset*	–	*Cr*	② *500–*

Transaction #2

An accountant would express the accounting entry as follows: debit A/P–Dini Bros. and credit Cash, $500.

After the changes are recorded, the two accounts affected appear as shown below.

Cash	
3 265	500 ②

A/P Dini Bros.	
② 500	1 516

TRANSACTION 3 **The company receives $200 cash from R. Van Loon in partial payment of her debt.**

Analysis

The accounting entry for this transaction is worked out on the transaction analysis sheet as follows:

(A) Account Names	(B) Asset, Liability, or Owner's Equity	(C) Increase (+) or Decrease (−)	(D) Debit or Credit	(E) Amount
Cash	*Asset*	+	*Dr*	③ *200–*
A/R – R. Van Loon	*Asset*	–	*Cr*	③ *200–*

Read the changes as follows: debit Cash and credit A/R–R. Van Loon, $200.

After the changes are recorded, the two accounts affected appear as shown below.

Cash

Debit	Credit
3 265	500 ②
③ 200	

A/R R. Van Loon

Debit	Credit
620	200 ③

TRANSACTION 4 **A delivery service is provided for a customer at a price of $400. The customer pays cash at the time the service is completed.**

Analysis

The accounting entry for this transaction is worked out on the transaction analysis sheet as follows:

(A) Account Names	(B) Asset, Liability, or Owner's Equity	(C) Increase (+) or Decrease (−)	(D) Debit or Credit	(E) Amount
Cash	*Asset*	+	*Dr*	(4) *400–*
B. Rissien, Capital	*Owner's Equity*	+	*Cr*	(4) *400–*

Read the changes as follows: debit Cash and credit B. Rissien, Capital, $400.

After the changes are recorded, the two accounts affected appear as shown below.

Cash

Debit	Credit
3 265	500 (2)
(3) 200	
(4) 400	

B. Rissien, Capital

Debit	Credit
	60 287
	400 (4)

There is an increase in assets. Since the liabilities are unaffected, the owner gets to claim this increase. As a result, the accounting equation remains in balance, as seen below.

TRANSACTION 5 A used truck costing $8000 is purchased from Dini Bros. A cash down payment of $2500 is made at the time of the purchase and the balance is to be paid at a later date.

Analysis

This transaction affects three accounts. The accounting entry for the transaction is worked out on the transaction analysis sheet as follows:

(A) Account Names	(B) Asset, Liability, or Owner's Equity	(C) Increase (+) or Decrease (−)	(D) Debit or Credit	(E) Amount
Trucks	*Asset*	+	*Dr*	⑤ *8 000–*
Cash	*Asset*	–	*Cr*	⑤ *2 500–*
A/P – Dini Bros.	*Liability*	+	*Cr*	⑤ *5 500–*

total credits 8000

Read these changes: debit Trucks, $8000; credit Cash, $2500; credit A/P–Dini Bros., $5500.

After the changes are recorded, the three accounts affected appear as shown below.

Trucks

Debit	Credit
55 075	
⑤ 8 000	

Cash

Debit	Credit
3 265	500 ②
③ 200	2 500 ⑤
④ 400	

A/P Dini Bros.

Debit	Credit
② 500	1 516
	5 500 ⑤

TRANSACTION 6 **A delivery service is completed for R. Van Loon at a price of $350. Van Loon does not pay for the service at the time it is provided, but agrees to pay within 30 days.**

Analysis

The accounting entry for this transaction is worked out on the transaction analysis sheet as follows:

(A) Account Names	(B) Asset, Liability, or Owner's Equity	(C) Increase (+) or Decrease (−)	(D) Debit or Credit	(E) Amount
A/R – R. Van Loon	*Asset*	+	*Dr*	*⑥ 350–*
B. Rissien, Capital	*Owner's Equity*	+	*Cr*	*⑥ 350–*

Read these changes: debit A/R–R. Van Loon and credit B. Rissien, Capital, $350.

After the changes are recorded, the two accounts affected appear as shown below.

A/R. Van Loon

Debit	Credit
620	200 ③
⑥ 350	

B. Rissien, Capital

Debit	Credit
	60 287
	400 ④
	350 ⑥

The business is better off as a result of this transaction. There are more assets for the owner to claim, as demonstrated in the illustration on the next page.

TRANSACTION 7 One of the lifting machines (part of Equipment) breaks down. The company spends $650 cash to have the machine repaired.

A common mistake made by students dealing with this type of transaction is to increase the Equipment account. This action would give the impression that the equipment had somehow increased in value by being repaired. Clearly, this is not the case. To help you to avoid this mistake, here is a clue: the business is worse off financially as a result of this transaction. Equity will therefore decrease.

Analysis

This transaction is worked out on the transaction analysis sheet as follows:

(A) Account Names	(B) Asset, Liability, or Owner's Equity	(C) Increase (+) or Decrease (−)	(D) Debit or Credit	(E) Amount
Cash	*Asset*	–	*Cr*	7 650–
B. Rissien, Capital	*Owner's Equity*	–	*Dr*	7 650–

Read the changes: debit B. Rissien, Capital and credit Cash, $650.

After the changes are recorded, the two accounts affected appear as shown below.

Cash

	3 265	500	2
3	200	2 500	5
4	400	650	7
	215		

B. Rissien, Capital

7	650	60 287	
		400	4
		350	6
		61387	

The business has fewer assets for the owner to claim. Both assets and owner's equity decrease, leaving the accounting equation in balance, as shown below.

Double-Entry System of Accounting

Whenever a transaction occurs, changes must be made in the accounts. For each transaction, all of the account changes together must balance. These are known as the accounting entry for the transaction.

In this chapter so far, there have been seven transactions. They are summarized in Figure 4.4.

The double-entry system using debits and credits is crucial to your understanding of accounting. For a review of this system, visit the *Accounting 1* website.

Transaction	Account Names	Account Classifications A, L, OE	Debit or Credit	Amount
1	Supplies A/P – Packham Products	A L	Dr Cr	$ 200 $ 200
2	A/P – Dini Bros. Cash	L A	Dr Cr	$ 500 $ 500
3	Cash A/R – R. Van Loon	A A	Dr Cr	$ 200 $ 200
4	Cash B. Rissien, Capital	A OE	Dr Cr	$ 400 $ 400
5	Trucks Cash A/P – Dini Bros.	A A L	Dr Cr Cr	$8 000 $2 500 $5 500
6	A/R – R. Van Loon B. Rissien, Capital	A OE	Dr Cr	$ 350 $ 350
7	B. Rissien, Capital Cash	OE A	Dr Cr	$ 650 $ 650

8000

Figure 4.4

Seven accounting entries for Pacific Trucking

As you have noticed, each of the above seven transactions balances within itself. For each transaction, the total of the debit amounts equals the total of the credit amounts. This is basic to the whole accounting process and is true for every possible transaction. If you ever find an accounting entry that does not balance within itself, you can be certain that it is not correct. On the other hand, a balanced entry is not necessarily a correct entry. If the entry balances, that means that it is probably correct. If it does not balance, there is no chance that it is correct.

Now you can understand why the system you have been working with is known as the **double-entry system of accounting**. In the double-entry system of accounting, every transaction is recorded in the accounts in two steps. It is recorded first as a debit (or debits) and second as a credit (or credits), so that the total of the debit entries equals the total of the credit entries. The double-entry system of accounting is in general use throughout the business world.

Homework

Section 4.2 pages 102 - 105

Review Questions 1-12

Exercises 1-4

SECTION 4.2 REVIEW QUESTIONS (page 102)

1. *Debit means the left side of an account and credit means the right side of an account.*
2. *The beginning financial position of a ledger is set up by recording the assets on the left side of their accounts and the liabilities and the capital on the right side of their accounts.*
3. *An increase means a debit in the asset accounts.*
4. *A decrease means a debit in the liability and capital accounts.*
5. *An increase means a credit in the liability and capital accounts.*
6. *A decrease means a credit in the asset accounts.*
7. *A transaction analysis sheet is used to help students learn to work out the accounting entry for a transaction.*
8. *An accounting entry represents all of the changes for a transaction in terms of debits and credits in balanced form.*
9. *Every correct accounting entry must balance.*
10. *An accounting entry that does not balance cannot be correct.*
11. *An accounting entry that does balance is probably correct, but not necessarily.*
12. *The double-entry system of accounting got its name because every transaction is recorded in the accounts in two steps. It is recorded first as a debit (or debits) and second as a credit (or credits), so that the total of the debit entries equals the total of the credit entries.*

Exercise 1, p. 102

Transaction No.	Account Names	Asset, Liability, or Owner's Equity	Increase (+) or Decrease (–)	Debit or Credit	Amount
1	Cash	Asset	+	Dr	300–
	A/R—J. Parker	Asset	–	Cr	300–
2	*Supplies*	*Asset*	+	*Dr*	*200–*
	Cash	*Asset*	–	*Cr*	*200–*
3	*A/P—Little Bros.*	*Liability*	–	*Dr*	*100–*
	Cash	*Asset*	–	*Cr*	*100–*
4	*F. Siska, Capital*	*Owner's Equity*	–	*Dr*	*250–*
	Cash	*Asset*	–	*Cr*	*250–*
5	*Equipment*	*Asset*	+	*Dr*	*500–*
	Cash	*Asset*	–	*Cr*	*125–*
	A/P—Champion Sports	*Liability*	+	*Cr*	*375–*
6	*Cash*	*Asset*	+	*Dr*	*300–*
	F. Siska, Capital	*Owner's Equity*	+	*Cr*	*300–*

Exercise 2, p. 103

Transaction No.	Account Names	Asset, Liability, or Owner's Equity	Increase (+) or Decrease (−)	Debit or Credit	Amount
1	Cash	Asset	+	Dr	450—
	J. Cooks, Capital	Owner's Equity	+	Cr	450—
2	Supplies	Asset	+	Dr	170—
	Cash	Asset	−	Cr	170—
3	A/P—Rossi Co.	Liability	−	Dr	125—
	Cash	Asset	−	Cr	125—
4	Cash	Asset	+	Dr	90—
	A/R—G. Rawl	Asset	−	Cr	90—
5	J. Cooks, Capital	Owner's Equity	−	Dr	500—
	Equipment	Asset	−	Cr	500—
6	Equipment	Asset	+	Dr	790—
	A/P—Bly Co.	Liability	+	Cr	790—
7	Cash	Asset	+	Dr	100—
	A/R—F. Stefryk	Asset	+	Dr	250—
	J. Cooks, Capital	Owner's Equity	+	Cr	350—
8	Cash	Asset	+	Dr	6 000—
	Bank Loan	Liability	+	Cr	6 000—
9	J. Cooks, Capital	Owner's Equity	−	Dr	375—
	Cash	Asset	−	Cr	375—
10	Cash	Asset	+	Dr	40—
	J. Cooks, Capital	Owner's Equity	+	Cr	40—

Exercise 3, p. 103

A., B.

Cash

+	−
6 000	3 000 1
2 600	250 5
4 1 000	750 6
8 375	

A/R—K. Mak

+	−
1 000	600 2

Supplies

+	−
5 000	400 7

Equipment

+	−
10 000	
3 980	

A/P—Heiden Fashions

−	+
1 3 000	3 000

A/P—Parry Supply Co.

−	+
	500
	980 3

Bank Loan

−	+
	9 000
	1000 4

B. Chan, Capital

−	+
5 250	9 500
6 750	375 8
7 400	

C.

	Assets		=	Liabilities		+	Owner's Equity	
	Debit +	Credit −		Debit −	Credit +		Debit −	Credit +
Transaction 1		3 000	=	3 000		+		
Transaction 2	600	600	=			+		
Transaction 3	980		=		980	+		
Transaction 4	1 000		=		1 000	+		
Transaction 5		250	=			+	250	
Transaction 6		750	=			+	750	
Transaction 7		400	=			+	400	
Transaction 8	375		=			+		375

Exercise 4, p. 105

Cash

	1 386	1 000	4
2	320	152	5
3	360		
7	3 000		
8	400		

A/R—J. Goertzen

	320	320	2

A/R—L. Tyler

	420		
6	120		

Supplies

	655		

Equipment

	6 809		
1	498		

Furniture

	3 300	1 300	8

A/P—Body-Works Supply

4	1 000	1 345	

A/P—Live Well Equipment

		984	
		498	1

Bank Loan

		6 000	
		3 000	7

M. Vigiani, Capital

5	152	4 621	
8	900	360	3
		120	6