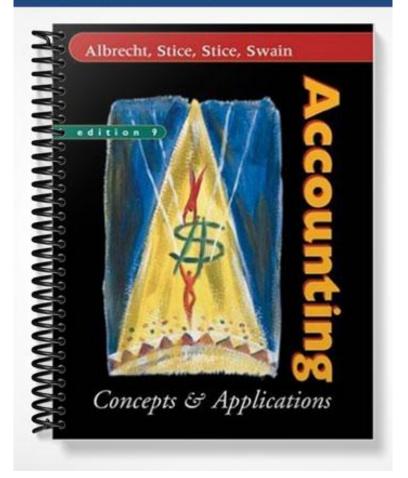
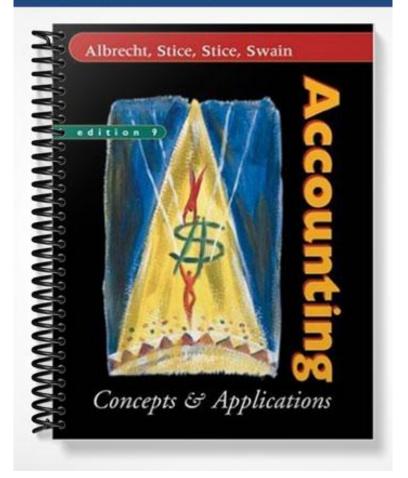
SOLUTIONS MANUAL



SOLUTIONS MANUAL



CHAPTER 3

DISCUSSION QUESTIONS

- 1. The basic objective of the accounting cycle is to transform accounting data into financial statements and other accounting reports. These outputs help individuals make better economic decisions.
- **2.** The first three steps in the accounting cycle include the following:
 - **a.** Analyze transactions—verify the dates, amounts, and authenticity of the transactions and supporting business documents from which accounting entries are made.
 - **b.** Record the effects of transactions record the nature and amounts of business exchanges with journal entries, usually in chronological order.
 - c. Summarize the effects of transactions.
 - (1) *Post journal entries*—classify and group similar transactions into common accounts.
 - (2) Determine account balances and prepare a trial balance—list the balances of all accounts to verify that total debits equal total credits.
- 3. Computer-based accounting systems reduce the amount of manual labor required in recording and summarizing business transactions. Computers are much faster and improve the accuracy of transforming data into summary financial reports. Human judgment is still needed with a computer system to analyze and record transactions, especially those of a nonroutine nature. Computers do routine work very well, but they need to be told what to do.
- 4. Each time accounts are debited, other accounts have to be credited for the same amount. This is a major characteristic of a double-entry accounting system. The total debits must always equal the total credits.
- 5. Asset accounts are increased by debits and decreased by credits. Liability and owners' equity accounts are increased by credits and decreased by debits. Thus, A = L + OE and debits equal credits in a double-entry accounting system.

- 6. Revenues provide resource inflows, and expenses represent resource outflows. The net result of revenues less expenses is income, which is reflected in owners' equity. Revenue accounts are increased by credits and increase owners' equity; expense accounts are increased by debits and reduce owners' equity. Dividends also reduce owners' equity, since they are distributions of earnings to the owners. Therefore, the dividends account is also increased by debits. However, dividends do not enter into the determination of net income.
- 7. The dividends account is similar to expense accounts in that dividends and expenses reduce owners' equity through the retained earnings account. Therefore, they have the same debit (increase) and credit (decrease) relationships. Dividends and expenses are different in that dividends are a distribution of earnings; they do not enter into the determination of net income, and therefore, dividends are not reported on the income statement. Expenses, on the other hand, are subtracted from revenues to determine net income; expenses are reported on the income statement.
- 8. Understanding the mechanics of accounting helps a businessperson understand the shorthand debit/credit language that is often used when talking about a company's accounts. In addition, people who understand the accounting cycle are better able to understand the flow of information through a business.
- **9.** A journal (a book of original entry) provides a chronological record of all transactions of an entity. It shows the dates of the transactions, the amounts involved, and the accounts affected. Usually, an explanation of the transaction is also included.

A ledger is a "book of accounts" that lists each account and all entries made to it. The balance of an account can be found by examining the ledger.

10.	The journal entries of the two parties would	ł
	be as follows:	

Seller: Cash Sales Revenue To record sale of merchandise for cash.	1,500	1,500
Cost of Goods Sold Inventory To record cost of goods sold and to reduce invento	1,000 ory.	1,000
Buyer: Inventory Cash To record purchase of merchandise for cash.	1,500	1,500

Excluding the seller's entries for merchandise cost and inventory reduction, the accounts on the two sets of books are related in that the seller records an increase in cash as the buyer records a decrease in cash. If the sale was a credit sale, the seller would record a receivable, while the buyer would record a payable. Similarly, the seller records a sale and the buyer records a purchase. This relationship of buyer and seller is the essence of exchange transactions, the primary basis for accounting entries.

- **11. a.** Increase asset (Supplies); increase liability (Accounts Payable).
 - b. Decrease asset (Cash); decrease owners' equity (by increasing Wages Expense).
 - c. Increase asset (the difference between cash received and the cost of inventory sold); increase owners' equity (the difference between sales revenue and the cost of goods sold).
 - **d.** Decrease asset (Cash); decrease owners' equity (by increasing Utilities Expense).
 - Increase asset (Building); decrease another asset (Cash); and increase a liability (Mortgage Payable).
 - f. Increase asset (Cash); increase owners' equity (Capital Stock).
 - **g.** Decrease asset (Cash); decrease owners' equity (by increasing Dividends, which reduces Retained Earnings).
 - h. Increase asset (Accounts Receivable with a smaller decrease in the invento-

ry); increase owners' equity (increase in Sales Revenue with a smaller increase in Cost of Goods Sold).

- i. Decrease asset (increase in Cash with a greater decrease in Land); decrease owners' equity (Loss on Sale because proceeds are less than cost).
- 12. A chart of accounts is a list of all accounts, along with assigned account numbers, used by a particular entity in its accounting system. The purpose of a chart of accounts is to numerically classify, or categorize, the accounts for easy reference. In practice, the account numbers are used much more than the account names, especially in an automated system.
- **13.** In a trial balance, if total debits equal total credits, there is some assurance that the recording and posting functions have been performed satisfactorily. Even if the trial balance appears correct, however, there may be errors. A transaction may have been omitted completely, or it may have been recorded incorrectly or posted to the wrong account. These types of errors usually will not be identified by preparing a trial balance.
- 14. A trial balance is an internal document used to summarize all of the account balances (assets, liabilities, owners' equity, revenues, expenses, and dividends) in a company's accounting system. The balance sheet, on the other hand, is a summary list of a company's assets, liabilities, and owners' equity; the balance sheet is frequently provided to interested parties both inside and outside a company.
- 15. Computers have not eliminated the need to analyze transactions. Computer accounting systems can be programmed to handle the great bulk of routine transactions, such as credit sales, collections on account, and so forth. However, as illustrated in the remainder of this text, many accounting journal entries involve the exercise of judgment by the accountant. For example, as explained in Chapter 7, at the end of each year the accountant must estimate the amount of outstanding accounts receivable that will never be collected. A computer can aid this process, but ultimately the decision must be made by a human being.

PRACTICE EXERCISES

PRACTICE 3–1 Impact of a Transaction

a, b, and c.

<u>Account</u>	Increase or Decrease	Amount
Cash	Increase	\$125,000
Loan Payable	Increase	125,000

d.Total assetsIncrease by \$125,000Total liabilitiesIncrease by \$125,000Total owners' equityNo impact

PRACTICE 3–2 Impact of a Transaction

a, b, and c.

<u>Account</u>	Increase or Decrease	<u>Amount</u>
Cash	Decrease	\$45,000
Land	Increase	45,000

d. Total assets Increase by \$45,000, decrease by \$45,000; no net impact Total liabilities No impact Total owners' equity No impact

PRACTICE 3–3 Impact of a Transaction

a, b, and c.

	<u>Account</u>	Increase or Decrease	<u>Amount</u>
	Cash	Decrease	\$30,000
	Loan Payable	Decrease	30,000
d.	Total assets	Decrease by \$30,000	
	Total liabilities	Decrease by \$30,000	
	Total owners' equity	No impact	

PRACTICE 3–4 Impact of a Transaction

a, b, and c.

<u>Account</u>	Increase or Decrease	<u>Amount</u>
Cash	Increase	\$75,000
Capital Stock	Increase	75,000
Total assets Total liabilities	Increase by \$75,000 No impact	

Increase by \$75,000

PRACTICE 3–5 Impact of a Transaction

Total owners' equity

a, b, and c.

<u>Account</u>	Increase or Decrease	Amount
Cash	Decrease	\$ 10,000
Building	Increase	100,000
Mortgage Payable	Increase	90,000

d.	Total assets	Increase by \$90,000
	Total liabilities	Increase by \$90,000
	Total owners' equity	No impact

PRACTICE 3–6 Computing Ending Account Balances

				Loan	Mortgage	Capital
Transaction	Cash	Land	Building	Payable_	Payable	Stock
3–1	+ 125,000			+ 125,000		
3–2	- 45,000	+ 45,000				
3–3	- 30,000			- 30,000		
3–4	+ 75,000					+ 75,000
3–5	<u> </u>		<u>+ 100,000</u>		<u>+ 90,000</u>	
Total	<u>\$ 115,000</u>	<u>\$45,000</u>	<u>\$ 100,000</u>	<u>\$ 95,000</u>	<u>\$90,000</u>	<u>\$75,000</u>

PRACTICE 3–7 Understanding Debits

	<u>Account</u>	DEBIT Increases or Decreases?
1.	Accounts Payable	Decreases
2.	Capital Stock	Decreases
3.	Land	Increases
4.	Inventory	Increases
5.	Loan Payable	Decreases
6.	Mortgage Payable	Decreases
7.	Building	Increases

d.

PRACTICE 3–8 Understanding Credits

	<u>Account</u>	CREDIT Increases or Decreases?
1.	Accounts Receivable	Decreases
2.	Capital Stock	Increases
3.	Equipment	Decreases
4.	Inventory	Decreases
5.	Accounts Payable	Increases
6.	Building	Decreases
7.	Notes Payable	Increases

PRACTICE 3–9 Understanding Debits, Credits, and Retained Earnings

1.	<u>Account</u> Sales Revenue	<u>Debit or Credit</u> Credit	ACCOUNT BALANCE Increased or Decreased? Increased
2.	Retained Earnings	Debit	Decreased
2. 3.	Insurance Expense	Credit	Decreased
-	•		
4.	Dividends	Credit	Decreased
5.	Interest Revenue	Debit	Decreased
6.	Advertising Expense	Debit	Increased
7.	Rent Revenue	Credit	Increased

PRACTICE 3–10 Understanding Retained Earnings

Note: In this solution, the revenue, expense, and dividend account balances are shown as additions to or subtractions from the Retained Earnings account, as appropriate. As shown in Chapter 4, the actual process by which these account balances are reflected in the ending Retained Earnings balance is called the closing process and is done in a summary fashion rather than account by account, as illustrated here.

	Retained	Earnings	
Debit (–)		Credit (+)	
		Beg. Bal.	1,000
Insurance Exp.	1,300	_	
		Sales Revenue	4,000
Advertising Exp.	2,300		
Dividends	450		
		Interest Revenue	200
		End. Bal.	1,150

PRACTICE 3-11	Journal Entries		
	e	125,000	125,000
PRACTICE 3-12	Journal Entries		
		45,000	45,000
PRACTICE 3-13	Journal Entries		
		30,000	30,000
PRACTICE 3-14	Journal Entries		
	K	75,000	75,000
PRACTICE 3-15	Journal Entries		

Building	100,000	
Cash		10,000
Mortgage Payable		90,000

PRACTICE 3–16 Posting

Cash				La	nd
Debi	t (+)	Credit (–)	Debit	(+)	Credit (-)
Beg. bal.	0		Beg. bal.	0	
	125,000			45,000	
		45,000			
		30,000			
	75,000				
		10,000			
End. bal.	115,000		End. bal.	45,000	
				· I	

Building		Loan Payable				
Debi	t (+)	Credit (–)		Debit (-)	Credi	it (+)
Beg. bal.	0				Beg. bal.	0
	100,000					125,000
				30,000		
End. bal.	100,000				End. bal.	95,000
					1	

PRACTICE 3–16 (Concluded)

Mortga	ge Payable		Capi	tal Stock	
Debit (-)	Credit	t (+)	Debit (–)	Credit	t (+)
	Beg. bal.	0		Beg. bal.	0
		90,000			75,000
	End. bal.	90,000		End. bal.	75,000

PRACTICE 3–17 Journal Entries with Revenues, Expenses, and Dividends

a.	Inventory Accounts Payable	130,000	130,000
b.	Cash Sales Revenue	100,000	100,000
	Cost of Goods Sold Inventory	65,000	65,000
c.	Wages Expense Cash	27,000	27,000
d.	Advertising Expense Cash	12,500	12,500
e.	Cash Accounts Receivable Sales Revenue	25,000 60,000	85,000
	Cost of Goods Sold Inventory	57,000	57,000
f.	Cash Accounts Receivable	47,000	47,000
g.	Accounts Payable Cash	55,000	55,000
h.	Dividends Cash	8,500	8,500

	Ca	sh			Accounts	Receivable	
Debi	t (+)	Cred	it (–)	Debit	t (+)	Credi	t (—)
Beg. bal.	0			Beg. bal.	0		
	100,000				60,000		
			27,000				47,000
			12,500				-
	25,000		·				
	47,000						
			55,000				
			8,500				
End. bal.	69,000			End. bal.	13,000		
	Inve	ntory			Accounts	s Payable	
Debi		Cred	it (–)	Debit		Credi	t (+)
Beg. bal.	0					Beg. bal.	0
•	130,000					•	130,000
			65,000		55,000		
			57,000				
End. bal.	8,000			-		End. bal.	75,000
		-					
Dahi		evenue Crodi	i4 (.)			oods Sold	+ <i>(</i>)
Debi	ι (-)	Credi	0	Debit Bog bol		Credi	l (-)
		Beg. bal.	100,000	Beg. bal.	0 65,000		
			85,000		57,000		
		End. bal.	185,000	End. bal.	122,000		
			105,000		122,000		
	Wages I	Expense			Advertisin	g Expense	
Debi	t (+)	Cred	it (–)	Debit	t (+)	Credi	t (–)
Beg. bal.	0			Beg. bal.	0		
	27,000				12,500		
End. bal.	27,000			End. bal.	12,500		
	Divid	ends					
Debi		lends Credi	it (–)				
Debi Beg. bal.		ends Cred	it (–)				
Debi Beg. bal.	<u>t (+)</u> 0		it (–)				
	t (+)		it (–)				

PRACTICE 3–18 Posting with Revenues, Expenses, and Dividends

PRACTICE 3–19 Preparing a Trial Balance

Cash	<u>Debit</u> \$184,000	Credit
Cash	. ,	
Accounts Receivable	13,000	
Inventory	8,000	
Land	45,000	
Building	100,000	
Accounts Payable		\$ 75,000
Loan Payable		95,000
Mortgage Payable		90,000
Capital Stock		75,000
Dividends	8,500	
Sales Revenue		185,000
Cost of Goods Sold	122,000	
Wages Expense	27,000	
Advertising Expense	<u>12,500</u>	
Totals	<u>\$520,000</u>	<u>\$520,000</u>

PRACTICE 3–20 Using a Trial Balance to Prepare an Income Statement

Sales revenue		\$370,000
Expenses:		
Cost of goods sold	\$244,000	
Utilities expense	54,000	
Rental expense	25,000	323,000
Net income		<u>\$ 47,000</u>

PRACTICE 3–21 Using a Trial Balance to Prepare a Balance Sheet

Assets	
Cash	\$ 68,000
Accounts receivable	126,000
Inventory	216,000
Land	90,000
Building	200,000
Total assets	<u>\$700,000</u>
Liabilities and Owners' Equity	

Accounts payable	\$150,000
Loan payable	270,000
Capital stock	250,000
Retained earnings	30,000*
Total liabilities and owners' equity	<u>\$700,000</u>

*Beginning retained earnings \$0 + Net income \$47,000 (see Practice 3–20) – Dividends \$17,000

PRACTICE 3–22 Preparing a Statement of Cash Flows

Operating activities:		
Collections from customers		
(\$100,000 + \$25,000 + \$47,000)	\$172,000	
Payments for inventory purchases	(55,000)	
Payments for wages	(27,000)	
Payments for advertising	(12,500)	\$ 77,500
Investing activities:		
Purchase of land	\$ (45,000)	
Purchase of building (cash down payment only)	(10,000)	(55,000)
Financing activities:		
Borrowed from bank	\$125,000	
Repaid Ioan	(30,000)	
Received from stockholders	75,000	
Paid cash dividends	<u>(8,500</u>)	<u>161,500</u>
Net increase in cash		\$184,000
Beginning cash balance		0
Ending cash balance		<u>\$184,000</u>

EXERCISES

EXERCISE 3–1 Basic Accounting Equation					
Transaction	<u>Assets</u>	= <u>Liabilities</u> +	- Owners' Equity		
1. Took out school lo	oan Increase (Cash)	Increase (School Ioan)			
2. Paid month's rent	Decrease (Cash))	Decrease (Increase in expenses)		
3. Sold computer	Increase (Cash) Decrease (Comp				
4. Received payched	k Increase (Cash)		Increase (Increase in revenues)		
5. Received interest	Increase (Cash)		Increase (Increase in revenues)		
6. Made car payment	Decrease (Cash)) Decrease (Car Ioan)	Decrease (Increase in expenses)		
	counting Elements: In elationships	ncrease/Decreas	e, Debit/Credit		
ltem	Increased with	Trai	nsaction		
AssetsDebit entryLiabilitiesCredit entryOwners' equityCredit entryCapital stockCredit entryRetained earningsCredit entryRevenuesCredit entryExpensesDebit entryDividendsDebit entry		Took out a ban Recorded net in Issued new sha Recorded net in	ares of company stock. ares of company stock. acome for year. thly customer sales. alary expense.		

<u>Tra</u>	nsaction	Assets	=	l	Liabilities		+ Owners' Equity
	1	+ (Inventory)		+ (Ac	counts Payab	le)	0
	2	+ (Cash)		0		,	+ (Revenue)
	_	– (Inventory)		0			– (Expense)
	3	+ (Cash)		-	tes Payable)		0
	4	+ (Land)			tes Payable)		0
		– (Cash)		,	<i>,</i>		
	5	+ (Cash)		0			+ (Capital Stock)
	6	– (Cash)		0			– (Expense)
	7	– (Cash)		– (Ac	counts Payab	le)	0
	8	+ (Cash)		0			0
		+ (Notes Receiva	ble)				
		– (Building)					
	9	– (Cash)		0			– (Dividends)
	10	– (Cash)		0			– (Expense)
EXI	ERCISE 3-4	Classification	of Ac	counts	5		
1.	Α	8.	OE-	-Е	-	15.	L
2.	OE—R	9.	OE			16.	Α
3.	Α	10.	L		-	17.	Α
4.	OE—E	11.	L		1	18.	OE—E
5.	OE—E	12.	OE-	–R	•	19.	L
6.	OE	13.	Α		2	20.	OE—E
7.	L	14.	Α				
EXI	ERCISE 3–5	Normal Accou	unt Ba	lances			
1.	DR	8.	DR		•	15.	CR
2.	CR	9.	CR		-	16.	DR
3.	DR	10.	CR		-	17.	DR
4.	DR	11.	CR		1	18.	DR
5.	DR	12.	CR			19.	CR
6.	CR	13.	DR		2	20.	DR
7.	CR	14.	DR				

EXERCISE 3–3	Expanded Accounting Equation
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Chapter 3

EXERCISE 3–6 Journalizing Transactions

1.	Cash Capital Stock	75,000	75,000
2.	Cash Notes Payable	35,000	35,000
3.	Salaries Expense Rent Expense Cash	45,500 3,600	49,100
4.	Inventory Accounts Payable	4,500	4,500
5.	Accounts Payable Cash	4,500	4,500
6.	Accounts Receivable Sales Revenue	1,350	1,350
	Cost of Goods Sold Inventory	850	850
7.	Cash Accounts Receivable	1,350	1,350
EXE	ERCISE 3–7 Journalizing Transactions		
1.	Building Cash Notes Payable	70,000	20,000 50,000
2.	Inventory Accounts Payable	15,000	15,000
3.	Accounts Receivable Sales Revenue	6,000	6,000
	Cost of Goods Sold Inventory	5,000	5,000

EXERCISE 3–7 (Concluded)

4. Accounts Payable Cash	15,000	15,000
5. Cash Capital Stock	25,000	25,000
6. Cash Accounts Receivable	4,500	4,500
7. Utilities Expense Cash	360	360
8. Cash	10,000	
Notes Receivable	17,000	
Building		27,000
9. Dividends	2,000	
Cash	2,000	2,000
EXERCISE 3–8 Journal Entries		
General Journal Entries:		
July 2 Cash	400,000	
Capital Stock		400,000
Issued 8,000 shares of capital stock.		
4 Equipment	80,000	
Cash		60,000
Notes Payable		20,000
<i>Purchased equipment with 75% cash and 25% on a note payable.</i>		
E Utilitico Exponso	2 500	
5 Utilities Expense Cash	3,500	2 500
Paid utilities.		3,500

	raiu utilities.		
9	Cash	12,500	
	Equipment		12,500
	Sold equipment at no gain or loss.		

EXERCISE 3–8 (Concluded)

July	13	Inventory Cash Accounts Payable Purchased inventory, 40% cash and 60% on account.	300,000	120,000 180,000
	14	Insurance Expense Cash Paid insurance premium.	7,500	7,500
	18	Accounts Receivable Sales Revenue Sold merchandise on account.	62,000	62,000
		Cost of Goods Sold Inventory Cost of merchandise sold.	45,000	45,000
	20	Cash Accounts Receivable Collected accounts receivable.	4,000	4,000
	24	Cash Sales Revenue Sold merchandise for cash.	55,000	55,000
		Cost of Goods Sold Inventory Cost of merchandise sold.	36,000	36,000
	27	Property Tax Expense Cash Paid property taxes.	1,400	1,400
	30	Accounts Payable Cash Paid accounts payable.	180,000	180,000

EXERCISE 3–9	Posting Journal Entries
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Cash	Accounts Receivable	Equipment
7/2 400,000 7/4 60,000	7/18 62,000 7/20 4,000	7/4 80,000 7/9 12,500
7/9 12,500 7/5 3,500		
7/20 4,000 7/13 120,000		
7/24 55,000 7/14 7,500		
7/27 1,400		
7/30 180,000		
Bal. 99,100	Bal. 58,000	Bal. 67,500
Inventory	Accounts Payable	Notes Payable
7/13 300,000 7/18 45,000	7/30 180,000 7/13 180,000	7/4 20,000
7/24 36,000		
Bal. 219,000	Bal. 0	
Capital Stock	Sales Revenue	Utilities Expense
	7/24 55,000	
	Bal. 117,000	
Property Tax Expense	Cost of Goods Sold	Insurance Expense
7/27 1,400	7/18 45,000	7/14 7,500
	7/24 36,000	
	Bal. 81,000	
I	I	I

EXERCISE 3–10 Challenging Journal Entries

1.	Compensation Expense	105,000	
	Cash		90,000
	Pension Liability		15,000

- The subtle assumption underlying the journal entry made in (1) is that one 2. dollar in cash now is the same as one dollar in cash to be received sometime in the future when the employees retire. All of us would prefer to receive the \$15,000 payment now rather than wait until retirement. At a minimum, we could take the \$15,000 received now and put it in the bank and have more than \$15,000 by the time that we retire. For this reason, accountants must make adjustments to the recorded amounts of cash flows that will not occur for a number of years. These "present value" adjustments are covered in many business courses and are introduced in Chapter 11 of this text. For example, if current interest rates are 10% and the employees are not expected to retire for another 15 years, the Pension Liability in (1) would be recorded at \$3,591 instead of at \$15,000. This amount of \$3,591 can be thought of as the amount that Han Company would have to deposit in a bank today, yielding 10%, such that the amount in the bank account would increase to \$15,000 by the end of 15 years, in time to make the \$15,000 payment to the retiring employees.
- 3. Prepaid Rent (asset)
 1,800

 Cash
 1,800

The cash payment of \$1,800 is debited to a Prepaid Rent asset because the payment is expected to benefit future periods. If the payment were made for rent owed for months that had already passed, then the debit would be to Rent Expense.

4. As of December 31, 2006, a portion of the Prepaid Rent asset recorded on August 1 has been used up. That amount, representing 5 months out of 12, is \$750 (5 months × \$150 per month). This amount should no longer be recorded as an asset because it will not benefit future periods; the rental months to which that \$750 applies have already passed. As shown in Chapter 4, an adjusting journal entry must be made on December 31 to reduce the Prepaid Rent asset by \$750 and to record Rent Expense in the amount of \$750.

EXERCISE 3–11 Journal Entries

a.	Equipment Accounts Payable	49,000	49,000
b.	Land Cash Notes Payable	500,000	190,000 310,000
C.	Accounts Payable Cash	33,000	33,000
d.	No entry		
e.	Cash Accounts Receivable Sales	14,000 15,000	29,000
f.	Cost of Goods Sold Inventory	17,000	17,000
g.	Cash Bank Loan Payable	78,000	78,000
h.	Dividends Cash	7,500	7,500
i.	Cash Capital Stock	50,000	50,000
j.	No entry		
k.	Bank Loan Payable Cash	13,000	13,000
I.	Cash Unearned Sales Revenue	500	500

EXERCISE 3–12 Analysis of Journal Entries

- a. The company purchased a building for \$90,000. A down payment of \$35,000 was paid in cash. A mortgage loan was arranged for the remaining \$55,000.
- b. An investor invested \$25,000 cash in the company in exchange for capital stock.
- c. The company received a loan from the bank for \$40,000.
- d. The company paid salaries of \$12,000.
- e. The company purchased inventory on account for \$12,500.
- f. The company sold inventory for \$84,000 on account. The inventory cost \$51,000.
- g. The company received a payment on account for \$62,000.
- h. The company paid \$38,000 on account.

EXERCISE 3–13 Journalizing and Posting Transactions

- July 1 Paid advertising expense, \$3,420.
 - 5 Collected \$9,500 cash from customers as payments on their accounts.
 - 10 Purchased \$20,000 of inventory on credit.
 - 14 Sold inventory costing \$15,000 to customers on account for \$18,000.
 - 23 Paid rent of \$2,000.
 - 25 Paid \$5,000 to creditors as payments on account.
 - 28 Collected \$8,000 from customers as payments on account.
 - 30 Purchased equipment for \$1,500 and land for \$4,000. Paid cash.

EXERCISE 3–14 Trial Balance

Sakamoto, Inc. Trial Balance July 31, 2006

	Debits	Credits
Cash	\$ 23,900	
Accounts Receivable	4,200	
Supplies	350	
Land	27,000	
Buildings	41,000	
Equipment	19,500	
Accounts Payable	•	\$ 9,600
Mortgage Payable (due 2009)		28,000
Capital Stock		12,000
Retained Earnings		48,000*
Fees Earned		43,000
Rent Expense	3,500	•
Insurance Expense	4,350	
Miscellaneous Expenses	1,950	
Salary Expense	14,000	
Utilities Expense	850	
Totals	\$140,600	<u>\$140,600</u>

*X + \$92,600 = \$140,600; X = \$48,000

EXERCISE 3–15 Trial Balance

Marshall, Inc. Trial Balance November 30, 2006

	Debits	Credits
Cash	\$35,000	
Short-Term Investments	15,000	
Accounts Receivable	25,000	
Notes Receivable	20,000	
Inventory	200,000	
Land	125,000	
Buildings	150,000	
Equipment	55,000	
Accounts Payable		\$ 55,000
Mortgage Payable		95,000
Notes Payable		250,000
Salaries Payable		2,000
Capital Stock		173,000
Retained Earnings		40,000
Sales Revenue		375,000
Cost of Goods Sold	188,000*	
Advertising Expense	5,000	
Other Expenses	1,000	
Property Tax Expense	1,500	
Rent Expense	7,500	
Salaries Expense	155,000	
Utilities Expense	7,000	
Totals	<u>\$990,000</u>	<u>\$990,000</u>

*Cost of Goods Sold is the difference between the total credits and total given debits:

Total credits	\$ 990,000
Total given debits	(802,000)
Cost of goods sold	<u>\$ 188,000</u>

EXERCISE 3–16 Relationships of the Expanded Accounting Equation

1.	December 31, 2005:	
	Total assets	\$ 125,000
	Less total liabilities	30,000
	Total owners' equity	\$ 95,000
	Less retained earnings	75,000
	Capital stock	<u>\$ 20,000</u>
2.	December 31, 2006:	
	Total assets	\$ 150,000
	Less total liabilities	35,000
	Total owners' equity	\$ 115,000
	Less capital stock	25,000
	Retained earnings	<u>\$ 90,000</u>
3.	Retained earnings, December 31, 2005 Plus net income for 2006	\$ 75,000 X
	Less dividends for 2006	(2,500)
	Retained earnings, December 31, 2006	<u>(2,300</u>) <u>\$ 90,000</u>
	Net income	<u>\$ 17,500</u> *
	*(\$75,000 + X – \$2,500 = \$90,000; X = \$17,500)	
	Revenues for 2006	\$ X
	Less expenses for 2006	<u>(102,500</u>)
	Net income for 2006	<u>\$ 17,500</u>
	Revenues	<u>\$ 120,000</u> **
	**(X – \$102,500 = \$17,500; X = \$120,000)	
Alte	rnative solution:	
	Increase in Retained Earnings during year = \$15,000 (\$90,000 - \$75	.000)
	\$15,000 = Revenues (X) - Expenses (\$102,500) - Dividends	
	Revenues (\$120,000)	
EXE	RCISE 3–17 Journal Entry to Correct an Error	
The	initial incorrect journal entry was as follows:	
	Land	
	Cash	5,000
The	journal entry that should have been made is as follows:	
	Salary Expense	
	Cash	5,000
Thu	s, the debit to Land of \$5,000 should not have been made; this mista	•
	one by crediting Land for \$5,000. In addition, the forgotten \$5,00	
	ry Expense must also be made. The correcting journal entry is as fo	
- 410		

Salary Expense	5,000	
Land		5,000

PROBLEMS

PROBLEM 3–1 Journal Entries and Trial Balance

1.	a.	Cash Accounts Receivable	42,000	42,000
	b.	Accounts Payable Cash	33,000	33,000
	C.	Inventory Cash	70,000	70,000
	d.	Utilities Expense Cash	12,600	12,600
	e.	Cash Accounts Receivable Sales Revenue	333,000 37,000	370,000
		Cost of Goods Sold Inventory	197,000	197,000
	f.	Interest Expense Mortgage Payable Cash	30,000 20,000	50,000
	g.	Salaries Expense Cash	120,000	120,000
	h.	Notes Payable Cash	10,000	10,000

2.												
	Ca	sh		Ac	Accounts Receivable				Inventory			
1/1	63,000	(b)	33,000	1/1	47,000	(a)	42,000	1/1	184,000	(e)	197,000	
(a)	42,000	(c)	70,000	(e)	37,000			(c)	70,000			
(e)	333,000	(d)	12,600									
		(f)	50,000									
		(g)	120,000									
		(h)	10,000									
Bal.	142,400			Bal.	42,000			Bal.	57,000			
						l						

Office Building	Accounts Payable	Mortgage Payable			
1/1 416,000	(b) 33,000 1/1 33,000	(f) 20,000 1/1 360,000			
	Bal. 0	Bal. 340,000			
Notes Payable (h) 10,000 1/1 137,000 Bal. 127,000	Capital Stock 1/1 115,000	Retained Earnings 1/1 65,000			
Sales Revenue (e) 370,000	Cost of Goods Sold (e) 197,000	Salaries Expense (g) 120,000			
Utilities Expense (d) 12,600	Interest Expense (f) 30,000				
	Gammon Corporation Trial Balance December 31, 2006				

PROBLEM 3–1 (Concluded)

Cash Accounts Receivable Inventory Office Building	Debits \$ 142,400 42,000 57,000 416,000	<u>Credits</u>
Mortgage Payable Notes Payable Capital Stock Retained Earnings Sales Revenue	410,000	\$ 340,000 127,000 115,000 65,000 370,000
Cost of Goods Sold Salaries Expense Utilities Expense Interest Expense Totals	197,000 120,000 12,600 <u>30,000</u> <u>\$1,017,000</u>	\$1,017,000

3. The purpose of the trial balance is to determine only whether total debits equal total credits. Thus, several types of errors can exist even though total debits equal total credits. These errors could include completely omitting a transaction, recording a transaction incorrectly, and posting a transaction to the wrong accounts.

PROBLEM 3–2 Journalizing and Posting

1.	Sept.	1	Cash Capital Stock	150,000	150,000
		2	Wages Expense Cash	20,000	20,000
		4	Inventory Accounts Payable	75,000	75,000
		5	Utilities Expense Cash	1,800	1,800
		9	Insurance Expense Cash	1,500	1,500
		11	Cash Accounts Receivable Sales Revenue	20,000 50,000	70,000
			Cost of Goods Sold Inventory	35,000	35,000
		15	Supplies Accounts Payable	2,500	2,500
		21	Cash Accounts Receivable	25,000	25,000
		25	Accounts Payable Cash	75,000	75,000

2.	•			_					_		
	Ca	sh		AC	counts	Recei	vable		Inve	ntory	
9/1	150,000	9/2	20,000	9/11	50,000	9/21	25,000	9/4	75,000	9/11	35,000
9/11	20,000	9/5	1,800								
9/21	25,000	9/9	1,500								
		9/25	75,000								
Bal.	96,700			Bal.	25,000			Bal.	40,000		
9/15	Supplies 9/15 2,500			A 9/25	ccounts		able 75,000		Capita	l Stoc 9/1	:k 150,000
9/15	2,500			5/25	75,000		•			5/1	150,000
						9/15	2,500				
						Bal.	2,500				
						I				1	

Sales Revenue	Cost of Goods Sold	Insurance Expense
9/11 70,000	9/11 35,000	9/9 1,500
I	Ι	I
Litilitica Expanse	Wagaa Expanse	
Utilities Expense	Wages Expense	
9/5 1,800	9/2 20,000	
	· I	

PROBLEM 3–2 (Concluded)

3. The owners should look at the cash account in the general ledger. The general ledger is a "book of accounts" in which data from transactions recorded in journals are posted and summarized. Thus, the owners would find the amount of cash on hand in the general ledger cash account.

PROBLEM 3–3 Journal Entries from Ledger Analysis

1.	(a)	Cash Capital Stock	100,000	100,000
	(b)	Building Cash Mortgage Payable	150,000	45,000 105,000
	(c)	Cash Notes Payable	50,000	50,000
	(d)	Inventory Cash Accounts Payable	35,000	5,000 30,000
	(e)	Cash Accounts Receivable Sales Revenue	25,000 30,000	55,000
		Cost of Goods Sold Inventory	30,000	30,000
	(f)	Wages Expense Cash	20,000	20,000
	(g)	Notes Payable Interest Expense Cash	50,000 3,500	53,500
	(h)	Accounts Payable Cash	30,000	30,000
	(i)	Cash Accounts Receivable	15,000	15,000

PROBLEM 3–3 (Concluded)

2.	Sales revenue	\$ 55,000
	Less: Cost of goods sold	(30,000)
	Gross margin	\$ 25,000
	Less: Wages expense	(20,000)
	Interest expense	(3,500)
	Net income	<u>\$ 1,500</u>

PROBLEM 3–4 Journalizing and Posting Transactions

1. 2006

March	1	Inventory Accounts Payable	26,500	26,500
	4	Cash Accounts Receivable	2,500	2,500
	5	Equipment Cash	1,500	1,500
	6	Accounts Receivable Sales Revenue	20,000	20,000
		Cost of Goods Sold Inventory	15,000	15,000
	10	Rent Expense Cash	525	525
	15	Utilities Expense Cash	50	50
	17	Salary Expense Cash	150	150
	20	Cash Accounts Receivable	16,500	16,500
2	22	Accounts Payable Cash	26,500	26,500
2	25	Property Tax Expense Cash	600	600
	28	Cash Sales Revenue	15,000	15,000
		Cost of Goods Sold Inventory	10,000	10,000

	2. Cash			Accounts Receivable				Equipment		
0/4			4 500	_				0/5	· · ·	ent
3/4	2,500		1,500	3/6	20,000		2,500	3/5	1,500	
3/20	16,500		525			3/20	16,500			
3/28	15,000		50							
		3/17	150							
		3/22	26,500							
		3/25	600							
Bal.	4,675			Bal.	1,000					
				-		-		•		
		ntory			ccounts				ost of Goo	ds Sold
3/1	26,500		15,000	3/22	26,500	3/1	26,500	3/6	15,000	
		3/28	10,000					3/28	10,000	
Bal.	1,500					Bal.	0	Bal.	25,000	
									I	
	Rent E	vnone	•		Jtilities	Evnor			Salary Ev	20100
2/4.0		xpens	e			схрег	156	Salary Expense		
3/10	525			3/15	50			3/17	150	
Pro	operty Ta	ay Fyr	nense		Sales R	eveni				
3/25	600				Ould's It	3/6	20,000			
J/20	000					3/0 3/28	20,000 15,000			
							,			
						Bal.	35,000			

PROBLEM 3–5 Unifying Concepts: Compound Journal Entries, Posting, Trial Balance

1.	(a)	Cash	20,000	
	. ,	Inventory	37,000	
		Land	25,500	
		Building	160,000	
		Equipment	12,500	
		Notes Payable		5,000
		Capital Stock		250,000
	(b)	Cash	15,000	
	. ,	Accounts Receivable	30,000	
		Sales Revenue		45,000
		Cost of Goods Sold	30,000	
		Inventory		30,000

PROBLEM 3–4 (Concluded)

PROBLEM 3–5 (Continued)

(c)	Notes Payable Interest Expense Cash	5,000 300	5,300
(d)	Inventory Cash Notes Payable	12,000	2,000 10,000
(e)	Office Equipment Cash Capital Stock	10,000	2,000 8,000
(f)	Truck Cash Notes Payable	15,000	3,000 12,000

2.	Cash	Δ	ccounts Re	Inventory				
(a) (b)	20,000 (c) 5,300 15,000 (d) 2,000 (e) 2,000 (f) 3,000	(b)	30,000		(a) (d)	37,000 12,000	(b)	30,000
Bal.	22,700 Land		Buildi	ng	Bal.	19,000 Equip	 oment	
(a)	25,500	(a)	160,000		(a)	12,500		
	Office Equipment	Truck			Notes Payable			
(e)	10,000	(f)	15,000		(c)	5,000	(a) (d) (f) Bal.	5,000 10,000 <u>12,000</u> 22,000
	Capital Stock		Sales Rev	/enue	С	ost of G	oods	Sold
	(a) 250,000 (e) 8,000 Bal. 258,000		(t	o) 45,000	(b)	30,000		
(c)	Interest Expense 300							

PROBLEM 3–5 (Concluded)

3.

J&W Merchandise Company Trial Balance December 31, 2006

	Debits	Credits
Cash	\$ 22,700	
Accounts Receivable	30,000	
Inventory	19,000	
Land	25,500	
Building	160,000	
Equipment	12,500	
Office Equipment	10,000	
Truck	15,000	
Notes Payable		\$ 22,000
Capital Stock		258,000
Sales Revenue		45,000
Cost of Goods Sold	30,000	
Interest Expense	300	
Totals	<u>\$325,000</u>	<u>\$325,000</u>

PROBLEM 3–6 Unifying Concepts: T-Accounts, Trial Balance, and Income Statement

1.					ASS	<u>SETS</u>					
	Cas	h		Ac	counts	Receiv	vable	Ν	lotes Re	eceiva	ble
(a) (e) (f) (m) (n) (p) (q)	9,500 ((10,000 () 3,250 () 3,000 () 1,500 ()	g) 15 h) 5 i) 12 k) 2 l) 7 o)	5,000 5,000 5,500 2,500 2,500 7,500 600 1,200	(d)	25,000	(f) (m)	9,500 13,000	(m)	3,000	(n)	3,000
Bal.	27,950	<u>, , , , , , , , , , , , , , , , , , , </u>	1,200	Bal.	2,500			Bal.	0		
(c) Bal.				Supplies (j) 1,500			(g) Bal.	La 10,000 7,000		3,000	
Building (g) 60,000			(b)	Equip 5,000	oment						

PROBLEM 3–6 (Continued)

	LIABILITIES	
Accounts Payable	Notes Payable	Mortgage Payable
(i) 12,000 (c) 18,000 (k) 2,500 (j) 1,500	(r) 10,000 (e) 10,000	(h) 2,750 (g) 55,000
Bal. 5,000	Bal. 0	Bal. 52,250
	<u>OWNERS' EQUITY</u>	
Capital Stock (a) 50,000		
	RETAINED EARNINGS	
Sales Revenue	Rent Revenue	Interest Revenue
(d) 25,000	(q) 1,500	(n) 250
Cost of Goods Sold	Wages Expense	Utilities Expense
(d) 15,000	(I) 7,500	(o) 600
Interest Expense		
(h) 2,750		
(r) 1,200		
Bal. 3,950		

PROBLEM 3–6 (Concluded)

2.

Trafalga, Inc. Trial Balance December 31, 2006

	Debits	Credits
Cash	\$ 27,950	
Accounts Receivable	2,500	
Notes Receivable	0	
Inventory	3,000	
Supplies	1,500	
Land	7,000	
Building	60,000	
Equipment	5,000	
Accounts Payable		\$ 5,000
Notes Payable		0
Mortgage Payable		52,250
Capital Stock		50,000
Sales Revenue		25,000
Rent Revenue		1,500
Interest Revenue		250
Cost of Goods Sold	15,000	
Wages Expense	7,500	
Utilities Expense	600	
Interest Expense	3,950	
Totals	<u>\$134,000</u>	<u>\$134,000</u>

3.

Trafalga, Inc.

Income Statement For the Year Ended December 31, 2006

Sales revenue		\$25,000
Cost of goods sold		<u>15,000</u>
Gross profit		\$10,000
Operating expenses:		
Wages expense	\$7,500	
Utilities expense	600	8,100
Operating income		\$ 1,900
Other revenues and expenses:		
Interest expense	\$(3,950)	
Rent revenue	1,500	
Interest revenue	250	(2,200)
Net loss		\$ (300)

PROBLEM 3–7 Transaction Analysis and Journal Entries

1.	(a)	Inventory Cash Accounts Payable	105,600	52,800 52,800
	(b)	Supplies Accounts Payable	3,300	3,300
	(c)	Utilities Expense Cash	720	720
	(d)	Cash Accounts Receivable Sales Revenue	2,800 14,500	17,300
		Cost of Goods Sold Inventory	13,200	13,200
	(e)	Repairs Expense Cash	4,950	4,950
	(f)	Cash Sales Revenue	16,250	16,250
		Cost of Goods Sold Inventory	11,800	11,800
	(g)	Cash Notes Payable	25,000	25,000
2.	(a)	Jerry's Motors, Inc. books:		
		Cash Accounts Receivable Sales Revenue	52,800 52,800	105,600
		Cost of Goods Sold Inventory	91,000	91,000
	(b)	White Supply Company books:		
		Accounts Receivable Sales Revenue	3,300	3,300
		Cost of Goods Sold Inventory	2,400	2,400
	(c)	Mountain Electric books:		
		Cash Service Fees (Revenue)	720	720

(d)	Dave's Delivery, Inc. books:		
	Truck Cash Accounts Payable	17,300	2,800 14,500
(e)	Steve's Automotive books:		
	Cash Repair Revenue	4,950	4,950
(f)	Rachel Mecham's books:		
	Automobile Cash	16,250	16,250
(g)	Local bank's books:		
	Notes Receivable Cash	25,000	25,000

PROBLEM 3–7 (Concluded)

3. In most business transactions, one party buys or receives something and one party sells or gives up something. Thus, the transaction is reported as a "mirror image" on each of the individual company records. For example, in item (b) Browne Motors purchased supplies on account from White Supply Company. Browne establishes an asset for the goods received and a liability for the amount owed to White Supply. White Supply Company records a receivable (asset) from Browne for the same amount and shows sales revenue having been earned. White Supply also has to record the cost of the goods sold and a reduction in inventory, which Browne now has.

Item (c) is even more parallel. Browne records an expense and shows cash being paid. Mountain Electric records a revenue and shows cash being received for the electrical services being rendered to Browne.

PROBLEM 3-8

Correcting a Trial Balance

Alden Company, Inc. Trial Balance November 30, 2006

	Debits	Credits
Cash	\$ 18,250	
Notes Receivable	5,000	
Accounts Receivable	5,300	
Inventory	148,000	
Land	87,850	
Buildings	104,700	
Equipment	36,900	
Furniture	15,000	
Accounts Payable		\$ 19,750
Notes Payable		187,350
Wages Payable		9,000
Mortgage Payable		78,900
Capital Stock		102,000
Retained Earnings		14,400
Sales Revenue		235,600
Cost of Goods Sold	113,050	
Advertising Expense	9,600	
Wages Expense	87,150	
Rent Expense	8,750	
Other Expenses	2,950	
Property Tax Expense	1,300	
Utilities Expense	3,200	
Totals	<u>\$647,000</u>	<u>\$647,000</u>

PROBLEM 3–9 Unifying Concepts: Journal Entries, T-Accounts, Trial Balance

May 7	Cash Accounts Receivable	3,000 2,000	
	Sales Revenue		5,000
	Cost of Goods Sold Inventory	3,850	3,850
8		4,000	
	Notes Receivable Land	2,500	6,500
15	Notes Payable Cash	2,500	2,500
21	Cash Capital Stock	1,000	1,000
23	Cash Sales Revenue	3,750	3,750
	Cost of Goods Sold Inventory	2,000	2,000
25	Salaries Expense Cash	1,000	1,000
26	Rent Expense Cash	250	250
29	Furniture Cash	250	250

2.

Cash				Notes Receivable		
Beg. bal.	5,050	5/3	3,000	5/8	2,500	
5/6	2,450	5/15	2,500			
5/7	3,000	5/25	1,000			
5/8	4,000	5/26	250			
5/21	1,000	5/29	250			
5/23	3,750					
End. bal.	12,250					
		I			I	

Accounts Receivable					Inve	ntory	
Beg. bal.	2,450	5/6	2,450	Beg. bal.	8,000		3,850
5/7	2,000			5/4	5,000		2,000
End. bal.	2,000			End. bal.	7,150		
						-	
		nd			Buil	ding	
Beg. bal.	13,000	5/8	6,500	Beg. bal.	12,000		
End. bal.	6,500						
		iture				Payable	
Beg. bal.	2,000			5/15	2,500	Beg. bal.	12,500
5/29	250						
End. bal.	2,250					End. bal.	10,000
	Accounts	s Payable			Capita	l Stock	
5/3	3,000	Beg. bal.	6,000			Beg. bal.	15,000
		5/4	5,000			5/21	1,000
		End. bal.	8,000			End. bal.	16,000
		-				-	
	Retained	Earnings			Sales R	evenue	
		Beg. bal.	9,000			5/7	5,000
						5/23	3,750
						End. bal.	8,750
					.	_	
		oods Sold				Expense	
5/7	3,850			5/25	1,000		
5/23	2,000						
End. bal.	5,850						
					Dont F	vnonco	
				5/26		xpense	
				5/26	250		

PROBLEM 3–9 (Concluded)

Jethro Company
Trial Balance
May 31, 2006

	Debits	Credits
Cash	\$12,250	
Notes Receivable	2,500	
Accounts Receivable	2,000	
Inventory	7,150	
Land	6,500	
Building	12,000	
Furniture	2,250	
Notes Payable		\$10,000
Accounts Payable		8,000
Capital Stock		16,000
Retained Earnings		9,000
Sales Revenue		8,750
Cost of Goods Sold	5,850	
Salaries Expense	1,000	
Rent Expense	250	
Totals	<u>\$51,750</u>	<u>\$51,750</u>

PROBLEM 3–10 Unifying Concepts: First Steps in the Accounting Cycle

1.	(a)	Inventory Accounts Payable	110,000	110,000
	(b)	Cash Capital Stock	25,000	25,000
	(c)	Property Tax Expense Cash	4,500	4,500
	(d)	Advertising and Selling Expenses Cash	8,000	8,000
	(e)	Utilities Expense Cash	6,500	6,500
	(f)	Salaries and Wages Payable Salaries and Wages Expense Cash	2,500 18,000	20,500

^{3.}

(g)	Cash	45,000	
	Accounts Receivable	130,000	175 000
	Sales Revenue		175,000
	Cost of Goods Sold	105,000	
	Inventory		105,000
(h)	Notes Payable	17,500	
	Interest Expense	1,600	
	Cash		19,100
(i)	Cash	10,000	
	Notes Payable		10,000
(j)	Mortgage Payable	2,500	
	Interest Expense	3,700	
	Cash		6,200
(k)	Cash	140,000	
. ,	Accounts Receivable		140,000
(I)	Accounts Payable	112,500	
()	Cash		112,500
(m)	Cash	1,400	
()	Miscellaneous Revenue	.,	1,400
(n)	Short-Term Investments	15,000	
()	Cash	10,000	15,000
(o)	Income Tax Expense	11,600	
(0)	Cash	11,000	11,600
(m)		7 600	
(p)	Dividends	7,600	7 600
	Cash		7,600

2.							
_	Ca	sh		SI	nort-Term	Investment	S
Beg. bal.	13,500	(c)	4,500	Beg. bal.	10,000		
(b)	25,000	(d)	8,000	(n)	15,000		
(g)	45,000	(e)	6,500				
(i)	10,000	• •	20,500				
(k)	140,000		19,100				
(m)	1,400	(j)	6,200				
		(I)	112,500				
		(n)	15,000				
		(o)	11,600				
		(p)	7,600				
End. bal.	23,400			End. bal.	25,000		
	Accounts	Receivable			Inve	ntory	
Beg. bal.	12,500		140,000	Beg. bal.	15,000		105,000
<u>(g)</u>	130,000	(1)	140,000	(a)	110,000	(9)	100,000
End. bal.	2,500			End. bal.	20,000		
						1	
_	La	nd			Build	dings	
Beg. bal.	25,000			Beg. bal.	75,000		
	Equir	oment			Notos	Payable	
Beg. bal.	20,000			(h)		Beg. bal.	17,500
Deg. Dai.	20,000			(1)	17,500	(i)	10,000
						End. bal.	10,000
	Accounts	: Pavable		Sala	aries and V	' Vages Paya	hlo
(I)		Beg. bal.	12,500	(f)		Beg. bal.	2,500
(1)	112,300	а)	110,000	(1)	∠,300	beg. bai.	2,300
		End. bal.	10,000			End. bal.	0
						I	
		e Payable			Capita	I Stock	
(j)	2,500	Beg. bal.	37,500			Beg. bal.	70,000
						(b)	25,000
		End. bal.	35,000			End. bal.	95,000

Retained Earnings				Divid	dends			
		Beg. bal.	31,000	(p)	7,600			
		1				1		
	Sales F	Revenue		Miscellaneous Revenue				
		(g)	175,000			(m)	1,400	
		oods Sold			Property T	ax Expense		
(g)	105,000			(c)	4,500			
	Advertising and	Selling Exp	enses	Utilities Expense				
(d)	8,000			(e)	6,500			
		1				1		
	Salaries and V	Vages Expe	nse		Interest	Expense		
(f)	18,000			(h)	1,600			
				(j)	3,700			
				End. bal.	5,300			
	Income Ta	ax Expense						
(0)	11,600							

3.

Benson Company Trial Balance December 31, 2006

	Debits	Credits
Cash	\$ 23,400	
Short-Term Investments	25,000	
Accounts Receivable	2,500	
Inventory	20,000	
Land	25,000	
Buildings	75,000	
Equipment	20,000	
Notes Payable		\$ 10,000
Accounts Payable		10,000
Salaries and Wages Payable		0
Mortgage Payable		35,000
Capital Stock		95,000
Retained Earnings		31,000
Dividends	7,600	
Sales Revenue		175,000
Miscellaneous Revenue		1,400
Cost of Goods Sold	105,000	
Property Tax Expense	4,500	
Advertising and Selling Expenses	8,000	
Utilities Expense	6,500	
Salaries and Wages Expense	18,000	
Interest Expense	5,300	
Income Tax Expense	<u>11,600</u>	
Totals	<u>\$357,400</u>	<u>\$357,400</u>

4.

(.....

Benson Company Income Statement For the Year Ended December 31, 2006

Sales revenue Less: Cost of goods sold Gross profit		\$175,000 <u>(105,000)</u> \$ 70,000
Operating expenses: Property tax expense Advertising and selling expenses Utilities expense Salaries and wages expense	\$ 4,500 8,000 6,500 18,000	(37,000)
Operating income before miscellaneous items and income taxes		\$ 33,000
Miscellaneous revenue and expense: Interest expense Miscellaneous revenue Income before taxes Income taxes Net income	\$(5,300) <u>1,400</u>	<u>(3,900</u>) \$ 29,100 <u>(11,600)</u> <u>\$ 17,500</u>
Earnings per share (9,500 shares outstanding) *\$17,500 ÷ 9,500 = \$1.84 (rounded)		<u>\$ 1.84</u> *

PROBLEM 3–10 (Concluded)

Benson Company Balance Sheet December 31, 2006			
Assets			
Current assets:			
Cash		\$23,400	
Short-term investments		25,000	
Accounts receivable		2,500	
Inventory		20,000	
Total current assets			\$ 70,900
Property, plant, and equipment:			
Land		\$25,000	
Buildings		75,000	
Equipment		20,000	
Total land, buildings, and equipment			120,000
Total assets			<u>\$190,900</u>
Liabilities and Stockholders' Equity Current liabilities: Notes payable Accounts payable Total current liabilities		\$10,000 <u>10,000</u>	\$ 20,000
Long-term liabilities:			
Mortgage payable Total liabilities			<u>35,000</u> \$ 55,000
Stockholders' equity: Capital stock (9,500 shares at \$10 per share) Retained earnings, January 1, 2006	\$31,000	\$95,000	
Total Dividends, 2006	<u>17,500</u> \$48,500 <u>7,600</u>	40.000	
Retained earnings, December 31, 2006		40,900	405.000
Total stockholders' equity Total liabilities and stockholders' equity			<u>135,900</u> <u>\$190,900</u>

5. Revenue and expense accounts are used to keep track of specific amounts in those individual accounts during the operating period. That detailed information is useful for planning, controlling costs, and other management decisions as well as for investors and creditors to use in understanding the operating results of a company. If applicable amounts were debited and credited to Retained Earnings directly, the detailed information on operating results, which is reported in the income statement, would be lost.

DISCUSSION CASES

CASE 3–1 How Does Microsoft (and Other Companies) Do It?

Microsoft and other companies—whether large or small—use a systematic process referred to as the accounting cycle to transform transaction data into summarized financial reports. The steps in the accounting cycle include analyzing transactions, recording the effects of transactions, summarizing those effects, and preparing financial statements and other reports for use by various internal and external users.

CASE 3–2 Advantages and Disadvantages of a Computerized Accounting System

Advantages of a computerized accounting system:

- 1. *Speed.* A computerized accounting system will be much faster than a manual system. Thus, your father-in-law will find it easier to update records and print financial reports.
- 2. Accuracy. A computer system will be more accurate than a manual system. The computer will generally make errors only if the data are entered incorrectly.
- **3.** Savings in time and effort. Once the data have been entered, the computerized system will offer a greater variety of reports from the data. With accounts receivable, for example, a computer can isolate all accounts 30 days overdue and print a list of them. Or the computer can focus on accounts over a certain dollar amount. The many different reports available by using the computer will help your father-in-law better understand his business and make more informed decisions.

Disadvantages of a computerized accounting system:

- 1. Garbage in, garbage out (GIGO). A computer will accept data without question as to whether the data are correct. Incorrect input will cause the related accounts and reports to be misstated. Unlike a computer, a person can use judgment to ascertain whether an amount is unrealistic when posting and can correct the problem at its source.
- 2. Costly setup and upkeep. A computerized accounting system is generally not cheap. One needs to purchase a computer system along with the applicable accounting software. In addition to making the initial investment for the system, the system will eventually need to be upgraded because software and computer technology are constantly changing.
- **3.** *Learning curve.* If your father-in-law has never used a computer before, he will have to spend a significant amount of time learning how to operate the computer and the software.

CASE 3–3 When Is a Debit a Debit?

The bank has used the term debit to mean "minus." Susan knows the asset Cash is increased with a debit. However, she is forgetting the general, nonaccounting meanings associated with debit (minus) and credit (plus). In accounting terminology, a debit means the left side of an account (and credit means the right side). Also, on the asset side of the accounting equation, debit means increase. Susan must pay for the new checks she received, which reduces cash. The bank has reduced the cash account to offset the cost of the checks. Also, from the bank's viewpoint, the cash in Susan's account is a liability to the bank (it owes that money to Susan). By giving new checks to Susan and reducing (debiting) her account, the bank accurately reflects a reduction in its liability (the claim Susan has to cash on deposit).

CASE 3–4 Understanding the Mechanics of Accounting

Jay McMahon should not be hired. He apparently has not understood which accounts have debit balances and which have credit balances. He has not prepared a proper trial balance: the title is incorrect; the accounts are not listed in logical order; and total debits do not equal total credits. A corrected trial balance is as follows:

Rollins Engineering Company Trial Balance December 31, 2006		
	Debits	Credits
Cash	\$ 82,100	
Accounts Receivable	44,000	
Supplies	11,000	
Office Equipment	15,000	
Accounts Payable		\$ 4,500
Salaries Payable		34,000
Capital Stock		77,000
Retained Earnings		24,000
Consulting Revenues		269,000
Salaries Expense	175,000	
Utilities Expense	12,000	
Rent Expense	30,000	
Supplies Expense	33,000	
Other Expenses	6,400	
Totals	<u>\$408,500</u>	\$408,500

The accounts are usually listed in the order they would appear on the balance sheet and income statement. Total debits should equal total credits for all accounts.

Double-entry accounting is based on the basic accounting equation: Assets = Liabilities + Owners' Equity. Since the equation is an equality, it must always remain in balance. This means that for every transaction, there must be equal debit and credit entries. Assets are increased by debits, while liabilities and owners' equity are increased by credits; this keeps the equation in balance. Since revenues increase owners' equity, revenue accounts are also increased by credits; expenses reduce owners' equity and therefore are increased by debits, just like assets. Thus, at any time under a double-entry system of accounting, it is possible to check the accounting records to see that Assets = Liabilities + Owners' Equity, and that debits equal credits.

CASE 3–5 Exercising Accounting Judgment

The scenarios presented in this case illustrate that the format of a journal entry frequently provides a useful framework with which to analyze a complex transaction.

a. The journal entry needed to record the cash portion of compensation expense is quite straightforward:

Compensation Expense	. 500,000	
Cash	. 500,000)

In order to make the journal entry needed to record the hamburger certificates given as compensation, one must make an assumption about how many of the certificates will actually be redeemed. If it is assumed that all of the certificates will be redeemed, the appropriate journal entry is as follows:

CASE 3–5 (Concluded)

Compensation Expense	60,000	
Certificate Liability (200,000 \times \$0.30)		60,000

This journal entry reflects the obligation to deliver 200,000 hamburgers, each costing 30 cents. Note that the \$1.00 selling price of the hamburgers is not used to value this obligation because financial records are based on what a company actually does (giving up hamburgers that cost \$60,000 to make) rather than what a company might have done (sell those same hamburgers for \$200,000).

The Certificate Liability represents the obligation that Baggins Company now has to deliver hamburgers in the future based on the certificates that have already been issued to employees.

As mentioned, the \$60,000 amount in this journal entry relies on the assumption that all of the certificates will be redeemed. In a real case, historical data for Baggins Company would be used to estimate what percentage of the certificates would actually be redeemed; the journal entry amount would be based on that estimated percentage.

b. The journal entry needed to record the purchase of the building is given below.

Building	100,000	
Cash		100,000

If the building is worthless on December 31, then it should be removed from Radagast's books. This is done with a credit to the building account of \$100,000. The more challenging task is identifying what account should be debited. With some thought, one can see that this is a case in which an asset (the building) has been completely used up in the course of business. This fits the definition of an expense, so an expense account should be debited, as follows:

Expense	100,000	
Building		100,000

More accurately, the debit in this case would be to a loss account. Losses differ from expenses in that losses arise from transactions or events that are outside the normal course of business. Hopefully it isn't in the normal course of business for Radagast to buy buildings that become worthless within a year.

JUDGMENT CALLS

JUDGMENT 3–1 You Decide: Is understanding the accounting cycle essential to being a good accountant, or is it a waste of time?

Issues to be discussed are:

- 1. Today, computer programs such as QuickBooks can perform the accounting cycle. All that is necessary is to input the original data.
- 2. However, without understanding what the computer program is doing, it will never be possible to understand what is going on, where the risks are, and whether or not you can have confidence in the output.
- **3.** Because technology can perform most of the duties of the accounting cycle, it isn't necessary to go into as much detail in memorizing procedures and processes as it used to be. What is necessary now is a general understanding of what the computer is doing and where it can go wrong.
- 4. The most important skills for today's accountants are being able to interpret and use the output of the accounting cycle to make better decisions.

JUDGMENT 3-2

You Decide: If you major in accounting, will you enjoy a rewarding career, or will the field be extinct in 20 years?

Issues to be discussed are:

- 1. While the work of accountants might change, accountants will always be needed.
- **2.** As computers become smarter and smarter, they will replace some of the duties of accountants, but they can never use the output to make decisions as well as a human being can.
- **3.** There will always be a need for accountants who can think analytically, communicate well, and participate in value-added decision making.
- 4. Accountants of the future will be more involved in interpreting financial information, planning, and understanding risks.
- **5.** Today, more and more accountants are becoming part of top management teams because of the increased importance of understanding financial information.

COMPETENCY ENHANCEMENT OPPORTUNITIES

ANALYZING 3–1 Microsoft

1.	Research and Development Expense	4,307*	4,307
	To record Microsoft's research and development expenditures for 2002.		
2.	Cash Common Stock and Paid-in Capital To record Microsoft's issuance of common stock during 2002.	1,497*	1,497
3.	Property and Equipment (asset) Cash To record Microsoft's purchase of property and equipment during 2002.	770*	770
4.	Equity and Other Investments (asset) Cash To record Microsoft's purchase of investments during 2002.	89,386*	89,386

*These numbers are in millions.

The balance in Microsoft's "equity and other investments" account decreased slightly in 2002. The purchase of \$89,386 million in new investments during 2002, coupled with the sale of investment securities valued at over \$70 billion, almost all related to Microsoft's short-term investments account, which increased by \$8 billion for the fiscal year.

ANALYZING 3–2 McDonald's

1.	Annual sales per store = \$41.5 billion/31,108 = \$1,334,062 Daily sales per store = \$1,334,062/365 = \$3,655 Estimated sale per customer: Between \$2.00 and \$5.00		
	Customers per store per day are between: \$3,655/\$2.00 = 1,828 and \$3,655/\$5.00 = 731		
2.	Cash Sales To record \$10 sale.	10.00	10.00
	Cost of Food and Packaging Food and Packaging Inventory To record the estimated cost of a \$10 sale; calculated as follows: [($$3.917/11.5) × $$10$] = $$3.41$	3.41	3.41
3.	Dividends (or Retained Earnings) Cash To record cash dividends paid by McDonald's in 2002.	297.4*	297.4
	*In milliona		

*In millions.

ANALYZING 3–2 (Concluded)

4.	Income Tax Expense Cash Income Tax Payable To record total income tax expense for 2002 for McDonald's. Part of the taxes have yet to be paid.	670.0	572.2 97.8
INT	ERNATIONAL CASE: Shanghai: Petro Chemical Compa	ny Limited	
1.	Cash or Accounts Receivable Sales To record 1995 sales for Shanghai Petrochemical.	11.835*	11.835
	Cost of Sales Inventory To record 1995 cost of sales for Shanghai Petrochemical.	9.016*	9.016
	*In billions of RMB.		
2.	Dividends or (Retained Earnings) Cash Dividends Payable <i>To record cash dividends declared for 1995 for Shanghai</i> <i>Petrochemical. Part of the dividends have yet to paid.</i>	851.5 [†]	818.8 32.7
	[†] In millions of RMB.		
3.	Accounts Receivable Sales To record \$100 sale on account.	100	100
	Cost of Goods Sold Inventory To record \$70 cost of sales for \$100 sale on account.	70	70
	VAT Receivable (\$100 × 0.17) VAT Payable to Government To record value added tax of 17% to be collected from customer and then forwarded to the government.	17	17

ETHICS CASE: Should You Go the Extra Mile?

Many people don't view this situation as a question of ethics. They would contend that your employer is paying you to take care of customers as they come into the store and that you have no further responsibility.

Others view this situation not as a question of ethics but as an opportunity to strengthen your résumé. If you can get involved in an "information system redesign," your prospects for improved employment in the future will go up.

The ethical question is whether you owe your employer your best effort, including any ideas that will improve operations. The answer isn't a clear one. But what is certain is that your job will be much more interesting and fulfilling if you are constantly trying to improve it.

WRITING ASSIGNMENT: Accounting is Everywhere!

Here is one example of a business press article that uses accounting data. The December 19, 2003 edition of *The Wall Street Journal* reported that Nike, Inc. (the company that makes athletic shoes) stated that its second-quarter profits rose from the previous year's reported performance because of strong back-to-school sales. The article reported Nike's revenue (\$2.8 billion), profits (\$179.1 million), and earnings per share (\$0.68 per share). The article also discussed how Nike is reconciling its relationship with Foot Locker, Inc. after disputes over discounts of higher-end shoes.

In every issue of *The Wall Street Journal*, there are articles reporting the performance of businesses. It is important that students know what those reports indicate about the future of the company.

THE DEBATE: Are Computers the Hero or the Villain?

Points to be covered might include:

To Infinity, and Beyond!

- 1. Since the beginning of business, businesspeople have been gathering information from current customers (and from those who refuse to be customers) to find out how to better serve future customers. Computers have not changed this process; they have only made it easier.
- 2. By entering the public marketplace, a consumer is voluntarily making himself or herself available for observation.
- **3.** It is a gross violation of a company's business rights to prevent it from selling information that it legally collects in the normal course of business.
- 4. Ultimately, this improvement in detailed information about specific consumers will allow manufacturers and retailers to design and deliver exactly the products that individual consumers want.

Right to Privacy

- 1. A consumer doesn't enter the public marketplace voluntarily; there is no other way to live in this world than to work for money and then use that money to buy food, clothing, etc.
- 2. Since consumers have no alternative to making their preferences known by their purchases, they should be protected from having that information exploited by businesses.
- **3.** Even if a certain business is allowed to use information about its own customers, it does not have the right to sell private information about customers to other businesses.
- **4.** Without these protections, those people who desire to be left alone will be the constant target of micro-advertising, solicitations, and strangers nosing around in their personal affairs.

CUMULATIVE SPREADSHEET PROJECT

The solutions to the Cumulative Spreadsheet Project can be found in the Solutions Manual files in the Instructor's Resource section of the Albrecht Web site at **http://albrecht.swlearning.com**. In addition, the solutions can be found on the Instructor's Resource CD-ROM, ISBN 0-324-20672-0.

INTERNET SEARCH: McDonald's

(Internet information changes often. For an updated Internet Search solution, check the text Web site at http://albrecht.swlearning.com.)

- 1. According to the information on McDonald's Web site, a hamburger has 280 calories and a Big Mac has 580 calories. So, one Big Mac has more calories than two hamburgers ($2 \times 280 = 560$).
- **2.** In order to purchase a McDonald's franchise in the United States, you must have \$175,000 of your own money. This money cannot be borrowed. You must also have a strong and successful background and be willing to personally devote your full-time efforts to managing the franchise.
- **3.** As of August 2003, a person had to do the following in order to find a copy of McDonald's most recent annual report on McDonald's Web site:
 - **a.** From the home page, select "Investor."
 - b. Choose "Investor Information."
 - c. Choose "Investor Publications."
 - d. Choose "2002 Annual Report."

As you can see, McDonald's has made it relatively easy to access its financial statements. It wasn't always this easy.

4. A recent McDonald's financial press release contained in the Internet archive is dated July 17, 2003, and is titled "Gloria Santona Promoted to Corporate Executive Vice President, McDonald's Corporation." In this press release, the company announces the promotion of a corporate officer.

SOLUTIONS TO "STOP & THINK"

Stop & Think (p. 99): Could the two journal entries relating to the sale of inventory be combined into one journal entry?

Certainly. In fact, if a company wished, it could wait until the end of each accounting period and just make one huge journal entry. But there are risks with waiting to make journal entries, just as there are when combining journal entries. If an error is made in a journal entry that has been combined, it may be more difficult to identify and correct the error.

Stop & Think (p. 101): Why are dividends NOT considered to be an expense?

Dividends are distributions to owners and are not considered a cost of doing business. Taxes must be paid (or the government gets upset) and interest must be paid (or creditors are distressed), but dividends are optional. If owners are concerned about dividends not being paid, they can sell their investment in the company.

SOLUTION TO "NET WORK"

Please check the text Web site at http://albrecht.swlearning.com for an updated solution to the Net Work exercise.