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# Introduction to Accounting and Business

*Google™*

**W**hen two teams pair up for a game of football, there is often a lot of noise. The band plays, the fans cheer, and fireworks light up the scoreboard. Obviously, the fans are committed and care about the outcome of the game. Just like fans at a football game, the owners of a business want their business to “win” against their competitors in the marketplace. While having your football team win can be a source of pride, winning in the marketplace goes beyond pride and has many tangible benefits. Companies that are winners are better able to serve customers, provide good jobs for employees, and make money for their owners.

One such successful company is **Google**, one of the most visible companies on the Internet. Many of us cannot visit the Web without using Google to

power a search. As one writer said, “Google is the closest thing the Web has to an ultimate answer machine.” And yet, Google is a free tool—no one asks for your credit card when you use Google’s search tools.

Do you think Google has been a successful company? Does it make money? How would you know? Accounting helps to answer these questions. Google’s accounting information tells us that Google is a successful company that makes a lot of money, but not from you and me. Google makes its money from advertisers.

This textbook introduces you to accounting, the language of business. Chapter 1 begins by discussing what a business is, how it operates, and the role that accounting plays.





### Instructions

- Record the above transactions directly in the following T accounts, without journalizing: Cash; Accounts Receivable; Supplies; Prepaid Insurance; Automobiles; Equipment; Notes Payable; Accounts Payable; Leila Durkin, Capital; Professional Fees; Rent Expense; Salary Expense; Blueprint Expense; Automobile Expense; Miscellaneous Expense. To the left of the amount entered in the accounts, place the appropriate letter to identify the transaction.
- Determine account balances of the T accounts. Accounts containing a single entry only (such as Prepaid Insurance) do not need a balance.
- Prepare an unadjusted trial balance for Leila Durkin, Architect, as of May 31, 2012.
- Determine the net income or net loss for May.

OBJ. 1,2,3,4

✓ 4. c. \$8,550



### PR 2-2A Journal entries and trial balance

On October 1, 2012, Faith Schultz established Heavenly Realty, which completed the following transactions during the month:

- Faith Schultz transferred cash from a personal bank account to an account to be used for the business, \$20,000.
- Paid rent on office and equipment for the month, \$3,750.
- Purchased supplies on account, \$1,100.
- Paid creditor on account, \$400.
- Earned sales commissions, receiving cash, \$16,750.
- Paid automobile expenses (including rental charge) for month, \$1,000, and miscellaneous expenses, \$700.
- Paid office salaries, \$2,150.
- Determined that the cost of supplies used was \$600.
- Withdrew cash for personal use, \$1,000.

### Instructions

- Journalize entries for transactions (a) through (i), using the following account titles: Cash; Supplies; Accounts Payable; Faith Schultz, Capital; Faith Schultz, Drawing; Sales Commissions; Rent Expense; Office Salaries Expense; Automobile Expense; Supplies Expense; Miscellaneous Expense. Explanations may be omitted.
- Prepare T accounts, using the account titles in (1). Post the journal entries to these accounts, placing the appropriate letter to the left of each amount to identify the transactions. Determine the account balances, after all posting is complete. Accounts containing only a single entry do not need a balance.
- Prepare an unadjusted trial balance as of October 31, 2012.
- Determine the following:
  - Amount of total revenue recorded in the ledger.
  - Amount of total expenses recorded in the ledger.
  - Amount of net income for October.
- Determine the increase or decrease in owner's equity for October.

OBJ. 1,2,3,4

✓ 3. Total of Credit column: \$66,500



### PR 2-3A Journal entries and trial balance

On April 1, 2012, Kathleen Alvarez established an interior decorating business, Intrex Designs. During the month, Kathleen completed the following transactions related to the business:

- Apr.
- Kathleen transferred cash from a personal bank account to an account to be used for the business, \$17,000.
  - Paid rent for period of April 2 to end of month, \$3,400.
  - Purchased office equipment on account, \$10,000.
  - Purchased a used truck for \$21,000, paying \$2,000 cash and giving a note payable for the remainder.
  - Purchased supplies for cash, \$1,800.
  - Received cash for job completed, \$13,000.



- Apr. 15. Paid annual premiums on property and casualty insurance, \$1,800.  
23. Recorded jobs completed on account and sent invoices to customers, \$9,000.  
24. Received an invoice for truck expenses, to be paid in April, \$1,000.

Enter the following transactions on Page 2 of the two-column journal.

29. Paid utilities expense, \$1,500.  
29. Paid miscellaneous expenses, \$750.  
30. Received cash from customers on account, \$7,800.  
30. Paid wages of employees, \$4,000.  
30. Paid creditor a portion of the amount owed for equipment purchased on April 6, \$2,500.  
30. Withdrew cash for personal use, \$2,000.

### Instructions

1. Journalize each transaction in a two-column journal beginning on Page 1, referring to the following chart of accounts in selecting the accounts to be debited and credited. (Do not insert the account numbers in the journal at this time.) Explanations may be omitted.

11 Cash	31 Kathleen Alvarez, Capital
12 Accounts Receivable	32 Kathleen Alvarez, Drawing
13 Supplies	41 Fees Earned
14 Prepaid Insurance	51 Wages Expense
16 Equipment	53 Rent Expense
18 Truck	54 Utilities Expense
21 Notes Payable	55 Truck Expense
22 Accounts Payable	59 Miscellaneous Expense

2. Post the journal to a ledger of four-column accounts, inserting appropriate posting references as each item is posted. Extend the balances to the appropriate balance columns after each transaction is posted.  
3. Prepare an unadjusted trial balance for Intrex Designs as of April 30, 2012.  
4. Determine the excess of revenues over expenses for April.  
5. Can you think of any reason why the amount determined in (4) might not be the net income for April?

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OBJ. 1,2,3,4

✓ 4. Total of Debit column: \$259,600



### PR 2-4A Journal entries and trial balance

Utopia Realty acts as an agent in buying, selling, renting, and managing real estate. The unadjusted trial balance on October 31, 2012, is shown below.

Utopia Realty Unadjusted Trial Balance October 31, 2012			
		Debit Balances	Credit Balances
11 Cash	.....	13,150	
12 Accounts Receivable	.....	30,750	
13 Prepaid Insurance	.....	1,500	
14 Office Supplies	.....	900	
16 Land	.....	—	
21 Accounts Payable	.....		7,000
22 Unearned Rent	.....		—
23 Notes Payable	.....		—
31 Ian Rogstad, Capital	.....		23,000
32 Ian Rogstad, Drawing	.....	1,000	
41 Fees Earned	.....		120,000
51 Salary and Commission Expense	.....	74,100	
52 Rent Expense	.....	15,000	
53 Advertising Expense	.....	8,900	
54 Automobile Expense	.....	2,750	
59 Miscellaneous Expense	.....	1,950	
		<u>150,000</u>	<u>150,000</u>





The following business transactions were completed by Utopia Realty during November 2012:

- Nov. 1. Paid rent on office for month, \$5,000.  
 2. Purchased office supplies on account, \$1,300.  
 5. Paid annual insurance premiums, \$3,600.  
 10. Received cash from clients on account, \$25,000.  
 15. Purchased land for a future building site for \$90,000, paying \$10,000 in cash and giving a note payable for the remainder.  
 17. Paid creditors on account, \$4,500.  
 20. Returned a portion of the office supplies purchased on November 2, receiving full credit for their cost, \$200.  
 23. Paid advertising expense, \$2,000.

*Enter the following transactions on Page 19 of the two-column journal.*

27. Discovered an error in computing a commission; received cash from the salesperson for the overpayment, \$1,000.  
 28. Paid automobile expense (including rental charges for an automobile), \$1,500.  
 29. Paid miscellaneous expenses, \$450.  
 30. Recorded revenue earned and billed to clients during the month, \$30,000.  
 30. Paid salaries and commissions for the month, \$7,500.  
 30. Withdrew cash for personal use, \$1,000.  
 30. Rented land purchased on November 15 to local merchants association for use as a parking lot in December and January, during a street rebuilding program; received advance payment of \$3,000.

### Instructions

- Record the November 1, 2010, balance of each account in the appropriate balance column of a four-column account, write *Balance* in the item section, and place a check mark (✓) in the Posting Reference column.
- Journalize the transactions for November in a two-column journal beginning on Page 18. Journal entry explanations may be omitted.
- Post to the ledger, extending the account balance to the appropriate balance column after each posting.
- Prepare an unadjusted trial balance of the ledger as of November 30, 2012.
- Assume that the November 30 transaction for salaries and commissions should have been \$5,700. (a) Why did the unadjusted trial balance in (4) balance? (b) Journalize the correcting entry. (c) Is this error a transposition or slide?

### OBJ. 4

✓ 7. Total of Debit column: \$43,338.10

### PR 2-5A Errors in trial balance

*If the working papers correlating with this textbook are not used, omit Problem 2-5A.*

The following records of A-Aall Electronic Repair are presented in the working papers:

- Journal containing entries for the period May 1–31.
- Ledger to which the May entries have been posted.
- Preliminary trial balance as of May 31, which does not balance.

Locate the errors, supply the information requested, and prepare a corrected trial balance according to the following instructions. The balances recorded in the accounts as of May 1 and the entries in the journal are correctly stated. If it is necessary to correct any posted amounts in the ledger, a line should be drawn through the erroneous figure and the correct amount inserted above. Corrections or notations may be inserted on the preliminary trial balance in any manner desired. It is not necessary to complete all of the instructions if equal trial balance totals can be obtained earlier. However, the requirements of instructions (6) and (7) should be completed in any event.

### Instructions

- Verify the totals of the preliminary trial balance, inserting the correct amounts in the schedule provided in the working papers.

(Continued)





2. Compute the difference between the trial balance totals.
3. Compare the listings in the trial balance with the balances appearing in the ledger, and list the errors in the space provided in the working papers.
4. Verify the accuracy of the balance of each account in the ledger, and list the errors in the space provided in the working papers.
5. Trace the postings in the ledger back to the journal, using small check marks to identify items traced. Correct any amounts in the ledger that may be necessitated by errors in posting, and list the errors in the space provided in the working papers.
6. Journalize as of May 31 the payment of \$100 for advertising expense. The bill had been paid on May 31 but was inadvertently omitted from the journal. Post to the ledger. (Revise any amounts necessitated by posting this entry.)
7. Prepare a new unadjusted trial balance.

**OBJ. 4**

✓ 1. Total of Debit column: \$1,400,000

**PR 2-6A Corrected trial balance**


Imperial Carpet has the following unadjusted trial balance as of March 31, 2012.

Imperial Carpet Unadjusted Trial Balance March 31, 2012		
	Debit Balances	Credit Balances
Cash .....	38,200	
Accounts Receivable .....	81,000	
Supplies .....	16,690	
Prepaid Insurance .....	3,600	
Equipment .....	392,000	
Notes Payable .....		200,000
Accounts Payable .....		54,000
Leonardo Pepin, Capital .....		254,300
Leonardo Pepin, Drawing .....	116,000	
Fees Earned .....		858,900
Wages Expense .....	490,000	
Rent Expense .....	112,600	
Advertising Expense .....	50,400	
Miscellaneous Expense .....	10,200	
	<u>1,310,690</u>	<u>508,300</u>

The debit and credit totals are not equal as a result of the following errors:

- a. The balance of cash was understated by \$12,000.
- b. A cash receipt of \$13,900 was posted as a debit to Cash of \$19,300.
- c. A debit of \$15,000 to Accounts Receivable was not posted.
- d. A return of \$90 of defective supplies was erroneously posted as a \$900 credit to Supplies.
- e. An insurance policy acquired at a cost of \$2,500 was posted as a credit to Prepaid Insurance.
- f. The balance of Notes Payable was understated by \$35,200.
- g. A credit of \$7,600 in Accounts Payable was overlooked when determining the balance of the account.
- h. A debit of \$10,000 for a withdrawal by the owner was posted as a credit to Leonardo Pepin, Capital.
- i. The balance of \$116,200 in Rent Expense was entered as \$112,600 in the trial balance.
- j. Gas, Electricity, and Water Expense, with a balance of \$48,300 was omitted from the trial balance.

**Instructions**

1. Prepare a corrected unadjusted trial balance as of March 31, 2012.
2.  Does the fact that the unadjusted trial balance in (1) is balanced mean that there are no errors in the accounts? Explain.



## Problems Series B

**OBJ. 1,2,3**

✓ 3. Total of Debit column: \$74,700

### PR 2-1B Entries into T accounts and trial balance

April Layton, an architect, opened an office on June 1, 2012. During the month, she completed the following transactions connected with her professional practice:

- Transferred cash from a personal bank account to an account to be used for the business, \$25,000.
- Purchased used automobile for \$24,000, paying \$5,000 cash and giving a note payable for the remainder.
- Paid June rent for office and workroom, \$2,000.
- Paid cash for supplies, \$1,450.
- Purchased office and computer equipment on account, \$8,000.
- Paid cash for annual insurance policies on automobile and equipment, \$3,600.
- Received cash from a client for plans delivered, \$10,500.
- Paid cash to creditors on account, \$1,750.
- Paid cash for miscellaneous expenses, \$600.
- Received invoice for blueprint service, due in July, \$1,500.
- Recorded fee earned on plans delivered, payment to be received in July, \$12,800.
- Paid salary of assistant, \$1,600.
- Paid cash for miscellaneous expenses, \$200.
- Paid installment due on note payable, \$350.
- Paid gas, oil, and repairs on automobile for June, \$550.

#### Instructions

- Record the above transactions directly in the following T accounts, without journalizing: Cash; Accounts Receivable; Supplies; Prepaid Insurance; Automobiles; Equipment; Notes Payable; Accounts Payable; April Layton, Capital; Professional Fees; Rent Expense; Salary Expense; Blueprint Expense; Automobile Expense; Miscellaneous Expense. To the left of each amount entered in the accounts, place the appropriate letter to identify the transaction.
- Determine account balances of the T accounts. Accounts containing a single entry only (such as Prepaid Insurance) do not need a balance.
- Prepare an unadjusted trial balance for April Layton, Architect, as of June 30, 2012.
- Determine the net income or net loss for June.

**OBJ. 1,2,3,4**

✓ 4. c. \$5,500



### PR 2-2B Journal entries and trial balance

On March 1, 2012, Mitch Quade established Marine Realty, which completed the following transactions during the month:

- Mitch Quade transferred cash from a personal bank account to an account to be used for the business, \$18,000.
- Purchased supplies on account, \$1,200.
- Earned sales commissions, receiving cash, \$14,000.
- Paid rent on office and equipment for the month, \$3,000.
- Paid creditor on account, \$750.
- Withdrew cash for personal use, \$2,000.
- Paid automobile expenses (including rental charge) for month, \$1,500, and miscellaneous expenses, \$400.
- Paid office salaries, \$2,800.
- Determined that the cost of supplies used was \$800.

#### Instructions

- Journalize entries for transactions (a) through (i), using the following account titles: Cash; Supplies; Accounts Payable; Mitch Quade, Capital; Mitch Quade, Drawing; Sales Commissions; Rent Expense; Office Salaries Expense; Automobile Expense; Supplies Expense; Miscellaneous Expense. Journal entry explanations may be omitted.

(Continued)





2. Prepare T accounts, using the account titles in (1). Post the journal entries to these accounts, placing the appropriate letter to the left of each amount to identify the transactions. Determine the account balances, after all posting is complete. Accounts containing only a single entry do not need a balance.
3. Prepare an unadjusted trial balance as of March 31, 2012.
4. Determine the following:
  - a. Amount of total revenue recorded in the ledger.
  - b. Amount of total expenses recorded in the ledger.
  - c. Amount of net income for March.
5. Determine the increase or decrease in owner's equity for March

**OBJ. 1,2,3,4****✓ 3. Total of Credit column: \$64,500****PR 2-3B Journal entries and trial balance**

On July 1, 2012, Kim Wheeler established an interior decorating business, Aztec Designs. During the month, Kim completed the following transactions related to the business:

- July
1. Kim transferred cash from a personal bank account to an account to be used for the business, \$21,000.
  4. Paid rent for period of July 4 to end of month, \$2,750.
  10. Purchased a used truck for \$18,000, paying \$4,000 cash and giving a note payable for the remainder.
  13. Purchased equipment on account, \$9,000.
  14. Purchased supplies for cash, \$1,500.
  15. Paid annual premiums on property and casualty insurance, \$3,600.
  15. Received cash for job completed, \$12,000.

*Enter the following transactions on Page 2 of the two-column journal.*

21. Paid creditor a portion of the amount owed for equipment purchased on July 13, \$2,000.
24. Recorded jobs completed on account and sent invoices to customers, \$9,800.
26. Received an invoice for truck expenses, to be paid in August, \$700.
27. Paid utilities expense, \$1,000.
27. Paid miscellaneous expenses, \$300.
29. Received cash from customers on account, \$4,600.
30. Paid wages of employees, \$2,800.
31. Withdrew cash for personal use, \$2,500.

**Instructions**

1. Journalize each transaction in a two-column journal beginning on Page 1, referring to the following chart of accounts in selecting the accounts to be debited and credited. (Do not insert the account numbers in the journal at this time.) Journal entry explanations may be omitted.

11 Cash	31 Kim Wheeler, Capital
12 Accounts Receivable	32 Kim Wheeler, Drawing
13 Supplies	41 Fees Earned
14 Prepaid Insurance	51 Wages Expense
16 Equipment	53 Rent Expense
18 Truck	54 Utilities Expense
21 Notes Payable	55 Truck Expense
22 Accounts Payable	59 Miscellaneous Expense

2. Post the journal to a ledger of four-column accounts, inserting appropriate posting references as each item is posted. Extend the balances to the appropriate balance columns after each transaction is posted.
3. Prepare an unadjusted trial balance for Aztec Designs as of July 31, 2012.
4. Determine the excess of revenues over expenses for July.
5. Can you think of any reason why the amount determined in (4) might not be the net income for July?



OBJ. 1,2,3,4

✓ 4. Total of Debit  
column: \$575,400**PR 2-4B Journal entries and trial balance**

Prime Time Realty acts as an agent in buying, selling, renting, and managing real estate. The unadjusted trial balance on July 31, 2012, is shown below.

Prime Time Realty Unadjusted Trial Balance July 31, 2012		
	Debit Balances	Credit Balances
11 Cash .....	30,000	
12 Accounts Receivable .....	57,200	
13 Prepaid Insurance .....	7,200	
14 Office Supplies .....	1,600	
16 Land .....	—	
21 Accounts Payable .....		12,000
22 Unearned Rent .....		—
23 Notes Payable .....		—
31 Sandy Ulrich, Capital .....		50,000
32 Sandy Ulrich, Drawing .....	25,600	
41 Fees Earned .....		338,000
51 Salary and Commission Expense .....	220,000	
52 Rent Expense .....	28,000	
53 Advertising Expense .....	18,400	
54 Automobile Expense .....	9,000	
59 Miscellaneous Expense .....	3,000	
	<u>400,000</u>	<u>400,000</u>

The following business transactions were completed by Prime Time Realty during August 2012:

- Aug. 1. Purchased office supplies on account, \$1,800.  
 2. Paid rent on office for month, \$5,000.  
 3. Received cash from clients on account, \$40,000.  
 5. Paid annual insurance premiums, \$6,000.  
 9. Returned a portion of the office supplies purchased on August 1, receiving full credit for their cost, \$400.  
 17. Paid advertising expense, \$5,500.  
 23. Paid creditors on account, \$7,000

Enter the following transactions on Page 19 of the two-column journal.

29. Paid miscellaneous expenses, \$500.  
 30. Paid automobile expense (including rental charges for an automobile), \$2,500.  
 31. Discovered an error in computing a commission; received cash from the salesperson for the overpayment, \$8,000.  
 31. Paid salaries and commissions for the month, \$18,000.  
 31. Recorded revenue earned and billed to clients during the month, \$112,000.  
 31. Purchased land for a future building site for \$75,000, paying \$10,000 in cash and giving a note payable for the remainder.  
 31. Withdrew cash for personal use, \$12,000.  
 31. Rented land purchased on August 31 to a local university for use as a parking lot during football season (September, October, and November); received advance payment of \$4,000.

**Instructions**

- Record the August 1 balance of each account in the appropriate balance column of a four-column account, write *Balance* in the item section, and place a check mark (✓) in the Posting Reference column.
- Journalize the transactions for August in a two-column journal beginning on Page 18. Journal entry explanations may be omitted.
- Post to the ledger, extending the account balance to the appropriate balance column after each posting.

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4. Prepare an unadjusted trial balance of the ledger as of August 31, 2012.
5. Assume that the August 31 transaction for Sandy Ulrich's cash withdrawal should have been \$1,200. (a) Why did the unadjusted trial balance in (4) balance? (b) Journalize the correcting entry. (c) Is this error a transposition or slide?

**OBJ. 4**

✓ 7. Total of Credit column: \$43,338.10

**PR 2-5B Errors in trial balance**

*If the working papers correlating with this textbook are not used, omit Problem 2-5B.*

The following records of A-Aall Electronic Repair are presented in the working papers:

- Journal containing entries for the period May 1–31.
- Ledger to which the May entries have been posted.
- Preliminary trial balance as of May 31, which does not balance.

Locate the errors, supply the information requested, and prepare a corrected trial balance according to the following instructions. The balances recorded in the accounts as of May 1 and the entries in the journal are correctly stated. If it is necessary to correct any posted amounts in the ledger, a line should be drawn through the erroneous figure and the correct amount inserted above. Corrections or notations may be inserted on the preliminary trial balance in any manner desired. It is not necessary to complete all of the instructions if equal trial balance totals can be obtained earlier. However, the requirements of instructions (6) and (7) should be completed in any event.

**Instructions**

1. Verify the totals of the preliminary trial balance, inserting the correct amounts in the schedule provided in the working papers.
2. Compute the difference between the trial balance totals. 2274573 2013/10/03 147.70.115.36
3. Compare the listings in the trial balance with the balances appearing in the ledger, and list the errors in the space provided in the working papers.
4. Verify the accuracy of the balance of each account in the ledger, and list the errors in the space provided in the working papers.
5. Trace the postings in the ledger back to the journal, using small check marks to identify items traced. Correct any amounts in the ledger that may be necessitated by errors in posting, and list the errors in the space provided in the working papers.
6. Journalize as of May 31 the payment of \$275 for gas and electricity. The bill had been paid on May 31 but was inadvertently omitted from the journal. Post to the ledger. (Revise any amounts necessitated by posting this entry.)
7. Prepare a new unadjusted trial balance.

**OBJ. 4**

✓ 1. Total of Debit column: \$285,000

**PR 2-6B Corrected trial balance**

Elite Video has the following unadjusted trial balance as of October 31, 2012.


Elite Video Unadjusted Trial Balance October 31, 2012		
	Debit Balances	Credit Balances
Cash .....	11,100	
Accounts Receivable .....	17,560	
Supplies .....	2,520	
Prepaid Insurance .....	1,840	
Equipment .....	64,800	
Notes Payable .....		31,600
Accounts Payable .....		6,160
Aimee Desanti, Capital .....		39,140
Aimee Desanti, Drawing .....	11,600	
Fees Earned .....		213,600
Wages Expense .....	122,400	
Rent Expense .....	25,020	
Advertising Expense .....	13,140	
Gas, Electricity, and Water Expense .....	6,800	
	276,780	290,500



The debit and credit totals are not equal as a result of the following errors:

- a. The balance of cash was overstated by \$7,500.
- b. A cash receipt of \$7,200 was posted as a debit to Cash of \$2,700.
- c. A debit of \$5,000 to Accounts Receivable was not posted.
- d. A return of \$350 of defective supplies was erroneously posted as a \$530 credit to Supplies.
- e. An insurance policy acquired at a cost of \$1,000 was posted as a credit to Prepaid Insurance.
- f. The balance of Notes Payable was overstated by \$10,000.
- g. A credit of \$500 in Accounts Payable was overlooked when the balance of the account was determined.
- h. A debit of \$4,000 for a withdrawal by the owner was posted as a debit to Aimee Desanti, Capital.
- i. The balance of \$11,340 in Advertising Expense was entered as \$13,140 in the trial balance.
- j. Miscellaneous Expense, with a balance of \$1,840, was omitted from the trial balance.

#### Instructions

1. Prepare a corrected unadjusted trial balance as of October 31 of the current year.
2.  Does the fact that the unadjusted trial balance in (1) is balanced mean that there are no errors in the accounts? Explain.

## Continuing Problem



✓ 4. Total of Debit column: \$40,030



The transactions completed by PS Music during June 2012 were described at the end of Chapter 1. The following transactions were completed during July, the second month of the business's operations:

- July
1. Pat Sharpe made an additional investment in PS Music by depositing \$4,000 in PS Music's checking account.
  1. Instead of continuing to share office space with a local real estate agency, Pat decided to rent office space near a local music store. Paid rent for July, \$1,800.
  1. Paid a premium of \$2,700 for a comprehensive insurance policy covering liability, theft, and fire. The policy covers a one-year period.
  2. Received \$1,250 on account.
  3. On behalf of PS Music, Pat signed a contract with a local radio station, WHBD, to provide guest spots for the next three months. The contract requires PS Music to provide a guest disc jockey for 80 hours per month for a monthly fee of \$3,600. Any additional hours beyond 80 will be billed to WHBD at \$40 per hour. In accordance with the contract, Pat received \$7,200 from WHBD as an advance payment for the first two months.
  3. Paid \$250 on account.
  4. Paid an attorney \$800 for reviewing the July 3rd contract with WHBD. (Record as Miscellaneous Expense.)
  5. Purchased office equipment on account from One-Stop Office Mart, \$6,000.
  8. Paid for a newspaper advertisement, \$200.
  11. Received \$900 for serving as a disc jockey for a party.
  13. Paid \$600 to a local audio electronics store for rental of digital recording equipment.
  14. Paid wages of \$1,200 to receptionist and part-time assistant.





Enter the following transactions on Page 2 of the two-column journal.

16. Received \$2,100 for serving as a disc jockey for a wedding reception.
18. Purchased supplies on account, \$1,080.
21. Paid \$620 to Upload Music for use of its current music demos in making various music sets.
22. Paid \$800 to a local radio station to advertise the services of PS Music twice daily for the remainder of July.
23. Served as disc jockey for a party for \$2,500. Received \$750, with the remainder due August 4, 2012.
27. Paid electric bill, \$760.
28. Paid wages of \$1,200 to receptionist and part-time assistant.
29. Paid miscellaneous expenses, \$370.
30. Served as a disc jockey for a charity ball for \$1,800. Received \$400, with the remainder due on August 9, 2012.
31. Received \$2,800 for serving as a disc jockey for a party.
31. Paid \$1,400 royalties (music expense) to National Music Clearing for use of various artists' music during July.
31. Withdrew \$1,500 cash from PS Music for personal use.

PS Music's chart of accounts and the balance of accounts as of July 1, 2012 (all normal balances), are as follows:

11 Cash	\$5,310	41 Fees Earned	\$6,650
12 Accounts Receivable	1,250	50 Wages Expense	400
14 Supplies	170	51 Office Rent Expense	750
15 Prepaid Insurance	—	52 Equipment Rent Expense	700
17 Office Equipment	—	53 Utilities Expense	300
21 Accounts Payable	250	54 Music Expense	1,590
23 Unearned Revenue	—	55 Advertising Expense	450
31 Pat Sharpe, Capital	5,000	56 Supplies Expense	180
32 Pat Sharpe, Drawing	500	59 Miscellaneous Expense	300


### Instructions

1. Enter the July 1, 2012, account balances in the appropriate balance column of a four-column account. Write *Balance* in the Item column, and place a check mark (✓) in the Posting Reference column. (*Hint:* Verify the equality of the debit and credit balances in the ledger before proceeding with the next instruction.)
2. Analyze and journalize each transaction in a two-column journal beginning on Page 1, omitting journal entry explanations.
3. Post the journal to the ledger, extending the account balance to the appropriate balance column after each posting.
4. Prepare an unadjusted trial balance as of July 31, 2012.

## Cases & Projects

### CP 2-1 Ethics and professional conduct in business

At the end of the current month, Jonni Rembert prepared a trial balance for Star Rescue Service. The credit side of the trial balance exceeds the debit side by a significant amount. Jonni has decided to add the difference to the balance of the miscellaneous expense account in order to complete the preparation of the current month's financial statements by a 5 o'clock deadline. Jonni will look for the difference next week when she has more time.

 Discuss whether Jonni is behaving in a professional manner.



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# Introduction to Accounting and Business

*Google™*

**W**hen two teams pair up for a game of football, there is often a lot of noise. The band plays, the fans cheer, and fireworks light up the scoreboard. Obviously, the fans are committed and care about the outcome of the game. Just like fans at a football game, the owners of a business want their business to “win” against their competitors in the marketplace. While having your football team win can be a source of pride, winning in the marketplace goes beyond pride and has many tangible benefits. Companies that are winners are better able to serve customers, provide good jobs for employees, and make money for their owners.

One such successful company is **Google**, one of the most visible companies on the Internet. Many of us cannot visit the Web without using Google to

power a search. As one writer said, “Google is the closest thing the Web has to an ultimate answer machine.” And yet, Google is a free tool—no one asks for your credit card when you use Google’s search tools.

Do you think Google has been a successful company? Does it make money? How would you know? Accounting helps to answer these questions. Google’s accounting information tells us that Google is a successful company that makes a lot of money, but not from you and me. Google makes its money from advertisers.

This textbook introduces you to accounting, the language of business. Chapter 1 begins by discussing what a business is, how it operates, and the role that accounting plays.





business entity concept, Chris Clark's personal assets, such as a home or personal bank account, and personal liabilities are excluded from the equation.

*Nov. 5, 2011 NetSolutions paid \$20,000 for the purchase of land as a future building site.* **Transaction B**

The land is located in a business park with access to transportation facilities. Chris Clark plans to rent office space and equipment during the first phase of the business plan. During the second phase, Chris plans to build an office and a warehouse on the land.

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The purchase of the land changes the makeup of the assets, but it does not change the total assets. The items in the equation prior to this transaction and the effect of the transaction are shown below. The new amounts are called *balances*.

Assets			=	Owner's Equity	
Cash	+	Land	}	Chris Clark, Capital	
Bal. 25,000				25,000	
b. -20,000		+20,000			
Bal. 5,000		20,000		25,000	

*Nov. 10, 2011 NetSolutions purchased supplies for \$1,350 and agreed to pay the supplier in the near future.* **Transaction C**

You have probably used a credit card to buy clothing or other merchandise. In this type of transaction, you received clothing for a promise to pay your credit card bill in the future. That is, you received an asset and incurred a liability to pay a future bill. Net-Solutions entered into a similar transaction by purchasing supplies for \$1,350 and agreeing to pay the supplier in the near future. This type of transaction is called a *purchase on account* and is often described as follows: *Purchased supplies on account, \$1,350.*

The liability created by a purchase on account is called an **account payable**. Items such as supplies that will be used in the business in the future are called **prepaid expenses**, which are assets. Thus, the effect of this transaction is to increase assets (Supplies) and liabilities (Accounts Payable) by \$1,350, as follows:

Assets				}	Liabilities + Owner's Equity	
Cash	+	Supplies	+		Land	Accounts Payable
Bal. 5,000				20,000		25,000
c. +1,350					+1,350	
Bal. 5,000		1,350		20,000	1,350	25,000

*Nov. 18, 2011 NetSolutions received cash of \$7,500 for providing services to customers.* **Transaction D**

You may have earned money by painting houses or mowing lawns. If so, you received money for rendering services to a customer. Likewise, a business earns money by selling goods or services to its customers. This amount is called **revenue**.

During its first month of operations, NetSolutions received cash of \$7,500 for providing services to customers. The receipt of cash increases NetSolutions' assets and also increases Chris Clark's equity in the business. The revenues of \$7,500 are recorded in a Fees Earned column to the right of Chris Clark, Capital. The effect of this transaction is to increase Cash and Fees Earned by \$7,500, as shown at the top of the next page.

Assets			=	Liabilities + Owner's Equity		
Cash	+ Supplies	+ Land		Accounts Payable	+ Chris Clark, Capital	+ Fees Earned
Bal. 5,000	1,350	20,000		1,350	25,000	
d. +7,500						+7,500
Bal. 12,500	1,350	20,000		1,350	25,000	7,500

Different terms are used for the various types of revenues. As illustrated above, revenue from providing services is recorded as **fees earned**. Revenue from the sale of merchandise is recorded as **sales**. Other examples of revenue include rent, which is recorded as **rent revenue**, and interest, which is recorded as **interest revenue**.

Instead of receiving cash at the time services are provided or goods are sold, a business may accept payment at a later date. Such revenues are described as *fees earned on account* or *sales on account*. For example, if NetSolutions had provided services on account instead of for cash, transaction (d) would have been described as follows: *Fees earned on account, \$7,500*.

In such cases, the firm has an **account receivable**, which is a claim against the customer. An account receivable is an asset, and the revenue is earned and recorded as if cash had been received. When customers pay their accounts, Cash increases and Accounts Receivable decreases.

**Transaction E** Nov. 30, 2011 NetSolutions paid the following expenses during the month: wages, \$2,125; rent, \$800; utilities, \$450; and miscellaneous, \$275.

During the month, NetSolutions spent cash or used up other assets in earning revenue. Assets used in this process of earning revenue are called **expenses**. Expenses include supplies used and payments for employee wages, utilities, and other services.

NetSolutions paid the following expenses during the month: wages, \$2,125; rent, \$800; utilities, \$450; and miscellaneous, \$275. Miscellaneous expenses include small amounts paid for such items as postage, coffee, and newspapers. The effect of expenses is the opposite of revenues in that expenses reduce assets and owner's equity. Like fees earned, the expenses are recorded in columns to the right of Chris Clark, Capital. However, since expenses reduce owner's equity, the expenses are entered as negative amounts. The effect of this transaction is shown below.

Assets			=	Liabilities + Owner's Equity							
Cash	+ Supplies	+ Land	=	Accounts Payable	+ Chris Clark, Capital	+ Fees Earned	- Wages Exp.	- Rent Exp.	- Utilities Exp.	- Misc. Exp.	
Bal. 12,500	1,350	20,000		1,350	25,000	7,500					
e. -3,650							-2,125	-800	-450	-275	
Bal. 8,850	1,350	20,000		1,350	25,000	7,500	-2,125	-800	-450	-275	

Businesses usually record each revenue and expense transaction as it occurs. However, to simplify, NetSolutions' revenues and expenses are summarized for the month in transactions (d) and (e).

**Transaction F** Nov. 30, 2011 NetSolutions paid creditors on account, \$950.

When you pay your monthly credit card bill, you decrease the cash in your checking account and decrease the amount you owe to the credit card company. Likewise, when NetSolutions pays \$950 to creditors during the month, it reduces assets and liabilities, as shown at the top of the next page.



Assets			=	Liabilities +		Owner's Equity						
Cash	+ Supplies	+ Land		Accounts Payable	+ Chris Clark, Capital	+ Fees Earned	- Wages Exp.	- Rent Exp.	- Utilities Exp.	- Misc. Exp.		
Bal. 8,850	1,350	20,000		1,350	25,000	7,500	-2,125	-800	-450	-275		
f. -950				-950								
Bal. 7,900	1,350	20,000		400	25,000	7,500	-2,125	-800	-450	-275		

Paying an amount on account is different from paying an expense. The paying of an expense reduces owner's equity, as illustrated in transaction (e). Paying an amount on account reduces the amount owed on a liability.

Nov. 30, 2011 *Chris Clark determined that the cost of supplies on hand at the end of the month was \$550.* **Transaction G**

The cost of the supplies on hand (not yet used) at the end of the month is \$550. Thus, \$800 (\$1,350 - \$550) of supplies must have been used during the month. This decrease in supplies is recorded as an expense, as shown below.

Assets			=	Liabilities +		Owner's Equity						
Cash	+ Supplies	+ Land		Accounts Payable	+ Chris Clark, Capital	+ Fees Earned	- Wages Exp.	- Rent Exp.	- Supplies Exp.	- Utilities Exp.	- Misc. Exp.	
Bal. 7,900	1,350	20,000		400	25,000	7,500	-2,125	-800		-450	-275	
g. -800									-800			
Bal. 7,900	550	20,000		400	25,000	7,500	-2,125	-800	-800	-450	-275	

Nov. 30, 2011 *Chris Clark withdrew \$2,000 from NetSolutions for personal use.*

**Transaction H**

At the end of the month, Chris Clark withdrew \$2,000 in cash from the business for personal use. This transaction is the opposite of an investment in the business by the owner. Withdrawals by the owner should not be confused with expenses. Withdrawals *do not* represent assets or services used in the process of earning revenues. Instead, withdrawals are a distribution of capital to the owner. Owner withdrawals are identified by the owner's name and *Drawing*. For example, Chris Clark's withdrawal is identified as Chris Clark, Drawing. Like expenses, withdrawals are recorded in a column to the right of Chris Clark, Capital. The effect of the \$2,000 withdrawal is as follows:

Assets			=	Liabilities +		Owner's Equity						
Cash	+ Supp.	+ Land		Accounts Payable	+ Chris Clark, Capital	+ Chris Clark, Drawing	+ Fees Earned	- Wages Exp.	- Rent Exp.	- Supplies Exp.	- Utilities Exp.	- Misc. Exp.
Bal. 7,900	550	20,000		400	25,000		7,500	-2,125	-800	-800	-450	-275
h. -2,000						-2,000						
Bal. 5,900	550	20,000		400	25,000	-2,000	7,500	-2,125	-800	-800	-450	-275

**Summary** The transactions of NetSolutions are summarized at the top of the next page. Each transaction is identified by letter, and the balance of each accounting equation element is shown after every transaction.

You should note the following:

1. The effect of every transaction is an increase or a decrease in one or more of the accounting equation elements.
2. The two sides of the accounting equation are always equal.
3. The owner's equity is increased by amounts invested by the owner and is decreased by withdrawals by the owner. In addition, the owner's equity is increased by revenues and is decreased by expenses.

Assets				=	Liabilities		+	Owner's Equity									
Cash	+ Supp.	+ Land	=	Payable	+ Capital	- Drawing	+ Earned	- Exp.	- Exp.	- Exp.	- Exp.	- Exp.	- Exp.	- Exp.	- Exp.	- Exp.	- Exp.
a. +25,000					+25,000												
b. -20,000		+20,000															
Bal. 5,000		20,000			25,000												
c. +1,350				+1,350													
Bal. 5,000	+1,350	20,000		+1,350	25,000												
d. +7,500							+7,500										
Bal. 12,500	1,350	20,000		1,350	25,000		7,500										
e. -3,650								-2,125	-800			-450	-275				
Bal. 8,850	1,350	20,000		1,350	25,000		7,500	-2,125	-800			-450	-275				
f. -950				-950													
Bal. 7,900	1,350	20,000		400	25,000		7,500	-2,125	-800			-450	-275				
g. -800									-800								
Bal. 7,900	550	20,000		400	25,000		7,500	-2,125	-800	-800		-450	-275				
h. -2,000						-2,000											
Bal. 5,900	550	20,000		400	25,000	-2,000	7,500	-2,125	-800	-800		-450	-275				

The four types of transactions affecting owner's equity are illustrated in Exhibit 5.

### EXHIBIT 5

#### Types of Transactions Affecting Owner's Equity



### Example Exercise 1-3 Transactions

OBJ.  
4

Salvo Delivery Service is owned and operated by Joel Salvo. The following selected transactions were completed by Salvo Delivery Service during February:

1. Received cash from owner as additional investment, \$35,000.
2. Paid creditors on account, \$1,800.
3. Billed customers for delivery services on account, \$11,250.
4. Received cash from customers on account, \$6,740.
5. Paid cash to owner for personal use, \$1,000.

Indicate the effect of each transaction on the accounting equation elements (Assets, Liabilities, Owner's Equity, Drawing, Revenue, and Expense). Also, indicate the specific item within the accounting equation element that is affected. To illustrate, the answer to (1) is shown below.

- (1) Asset (Cash) increases by \$35,000; Owner's Equity (Joel Salvo, Capital) increases by \$35,000.

#### Follow My Example 1-3

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- (2) Asset (Cash) decreases by \$1,800; Liability (Accounts Payable) decreases by \$1,800.
- (3) Asset (Accounts Receivable) increases by \$11,250; Revenue (Delivery Service Fees) increases by \$11,250.
- (4) Asset (Cash) increases by \$6,740; Asset (Accounts Receivable) decreases by \$6,740.
- (5) Asset (Cash) decreases by \$1,000; Drawing (Joel Salvo, Drawing) increases by \$1,000.

Practice Exercises: PE 1-3A, PE 1-3B



## Financial Statements



Describe the financial statements of a proprietorship and explain how they interrelate.

After transactions have been recorded and summarized, reports are prepared for users. The accounting reports providing this information are called **financial statements**. The primary financial statements of a proprietorship are the income statement, the statement of owner's equity, the balance sheet, and the statement of cash flows. The order that the financial statements are prepared and the nature of each statement is described as follows.

Order Prepared	Financial Statement	Description of Statement
1.	<b>Income statement</b>	A summary of the revenue and expenses <i>for a specific period of time</i> , such as a month or a year.
2.	<b>Statement of owner's equity</b>	A summary of the changes in the owner's equity that have occurred <i>during a specific period of time</i> , such as a month or a year.
3.	<b>Balance sheet</b>	A list of the assets, liabilities, and owner's equity <i>as of a specific date</i> , usually at the close of the last day of a month or a year.
4.	<b>Statement of cash flows</b>	A summary of the cash receipts and cash payments for a <i>specific period of time</i> , such as a month or a year.

The four financial statements and their interrelationships are illustrated in Exhibit 6, on page 17. The data for the statements are taken from the summary of transactions of NetSolutions on page 14.

All financial statements are identified by the name of the business, the title of the statement, and the *date or period of time*. The data presented in the income statement, the statement of owner's equity, and the statement of cash flows are for a period of time. The data presented in the balance sheet are for a specific date.

## Income Statement

The income statement reports the revenues and expenses for a period of time, based on the **matching concept**. This concept is applied by *matching* the expenses incurred during a period with the revenue that those expenses generated. The excess of the revenue over the expenses is called **net income**, net profit, or **earnings**. If the expenses exceed the revenue, the excess is a **net loss**.

The revenue and expenses for NetSolutions were shown in the equation as separate increases and decreases. Net income for a period increases the owner's equity (capital) for the period. A net loss decreases the owner's equity (capital) for the period.

The revenue, expenses, and the net income of \$3,050 for NetSolutions are reported in the income statement in Exhibit 6, on page 17. The order in which the expenses are listed in the income statement varies among businesses. Most businesses list expenses in order of size, beginning with the larger items. Miscellaneous expense is usually shown as the last item, regardless of the amount.

### Note:

When revenues exceed expenses, it is referred to as **net income**, **net profits**, or **earnings**. When expenses exceed revenues, it is referred to as **net loss**.

### Example Exercise 1-4 Income Statement



The revenues and expenses of Chickadee Travel Service for the year ended April 30, 2012, are listed below.

Fees earned	\$263,200
Miscellaneous expense	12,950
Office expense	63,000
Wages expense	131,700

Prepare an income statement for the current year ended April 30, 2012.

(Continued)

**Follow My Example 1-4**

Chickadee Travel Service Income Statement For the Year Ended April 30, 2012	
Fees earned .....	\$263,200
Expenses:	
Wages expense .....	\$131,700
Office expense .....	63,000
Miscellaneous expense .....	12,950
Total expenses .....	<u>207,650</u>
Net income .....	<u>\$ 55,550</u>

Practice Exercises: **PE 1-4A, PE 1-4B****Statement of Owner's Equity**

The statement of owner's equity reports the changes in the owner's equity for a period of time. It is prepared *after* the income statement because the net income or net loss for the period must be reported in this statement. Similarly, it is prepared *before* the balance sheet, since the amount of owner's equity at the end of the period must be reported on the balance sheet. Because of this, the statement of owner's equity is often viewed as the connecting link between the income statement and balance sheet.

Three types of transactions affected owner's equity of NetSolutions during November:

1. the original investment of \$25,000,
2. the revenue and expenses that resulted in net income of \$3,050 for the month, and
3. a withdrawal of \$2,000 by the owner.

The preceding information is summarized in the statement of owner's equity in Exhibit 6.

**Example Exercise 1-5 Statement of Owner's Equity****OBJ.**  
**5**

Using the income statement for Chickadee Travel Service shown in Example Exercise 1-4, prepare a statement of owner's equity for the year ended April 30, 2012. Adam Cellini, the owner, invested an additional \$50,000 in the business and withdrew cash of \$30,000 for personal use during the year. The capital of the owner, Adam Cellini, was \$80,000 on May 1, 2011, the beginning of the current year.

**Follow My Example 1-5**

Chickadee Travel Service Statement of Owner's Equity For the Year Ended April 30, 2012	
Adam Cellini, capital, May 1, 2011 .....	\$ 80,000
Additional investment by owner during year .....	\$ 50,000
Net income for the year .....	55,550
	<u>\$105,550</u>
Less withdrawals .....	<u>30,000</u>
Increase in owner's equity .....	75,550
Adam Cellini, capital, April 30, 2012 .....	<u>\$155,550</u>

Practice Exercises: **PE 1-5A, PE 1-5B****Balance Sheet**

The balance sheet in Exhibit 6 reports the amounts of NetSolutions' assets, liabilities, and owner's equity as of November 30, 2011. The asset and liability amounts are taken from the last line of the summary of transactions on page 14. Chris Clark, Capital



**EXHIBIT 6****Financial  
Statements for  
NetSolutions****NetSolutions  
Income Statement  
For the Month Ended November 30, 2011**

Fees earned .....		\$7,500
Expenses:		
Wages expense .....	\$2,125	
Rent expense .....	800	
Supplies expense .....	800	
Utilities expense .....	450	
Miscellaneous expense .....	275	
Total expense .....		<u>4,450</u>
Net income .....		<u>\$3,050</u>

**NetSolutions  
Statement of Owner's Equity  
For the Month Ended November 30, 2011**

Chris Clark, capital, November 1, 2011 .....		\$ 0
Investment on November 1, 2011 .....	\$25,000	
Net income for November .....	<u>3,050</u>	
	\$28,050	
Less withdrawals .....	<u>2,000</u>	
Increase in owner's equity .....		26,050
Chris Clark, capital, November 30, 2011 .....		<u>\$26,050</u>

**NetSolutions  
Balance Sheet  
November 30, 2011**

Assets		Liabilities	
Cash .....	\$ 5,900	Accounts payable .....	\$ 400
Supplies .....	550	<b>Owner's Equity</b>	
Land .....	20,000	Chris Clark, capital .....	<u>26,050</u>
Total assets .....	<u>\$26,450</u>	Total liabilities and owner's equity .....	<u>\$26,450</u>

**NetSolutions  
Statement of Cash Flows  
For the Month Ended November 30, 2011**

Cash flows from operating activities:	
Cash received from customers .....	\$ 7,500
Deduct cash payments for expenses and payments	
to creditors .....	<u>4,600</u>
Net cash flow from operating activities .....	<u>2,900</u>
Cash flows from investing activities:	
Cash payments for purchase of land .....	(20,000)
Cash flows from financing activities:	
Cash received as owner's investment .....	\$25,000
Deduct cash withdrawal by owner .....	<u>2,000</u>
Net cash flow from financing activities .....	23,000
Net cash flow and November 30, 2011, cash balance .....	<u>\$ 5,900</u>



Bank loan officers use a business's financial statements in deciding whether to grant a loan to the business. Once the loan is granted, the borrower may be required to maintain a certain level of assets in excess of liabilities. The business's financial statements are used to monitor this level.

as of November 30, 2011, is taken from the statement of owner's equity. The form of balance sheet shown in Exhibit 6 is called the **account form**. This is because it resembles the basic format of the accounting equation, with assets on the left side and the liabilities and owner's equity sections on the right side.<sup>3</sup>

The assets section of the balance sheet presents assets in the order that they will be converted into cash or used in operations. Cash is presented first, followed by receivables, supplies, prepaid insurance, and other assets. The assets of a more permanent nature are shown next, such as land, buildings, and equipment.

In the liabilities section of the balance sheet in Exhibit 6, accounts payable is the only liability. When there are two or more liabilities, each should be listed and the total amount of liabilities presented as follows:

Liabilities		
Accounts payable	\$12,900	
Wages payable	<u>2,570</u>	
Total liabilities		\$15,470

### Example Exercise 1-6 Balance Sheet

OBJ.  
5

Using the following data for Chickadee Travel Service as well as the statement of owner's equity shown in Example Exercise 1-5, prepare a balance sheet as of April 30, 2012.

Accounts receivable	\$31,350
Accounts payable	12,200
Cash	53,050
Land	80,000
Supplies	3,350

### Follow My Example 1-6

#### Chickadee Travel Service Balance Sheet April 30, 2012

Assets		Liabilities	
Cash.....	\$ 53,050	Accounts payable.....	\$ 12,200
Accounts receivable .....	31,350		
Supplies .....	3,350		
Land.....	<u>80,000</u>		
Total assets.....	<u>\$167,750</u>		
		Owner's Equity	
		Adam Cellini, capital .....	<u>155,550</u>
		Total liabilities and owner's equity .....	<u>\$167,750</u>

Practice Exercises: **PE 1-6A, PE 1-6B**

## Statement of Cash Flows

The statement of cash flows consists of the following three sections, as shown in Exhibit 6:

1. operating activities,
2. investing activities, and
3. financing activities.

Each of these sections is briefly described below.

**Cash Flows from Operating Activities** This section reports a summary of cash receipts and cash payments from operations. The net cash flow from operating activities normally differs from the amount of net income for the period. In Exhibit 6, NetSolutions

<sup>3</sup> An alternative form of balance sheet, called the *report form*, is illustrated in Chapter 6. It presents the liabilities and owner's equity sections below the assets section.

reported net cash flows from operating activities of \$2,900 and net income of \$3,050. This difference occurs because revenues and expenses may not be recorded at the same time that cash is received from customers or paid to creditors.

**Cash Flows from Investing Activities** This section reports the cash transactions for the acquisition and sale of relatively permanent assets. Exhibit 6 reports that NetSolutions paid \$20,000 for the purchase of land during November.

**Cash Flows from Financing Activities** This section reports the cash transactions related to cash investments by the owner, borrowings, and withdrawals by the owner. Exhibit 6 shows that Chris Clark invested \$25,000 in the business and withdrew \$2,000 during November.

Preparing the statement of cash flows requires that each of the November cash transactions for NetSolutions be classified as an operating, investing, or financing activity. Using the summary of transactions shown on page 14, the November cash transactions for NetSolutions are classified as follows:

Transaction	Amount	Cash Flow Activity
a.	\$25,000	Financing (Investment by Chris Clark)
b.	-20,000	Investing (Purchase of land)
d.	7,500	Operating (Fees earned)
e.	-3,650	Operating (Payment of expenses)
f.	-950	Operating (Payment of account payable)
h.	-2,000	Financing (Withdrawal by Chris Clark)

Transactions (c) and (g) are not listed above since they did not involve a cash receipt or payment. In addition, the payment of accounts payable in transaction (f) is classified as an operating activity since the account payable arose from the purchase of supplies, which are used in operations. Using the preceding classifications of November cash transactions, the statement of cash flows is prepared as shown in Exhibit 6.<sup>4</sup>

The ending cash balance shown on the statement of cash flows is also reported on the balance sheet as of the end of the period. To illustrate, the ending cash of \$5,900 reported on the November statement of cash flows in Exhibit 6 is also reported as the amount of cash on hand in the November 30, 2011, balance sheet.

Since November is NetSolutions' first period of operations, the net cash flow for November and the November 30, 2011, cash balance are the same amount, \$5,900, as shown in Exhibit 6. In later periods, NetSolutions will report in its statement of cash flows a beginning cash balance, an increase or a decrease in cash for the period, and an ending cash balance. For example, assume that for December NetSolutions has a decrease in cash of \$3,835. The last three lines of NetSolutions' statement of cash flows for December would be as follows:

Decrease in cash	\$3,835
Cash as of December 1, 2011	5,900
Cash as of December 31, 2011	<u>\$2,065</u>

### Example Exercise 1-7 Statement of Cash Flows

OBJ.  
5

A summary of cash flows for Chickadee Travel Service for the year ended April 30, 2012, is shown below.

Cash receipts:	
Cash received from customers .....	\$251,000
Cash received from additional investment of owner .....	50,000
Cash payments:	
Cash paid for expenses .....	210,000
Cash paid for land .....	80,000
Cash paid to owner for personal use .....	30,000

The cash balance as of May 1, 2011, was \$72,050. Prepare a statement of cash flows for Chickadee Travel Service for the year ended April 30, 2012.

(Continued)

<sup>4</sup>This method of preparing the statement of cash flows is called the "direct method." This method and the indirect method are discussed further in Chapter 16.



## Follow My Example 1-7

**Chickadee Travel Service**  
**Statement of Cash Flows**  
**For the Year Ended April 30, 2012**

Cash flows from operating activities:		
Cash received from customers .....	\$251,000	
Deduct cash payments for expenses .....	<u>210,000</u>	
Net cash flows from operating activities .....		\$ 41,000
Cash flows from investing activities:		
Cash payments for purchase of land .....		(80,000)
Cash flows from financing activities:		
Cash received from owner as investment .....	\$ 50,000	
Deduct cash withdrawals by owner .....	<u>30,000</u>	
Net cash flows from financing activities .....		<u>20,000</u>
Net decrease in cash during year .....		<u>\$(19,000)</u>
Cash as of May 1, 2011 .....		<u>72,050</u>
Cash as of April 30, 2012 .....		<u>\$ 53,050</u>

Practice Exercises: **PE 1-7A, PE 1-7B**

## Interrelationships Among Financial Statements

Financial statements are prepared in the order of the income statement, statement of owner's equity, balance sheet, and statement of cash flows. This order is important because the financial statements are interrelated. These interrelationships for NetSolutions are shown in Exhibit 6 and are described below.<sup>5</sup>

Financial Statements	Interrelationship	NetSolutions Example (Exhibit 6)
Income Statement and Statement of Owner's Equity	Net income or net loss reported on the income statement is also reported on the statement of owner's equity as either an addition (net income) to or deduction (net loss) from the beginning owner's equity and any additional investments by the owner during the period.	NetSolutions' net income of \$3,050 for November is added to Chris Clark's investment of \$25,000 in the statement of owner's equity.
Statement of Owner's Equity and Balance Sheet	Owner's capital at the end of the period reported on the statement of owner's equity is also reported on the balance sheet as owner's capital.	Chris Clark, Capital of \$26,050 as of November 30, 2011, on the statement of owner's equity also appears on the November 30, 2011, balance sheet as Chris Clark, Capital.
Balance Sheet and Statement of Cash Flows	The cash reported on the balance sheet is also reported as the end-of-period cash on the statement of cash flows.	Cash of \$5,900 reported on the balance sheet as of November 30, 2011, is also reported on the November statement of cash flows as the end-of-period cash.

The preceding interrelationships are important in analyzing financial statements and the impact of transactions on a business. In addition, these interrelationships serve as a check on whether the financial statements are prepared correctly. For example, if the ending cash on the statement of cash flows doesn't agree with the balance sheet cash, then an error has occurred.

<sup>5</sup> Depending on the method of preparing the cash flows from operating activities section of the statement of cash flows, net income (or net loss) may also appear on the statement of cash flows. This interrelationship or method of preparing the statement of cash flows, called the "indirect method," is described and illustrated in Chapter 16.

## Financial Analysis and Interpretation: Ratio of Liabilities to Owner's Equity



**OBJ. 6** Describe and illustrate the use of the ratio of liabilities to owner's equity in evaluating a company's financial condition.

The basic financial statements illustrated in this chapter are useful to bankers, creditors, owners, and others in analyzing and interpreting the financial performance and condition of a company. Throughout this text, various tools and techniques that are often used to analyze and interpret a company's financial performance and condition are described and illustrated. The first such tool that is discussed is useful in analyzing the ability of a company to pay its creditors.

The relationship between liabilities and owner's equity, expressed as a **ratio of liabilities to owner's equity**, is computed as follows:

$$\text{Ratio of Liabilities to Owner's Equity} = \frac{\text{Total Liabilities}}{\text{Total Owner's Equity (or Total Stockholders' Equity)}}$$

NetSolutions' ratio of liabilities to owner's equity at the end of November is 0.015, as computed below.

$$\text{Ratio of Liabilities to Owner's Equity} = \frac{\$400}{\$26,050} = 0.015$$

Corporations refer to total owner's equity as total stockholders' equity. Thus, total stockholders' equity is substituted for total owner's equity when computing this ratio.

To illustrate, balance sheet data (in millions) for [Google Inc.](#) and [McDonald's Corporation](#) are shown below.

	Dec. 31, 2009	Dec. 31, 2008
Google Inc.		
Total liabilities	\$ 3,529	\$ 2,646
Total stockholders' equity	28,239	22,690
McDonald's Corporation		
Total liabilities	\$15,079	\$14,112
Total stockholders' equity	13,383	15,280

The ratio of liabilities to stockholders' equity as of December 31, 2009 and 2008 for Google and McDonald's is computed below.

	Dec. 31, 2009	Dec. 31, 2008
Google Inc.		
Total liabilities	\$ 3,529	\$ 2,646
Total stockholders' equity	28,239	22,690
Ratio of liabilities to stockholders' equity	0.12	0.12
	(\$3,529/\$28,239)	(\$2,646/\$22,690)
McDonald's Corporation		
Total liabilities	\$15,079	\$14,112
Total stockholders' equity	13,383	15,280
Ratio of liabilities to stockholders' equity	1.13	0.92
	(\$15,079/\$13,383)	(\$14,112/\$15,280)

The rights of creditors to a business's assets come before the rights of the owners or stockholders. Thus, the lower the ratio of liabilities to owner's equity, the better able the company is to withstand poor business conditions and pay its obligations to creditors.

Google is unusual in that it has a very low amount of liabilities; thus, its ratio of liabilities to stockholders' equity of 0.12 is small. In contrast, McDonald's has more

liabilities; its ratio of liabilities to stockholders' equity is 1.13 and 0.92 on December 31, 2009 and 2008, respectively. Since McDonald's ratio of liabilities to stockholders' equity increased slightly from 2008 to 2009, its creditors are slightly more at risk on December 31, 2009, as compared to December 31, 2008. Also, McDonald's creditors are more at risk than are Google's creditors. The creditors of both companies are, however, well protected against the risk of nonpayment.

### Example Exercise 1-8 Ratio of Liabilities to Owner's Equity

**OBJ.**  
6

The following data were taken from Hawthorne Company's balance sheet:

	Dec. 31, 2012	Dec. 31, 2011
Total liabilities	\$120,000	\$105,000
Total owner's equity	80,000	75,000

- Compute the ratio of liabilities to owner's equity.
- Has the creditors' risk increased or decreased from December 31, 2011, to December 31, 2012?

#### Follow My Example 1-8

a.	Dec. 31, 2012	Dec. 31, 2011
Total liabilities	\$120,000	\$105,000
Total owner's equity	80,000	75,000
Ratio of liabilities to owner's equity	1.50	1.40
	(\$120,000/\$80,000)	(\$105,000/\$75,000)

- Increased

Practice Exercises: **PE 1-8A, PE 1-8B**

## At a Glance 1

**OBJ.**  
1

**Describe the nature of a business, the role of accounting, and ethics in business.**

**Key Points** A business provides goods or services (outputs) to customers with the objective of earning a profit. Three types of businesses include service, merchandising, and manufacturing businesses.

Accounting is an information system that provides reports to users about the economic activities and condition of a business.

Ethics are moral principles that guide the conduct of individuals. Good ethical conduct depends on individual character and firm culture.

Accountants are engaged in private accounting or public accounting.

#### Learning Outcomes

- Distinguish among service, merchandising, and manufacturing businesses.
- Describe the role of accounting in business and explain why accounting is called the "language of business."
- Define ethics and list the two factors affecting ethical conduct.
- Describe what private and public accounting means.

**Example  
Exercises**
**Practice  
Exercises**



**OBJ.**  
**2****Summarize the development of accounting principles and relate them to practice.**

**Key Points** Generally accepted accounting principles (GAAP) are used in preparing financial statements. Accounting principles and concepts develop from research, practice, and pronouncements of authoritative bodies.

The business entity concept views the business as an entity separate from its owners, creditors, or other businesses. Businesses may be organized as proprietorships, partnerships, corporations, and limited liability companies. The cost concept requires that purchases of a business be recorded in terms of actual cost. The objectivity concept requires that the accounting records and reports be based on objective evidence. The unit of measure concept requires that economic data be recorded in dollars.

**Learning Outcomes**

- Explain what is meant by generally accepted accounting principles.
- Describe how generally accepted accounting principles are developed.
- Describe and give an example of what is meant by the business entity concept.
- Describe the characteristics of a proprietorship, partnership, corporation, and limited liability company.
- Describe and give an example of what is meant by the cost concept.
- Describe and give an example of what is meant by the objectivity concept.
- Describe and give an example of what is meant by the unit of measure concept.

**Example  
Exercises****Practice  
Exercises****EE1-1****PE1-1A, 1-1B****OBJ.**  
**3****State the accounting equation and define each element of the equation.**

**Key Points** The resources owned by a business and the rights or claims to these resources may be stated in the form of an equation, as follows:

$$\text{Assets} = \text{Liabilities} + \text{Owner's Equity}$$

**Learning Outcomes**

- State the accounting equation.
- Define assets, liabilities, and owner's equity.
- Given two elements of the accounting equation, solve for the third element.

**Example  
Exercises****Practice  
Exercises****EE1-2****PE1-2A, 1-2B****OBJ.**  
**4****Describe and illustrate how business transactions can be recorded in terms of the resulting change in the elements of the accounting equation.**

**Key Points** All business transactions can be stated in terms of the change in one or more of the three elements of the accounting equation.

**Learning Outcomes**

- Define a business transaction.
- Using the accounting equation as a framework, record transactions.

**Example  
Exercises****Practice  
Exercises****EE1-3****PE1-3A, 1-3B**

**OBJ.**  
**5****Describe the financial statements of a proprietorship and explain how they interrelate.**

**Key Points** The primary financial statements of a proprietorship are the income statement, the statement of owner's equity, the balance sheet, and the statement of cash flows. The income statement reports a period's net income or net loss, which is also reported on the statement of owner's equity. The ending owner's capital reported on the statement of owner's equity is also reported on the balance sheet. The ending cash balance is reported on the balance sheet and the statement of cash flows.

**Learning Outcomes**

- List and describe the financial statements of a proprietorship.
- Prepare an income statement.
- Prepare a statement of owner's equity.
- Prepare a balance sheet.
- Prepare a statement of cash flows.
- Explain how the financial statements of a proprietorship are interrelated.

**Example  
Exercises****EE1-4****EE1-5****EE1-6****EE1-7****Practice  
Exercises****PE1-4A, 1-4B****PE1-5A, 1-5B****PE1-6A, 1-6B****PE1-7A, 1-7B****OBJ.**  
**6****Describe and illustrate the use of the ratio of liabilities to owner's equity in evaluating a company's financial condition.**

**Key Points** A ratio useful in analyzing the ability of a business to pay its creditors is the ratio of liabilities to owner's (stockholders') equity. The lower the ratio of liabilities to owner's equity, the better able the company is to withstand poor business conditions and pay its obligations to creditors.

**Learning Outcomes**

- Describe the usefulness of the ratio of liabilities to owner's (stockholders') equity.
- Compute the ratio of liabilities to owner's (stockholders') equity.

**Example  
Exercises****EE1-8****Practice  
Exercises****PE1-8A, 1-8B****Key Terms**

account form (18)  
account payable (11)  
account receivable (12)  
accounting (3)  
accounting equation (9)  
assets (9)  
balance sheet (15)  
business (2)  
business entity concept (7)  
business transaction (9)  
Certified Public Accountant (CPA) (6)  
corporation (8)

cost concept (8)  
earnings (15)  
ethics (4)  
expenses (12)  
fees earned (12)  
financial accounting (3)  
Financial Accounting Standards Board (FASB) (7)  
financial statements (15)  
general-purpose financial statements (4)  
generally accepted accounting principles (GAAP) (6)

income statement (15)  
interest revenue (12)  
International Accounting Standards Board (IASB) (7)  
liabilities (9)  
limited liability company (LLC) (8)  
management (or managerial) accounting (3)  
manufacturing business (2)  
matching concept (15)  
merchandising business (2)  
net income (or net profit) (15)

net loss (15)  
 objectivity concept (8)  
 owner's equity (9)  
 partnership (7)  
 prepaid expenses (11)  
 private accounting (3)  
 profit (2)

proprietorship (7)  
 public accounting (6)  
 ratio of liabilities to owner's  
 (stockholders') equity (21)  
 rent revenue (12)  
 revenue (11)  
 sales (12)

Securities and Exchange  
 Commission (SEC) (7)  
 service business (2)  
 statement of cash flows (15)  
 statement of owner's  
 equity (15)  
 unit of measure concept (8)

## Illustrative Problem

Cecil Jameson, Attorney-at-Law, is a proprietorship owned and operated by Cecil Jameson. On July 1, 2011, Cecil Jameson, Attorney-at-Law, has the following assets and liabilities: cash, \$1,000; accounts receivable, \$3,200; supplies, \$850; land, \$10,000; accounts payable, \$1,530. Office space and office equipment are currently being rented, pending the construction of an office complex on land purchased last year. Business transactions during July are summarized as follows:

- a. Received cash from clients for services, \$3,928.
- b. Paid creditors on account, \$1,055.
- c. Received cash from Cecil Jameson as an additional investment, \$3,700.
- d. Paid office rent for the month, \$1,200.
- e. Charged clients for legal services on account, \$2,025.
- f. Purchased supplies on account, \$245.
- g. Received cash from clients on account, \$3,000.
- h. Received invoice for paralegal services from Legal Aid Inc. for July (to be paid on August 10), \$1,635.
- i. Paid the following: wages expense, \$850; answering service expense, \$250; utilities expense, \$325; and miscellaneous expense, \$75.
- j. Determined that the cost of supplies on hand was \$980; therefore, the cost of supplies used during the month was \$115.
- k. Jameson withdrew \$1,000 in cash from the business for personal use.

### Instructions

1. Determine the amount of owner's equity (Cecil Jameson's capital) as of July 1, 2011.
2. State the assets, liabilities, and owner's equity as of July 1 in equation form similar to that shown in this chapter. In tabular form below the equation, indicate the increases and decreases resulting from each transaction and the new balances after each transaction.
3. Prepare an income statement for July, a statement of owner's equity for July, and a balance sheet as of July 31, 2011.
4. (Optional). Prepare a statement of cash flows for July.

### Solution

1.

$$\begin{aligned}
 &\text{Assets} - \text{Liabilities} = \text{Owner's Equity (Cecil Jameson, capital)} \\
 &(\$1,000 + \$3,200 + \$850 + \$10,000) - \$1,530 = \text{Owner's Equity (Cecil Jameson, capital)} \\
 &\$15,050 - \$1,530 = \text{Owner's Equity (Cecil Jameson, capital)} \\
 &\$13,520 = \text{Owner's Equity (Cecil Jameson, capital)}
 \end{aligned}$$



2.

Assets					=	Liabilities +		Owner's Equity																					
	Cash	+	Accts. Rec.	+	Supp.	+	Land	=	Accts Pay.	+	Cecil Jameson, Capital	-	Cecil Jameson, Drawing	+	Fees Earned	-	Paralegal Exp.	-	Rent Exp.	-	Wages Exp.	-	Utilities Exp.	-	Answering Service Exp.	-	Supp. Exp.	-	Misc. Exp.
Bal.	1,000		3,200		850		10,000		1,530		13,520																		
a.	+3,928														3,928														
Bal.	4,928		3,200		850		10,000		1,530		13,520				3,928														
b.	-1,055								-1,055																				
Bal.	3,873		3,200		850		10,000		475		13,520				3,928														
c.	+3,700										+3,700																		
Bal.	7,573		3,200		850		10,000		475		17,220				3,928														
d.	-1,200																		-1,200										
Bal.	6,373		3,200		850		10,000		475		17,220				3,928				-1,200										
e.			+2,025												+2,025														
Bal.	6,373		5,225		850		10,000		475		17,220				5,953				-1,200										
f.					+245				+245																				
Bal.	6,373		5,225		1,095		10,000		720		17,220				5,953				-1,200										
g.	+3,000		-3,000																										
Bal.	9,373		2,225		1,095		10,000		720		17,220				5,953				-1,200										
h.									+1,635								-1,635												
Bal.	9,373		2,225		1,095		10,000		2,355		17,220				5,953		-1,635		-1,200										
i.	-1,500																			-850		-325			-250				-75
Bal.	7,873		2,225		1,095		10,000		2,355		17,220				5,953		-1,635		-1,200		-850		-325		-250				-75
j.					-115																						-115		
Bal.	7,873		2,225		980		10,000		2,355		17,220				5,953		-1,635		-1,200		-850		-325		-250			-115	-75
k.	-1,000												-1,000																
Bal.	6,873		2,225		980		10,000		2,355		17,220		-1,000		5,953		-1,635		-1,200		-850		-325		-250		-115	-75	

3.

**Cecil Jameson, Attorney-at-Law**  
**Income Statement**  
**For the Month Ended July 31, 2011**

Fees earned .....	\$5,953
Expenses:	
Paralegal expense .....	\$1,635
Rent expense .....	1,200
Wages expense .....	850
Utilities expense .....	325
Answering service expense .....	250
Supplies expense .....	115
Miscellaneous expense .....	75
Total expenses .....	4,450
Net income .....	<u>\$1,503</u>

**Cecil Jameson, Attorney-at-Law**  
**Statement of Owner's Equity**  
**For the Month Ended July 31, 2011**

Cecil Jameson, capital, July 1, 2011 .....	\$13,520
Additional investment by owner .....	3,700
Net income for the month .....	1,503
	<u>\$5,203</u>
Less withdrawals .....	1,000
Increase in owner's equity .....	4,203
Cecil Jameson, capital, July 31, 2011 .....	<u>\$17,723</u>

(continued)

**Cecil Jameson, Attorney-at-Law**  
**Balance Sheet**  
**July 31, 2011**

Assets		Liabilities	
Cash .....	\$ 6,873	Accounts payable .....	\$ 2,355
Accounts receivable .....	2,225	<b>Owner's Equity</b>	
Supplies .....	980	Cecil Jameson, capital .....	17,723
Land .....	10,000	Total liabilities and owner's	
Total assets .....	<u>\$20,078</u>	equity .....	<u>\$20,078</u>

## 4. Optional.

**Cecil Jameson, Attorney-at-Law**  
**Statement of Cash Flows**  
**For the Month Ended July 31, 2011**

Cash flows from operating activities:		
Cash received from customers .....	\$6,928*	
Deduct cash payments for operating expenses .....	<u>3,755**</u>	
Net cash flows from operating activities .....		\$3,173
Cash flows from investing activities: .....		
Cash flows from financing activities:		
Cash received from owner as investment .....	\$3,700	
Deduct cash withdrawals by owner .....	<u>1,000</u>	
Net cash flows from financing activities .....		2,700
Net increase in cash during year .....		\$5,873
Cash as of July 1, 2011 .....		<u>1,000</u>
Cash as of July 31, 2011 .....		<u>\$6,873</u>

\*\$6,928 = \$3,928 + \$3,000

\*\*\$3,755 = \$1,055 + \$1,200 + \$1,500

## Discussion Questions

1. Name some users of accounting information.
2. What is the role of accounting in business?
3. Why are most large companies like **Microsoft**, **PepsiCo**, **Caterpillar**, and **AutoZone** organized as corporations?
4. Murray Stoltz is the owner of Ontime Delivery Service. Recently, Murray paid interest of \$3,200 on a personal loan of \$60,000 that he used to begin the business. Should Ontime Delivery Service record the interest payment? Explain.
5. On October 3, A2Z Repair Service extended an offer of \$75,000 for land that had been priced for sale at \$90,000. On November 23, A2Z Repair Service accepted the seller's counteroffer of \$82,000. Describe how A2Z Repair Service should record the land.
6. a. Land with an assessed value of \$400,000 for property tax purposes is acquired by a business for \$525,000. Ten years later, the plot of land has an assessed value of \$700,000 and the business receives an offer of \$1,000,000 for it. Should the monetary amount assigned to the land in the business records now be increased?
  - b. Assuming that the land acquired in (a) was sold for \$1,000,000, how would the various elements of the accounting equation be affected?



7. Describe the difference between an account receivable and an account payable.
8. A business had revenues of \$430,000 and operating expenses of \$615,000. Did the business (a) incur a net loss or (b) realize net income?
9. A business had revenues of \$825,000 and operating expenses of \$708,000. Did the business (a) incur a net loss or (b) realize net income?
10. What particular item of financial or operating data appears on both the income statement and the statement of owner's equity? What item appears on both the balance sheet and the statement of owner's equity? What item appears on both the balance sheet and the statement of cash flows?

## Practice Exercises

### Learning Objectives

OBJ. 2

### Example Exercises

EE 1-1 p. 8

#### PE 1-1A Cost concept

On June 10, Easy Repair Service extended an offer of \$95,000 for land that had been priced for sale at \$118,500. On August 2, Easy Repair Service accepted the seller's counteroffer of \$105,000. On August 27, the land was assessed at a value of \$80,000 for property tax purposes. On April 1, Easy Repair Service was offered \$125,000 for the land by a national retail chain. At what value should the land be recorded in Easy Repair Service's records?

OBJ. 2

EE 1-1 p. 8

#### PE 1-1B Cost concept

On February 7, AAA Repair Service extended an offer of \$50,000 for land that had been priced for sale at \$65,000. On February 21, AAA Repair Service accepted the seller's counteroffer of \$57,500. On April 30, the land was assessed at a value of \$40,000 for property tax purposes. On August 30, AAA Repair Service was offered \$90,000 for the land by a national retail chain. At what value should the land be recorded in AAA Repair Service's records?

OBJ. 3

EE 1-2 p. 9

#### PE 1-2A Accounting equation

Shannon Cook is the owner and operator of Galaxy LLC, a motivational consulting business. At the end of its accounting period, December 31, 2011, Galaxy has assets of \$800,000 and liabilities of \$450,000. Using the accounting equation, determine the following amounts:

- Owner's equity, as of December 31, 2011.
- Owner's equity, as of December 31, 2012, assuming that assets increased by \$175,000 and liabilities decreased by \$60,000 during 2012.

OBJ. 3

EE 1-2 p. 9

#### PE 1-2B Accounting equation

Jan Petri is the owner and operator of You're the One, a motivational consulting business. At the end of its accounting period, December 31, 2011, You're the One has assets of \$575,000 and liabilities of \$125,000. Using the accounting equation, determine the following amounts:

- Owner's equity, as of December 31, 2011.
- Owner's equity, as of December 31, 2012, assuming that assets increased by \$85,000 and liabilities increased by \$30,000 during 2012.

OBJ. 4

EE 1-3 p. 14

#### PE 1-3A Transactions

Queens Delivery Service is owned and operated by Lisa Dewar. The following selected transactions were completed by Queens Delivery Service during June:

- Received cash from owner as additional investment, \$18,000.
- Paid creditors on account, \$1,800.
- Billed customers for delivery services on account, \$12,500.
- Received cash from customers on account, \$6,900.
- Paid cash to owner for personal use, \$4,000.

Indicate the effect of each transaction on the accounting equation elements (Assets, Liabilities, Owner's Equity, Drawing, Revenue, and Expense). Also, indicate the specific item within the accounting equation element that is affected. To illustrate, the answer to (1) is shown below.

(1) Asset (Cash) increases by \$18,000; Owner's Equity (Lisa Dewar, Capital) increases by \$18,000.



**Learning Objectives****OBJ. 4****Example Exercises****EE 1-3** p. 14**PE 1-3B Transactions**

Motorcross Delivery Service is owned and operated by Jim Smith. The following selected transactions were completed by Motorcross Delivery Service during February:

1. Received cash from owner as additional investment, \$30,000.
2. Paid advertising expense, \$1,200.
3. Purchased supplies on account, \$450.
4. Billed customers for delivery services on account, \$7,500.
5. Received cash from customers on account, \$4,900.

Indicate the effect of each transaction on the accounting equation elements (Assets, Liabilities, Owner's Equity, Drawing, Revenue, and Expense). Also, indicate the specific item within the accounting equation element that is affected. To illustrate, the answer to (1) is shown below.

(1) Asset (Cash) increases by \$30,000; Owner's Equity (Jim Smith, Capital) increases by \$30,000.

**OBJ. 5****EE 1-4** p. 16**PE 1-4A Income statement**

The revenues and expenses of Dynasty Travel Service for the year ended June 30, 2012, are listed below.

Fees earned	\$950,000
Office expense	222,000
Miscellaneous expense	16,000
Wages expense	478,000

Prepare an income statement for the current year ended June 30, 2012.

**OBJ. 5****EE 1-4** p. 16**PE 1-4B Income statement**

The revenues and expenses of Escape Travel Service for the year ended November 30, 2012, are listed below.

Fees earned	\$942,500
Office expense	391,625
Miscellaneous expense	15,875
Wages expense	562,500

Prepare an income statement for the current year ended November 30, 2012.

**OBJ. 5****EE 1-5** p. 16**PE 1-5A Statement of owner's equity**

Using the income statement for Dynasty Travel Service shown in Practice Exercise 1-4A, prepare a statement of owner's equity for the current year ended June 30, 2012. Nancy Coleman, the owner, invested an additional \$60,000 in the business during the year and withdrew cash of \$36,000 for personal use. Nancy Coleman, capital as of July 1, 2011, was \$250,000.

**OBJ. 5****EE 1-5** p. 16**PE 1-5B Statement of owner's equity**

Using the income statement for Escape Travel Service shown in Practice Exercise 1-4B, prepare a statement of owner's equity for the current year ended November 30, 2012. Brett Daniels, the owner, invested an additional \$45,000 in the business during the year and withdrew cash of \$25,000 for personal use. Brett Daniels, capital as of December 1, 2011, was \$475,000.

**OBJ. 5****EE 1-6** p. 18**PE 1-6A Balance sheet**

Using the following data for Dynasty Travel Service as well as the statement of owner's equity shown in Practice Exercise 1-5A, prepare a balance sheet as of June 30, 2012.


**Learning  
Objectives**
**Example  
Exercises**

Accounts receivable	\$ 64,000
Accounts payable	24,000
Cash	156,000
Land	300,000
Supplies	12,000

**OBJ. 5**    **EE 1-6** p. 18    **PE 1-6B Balance sheet**

Using the following data for Escape Travel Service as well as the statement of owner's equity shown in Practice Exercise 1-5B, prepare a balance sheet as of November 30, 2012.

Accounts receivable	\$ 94,375
Accounts payable	52,500
Cash	56,750
Land	362,500
Supplies	6,375

**OBJ. 5**    **EE 1-7** p. 20    **PE 1-7A Statement of cash flows**

A summary of cash flows for Dynasty Travel Service for the year ended June 30, 2012, is shown below.

Cash receipts:	
Cash received from customers	\$920,000
Cash received from additional investment of owner	60,000
Cash payments:	
Cash paid for operating expenses	710,000
Cash paid for land	208,000
Cash paid to owner for personal use	36,000

The cash balance as of July 1, 2011, was \$130,000.

Prepare a statement of cash flows for Dynasty Travel Service for the year ended June 30, 2012.

**OBJ. 5**    **EE 1-7** p. 20    **PE 1-7B Statement of cash flows**

A summary of cash flows for Escape Travel Service for the year ended November 30, 2012, is shown below.

Cash receipts:	
Cash received from customers	\$875,000
Cash received from additional investment of owner	45,000
Cash payments:	
Cash paid for operating expenses	912,500
Cash paid for land	67,500
Cash paid to owner for personal use	25,000

The cash balance as of December 1, 2011, was \$141,750.

Prepare a statement of cash flows for Escape Travel Service for the year ended November 30, 2012.

**OBJ. 6**    **EE 1-8** p. 22    **PE 1-8A Ratio of liabilities to owner's equity**


The following data were taken from White Company's balance sheet:

	Dec. 31, 2012	Dec. 31, 2011
Total liabilities	\$375,000	\$287,500
Total owner's equity	300,000	250,000

- Compute the ratio of liabilities to owner's equity.
- Has the creditor's risk increased or decreased from December 31, 2011 to December 31, 2012?

**PE 1-8B Ratio of liabilities to owner's equity**

The following data were taken from Stone Company's balance sheet:

	Dec. 31, 2012	Dec. 31, 2011
Total liabilities	\$340,000	\$300,000
Total owner's equity	500,000	400,000

- Compute the ratio of liabilities to owner's equity.
- Has the creditor's risk increased or decreased from December 31, 2011 to December 31, 2012?

## Exercises

**OBJ. 1****EX 1-1 Types of businesses**

The following is a list of well-known companies: 2274573 2013/10/03 147.70.115.36

- H&R Block
- eBay Inc.
- Wal-Mart Stores, Inc.
- Ford Motor Company
- Citigroup
- Boeing
- SunTrust
- Alcoa Inc.
- Procter & Gamble
- FedEx
- Gap Inc.
- Hilton Hospitality, Inc.
- CVS
- Caterpillar
- The Dow Chemical Company

- Indicate whether each of these companies is primarily a service, merchandise, or manufacturing business. If you are unfamiliar with the company, use the Internet to locate the company's home page or use the finance Web site of Yahoo (<http://finance.yahoo.com>).
- For which of the preceding companies is the accounting equation relevant?

**OBJ. 1****EX 1-2 Professional ethics**

A fertilizer manufacturing company wants to relocate to Jones County. A report from a fired researcher at the company indicates the company's product is releasing toxic by-products. The company suppressed that report. A later report commissioned by the company shows there is no problem with the fertilizer.

➤ Should the company's chief executive officer reveal the content of the unfavorable report in discussions with Jones County representatives? Discuss.

**OBJ. 2****EX 1-3 Business entity concept**

Rocky Mountain Sports sells hunting and fishing equipment and provides guided hunting and fishing trips. Rocky Mountain Sports is owned and operated by Mike Weber, a well-known sports enthusiast and hunter. Mike's wife, Susan, owns and operates Madison Boutique, a women's clothing store. Mike and Susan have established a trust fund to finance their children's college education. The trust fund is maintained by National Bank in the name of the children, Kerri and Kyle.

- For each of the following transactions, identify which of the entities listed should record the transaction in its records.

Entities	
R	Rocky Mountain Sports
B	National Bank Trust Fund
M	Madison Boutique
X	None of the above





1. Susan authorized the trust fund to purchase mutual fund shares.
  2. Susan purchased two dozen spring dresses from a Chicago designer for a special spring sale.
  3. Mike paid a breeder's fee for an English springer spaniel to be used as a hunting guide dog.
  4. Susan deposited a \$3,000 personal check in the trust fund at National Bank.
  5. Mike paid a local doctor for his annual physical, which was required by the workmen's compensation insurance policy carried by Rocky Mountain Sports.
  6. Mike received a cash advance from customers for a guided hunting trip.
  7. Susan paid her dues to the YWCA.
  8. Susan donated several dresses from inventory for a local charity auction for the benefit of a women's abuse shelter.
  9. Mike paid for dinner and a movie to celebrate their fifteenth wedding anniversary.
  10. Mike paid for an advertisement in a hunters' magazine.
- b. What is a business transaction?

**OBJ. 3**

✓ Starbucks,  
\$3,046

**EX 1-4 Accounting equation**

The total assets and total liabilities of **Peat's Coffee & Tea Inc.** and **Starbucks Corporation** are shown below.

	Peat's Coffee & Tea (in millions)	Starbucks (in millions)
Assets	\$176	\$5,577
Liabilities	32	2,531

Determine the owners' equity of each company.

**OBJ. 3**

✓ Dollar Tree,  
\$1,253

**EX 1-5 Accounting equation**

The total assets and total liabilities of **Dollar Tree Inc.** and **Target Corporation** are shown below.

	Dollar Tree (in millions)	Target Corporation (in millions)
Assets	\$2,036	\$44,106
Liabilities	783	30,394

Determine the owners' equity of each company.

**OBJ. 3**

✓ a. 600,000

**EX 1-6 Accounting equation**

Determine the missing amount for each of the following:

	Assets	=	Liabilities	+	Owner's Equity
a.	x	=	\$150,000	+	\$450,000
b.	\$275,000	=	x	+	50,000
c.	615,000	=	190,000	+	x

**OBJ. 3, 4**

✓ b. \$530,000

**EX 1-7 Accounting equation**

Todd Olson is the owner and operator of Alpha, a motivational consulting business. At the end of its accounting period, December 31, 2011, Alpha has assets of \$800,000 and liabilities of \$350,000. Using the accounting equation and considering each case independently, determine the following amounts:

- a. Todd Olson, capital, as of December 31, 2011.
- b. Todd Olson, capital, as of December 31, 2012, assuming that assets increased by \$150,000 and liabilities increased by \$70,000 during 2012.
- c. Todd Olson, capital, as of December 31, 2012, assuming that assets decreased by \$60,000 and liabilities increased by \$20,000 during 2012.
- d. Todd Olson, capital, as of December 31, 2012, assuming that assets increased by \$100,000 and liabilities decreased by \$40,000 during 2012.
- e. Net income (or net loss) during 2012, assuming that as of December 31, 2012, assets were \$975,000, liabilities were \$400,000, and there were no additional investments or withdrawals.



**OBJ. 3**

**EX 1-8 Asset, liability, owner's equity items**

Indicate whether each of the following is identified with (1) an asset, (2) a liability, or (3) owner's equity:

- a. cash
- b. wages expense
- c. accounts payable
- d. fees earned
- e. supplies
- f. land

**OBJ. 4**

**EX 1-9 Effect of transactions on accounting equation**

Describe how the following business transactions affect the three elements of the accounting equation.

- a. Invested cash in business.
- b. Purchased supplies for cash.
- c. Purchased supplies on account.
- d. Received cash for services performed.
- e. Paid for utilities used in the business.

**OBJ. 4**

✓ a. (1) increase  
\$250,000

**EX 1-10 Effect of transactions on accounting equation**

- a. A vacant lot acquired for \$100,000 is sold for \$350,000 in cash. What is the effect of the sale on the total amount of the seller's (1) assets, (2) liabilities, and (3) owner's equity?
- b. Assume that the seller owes \$75,000 on a loan for the land. After receiving the \$350,000 cash in (a), the seller pays the \$75,000 owed. What is the effect of the payment on the total amount of the seller's (1) assets, (2) liabilities, and (3) owner's equity?
- c. Is it true that a transaction always affects at least two elements (Assets, Liabilities, or Owner's Equity) of the accounting equation? Explain.

**OBJ. 4**

**EX 1-11 Effect of transactions on owner's equity**

Indicate whether each of the following types of transactions will either (a) increase owner's equity or (b) decrease owner's equity:

1. owner's investments
2. revenues
3. expenses
4. owner's withdrawals

**OBJ. 4**

**EX 1-12 Transactions**

The following selected transactions were completed by Speedy Delivery Service during October:

1. Received cash from owner as additional investment, \$30,000.
2. Purchased supplies for cash, \$1,500.
3. Paid rent for October, \$4,000.
4. Paid advertising expense, \$2,500.
5. Received cash for providing delivery services, \$18,750.
6. Billed customers for delivery services on account, \$41,500.
7. Paid creditors on account, \$6,000.
8. Received cash from customers on account, \$26,200.
9. Determined that the cost of supplies on hand was \$250; therefore, \$1,250 of supplies had been used during the month.
10. Paid cash to owner for personal use, \$2,000.

Indicate the effect of each transaction on the accounting equation by listing the numbers identifying the transactions, (1) through (10), in a column, and inserting at the right of each number the appropriate letter from the following list:

- Increase in an asset, decrease in another asset.
- Increase in an asset, increase in a liability.
- Increase in an asset, increase in owner's equity.
- Decrease in an asset, decrease in a liability.
- Decrease in an asset, decrease in owner's equity.

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**OBJ. 4**

✓ d. \$13,200

**EX 1-13 Nature of transactions**


Jeremy Zabel operates his own catering service. Summary financial data for February are presented in equation form as follows. Each line designated by a number indicates the effect of a transaction on the equation. Each increase and decrease in owner's equity, except transaction (5), affects net income.

	Assets			= Liabilities +		Owner's Equity		
	Cash	+ Supplies	+ Land	= Accounts Payable	+ Jeremy Zabel, Capital	Jeremy Zabel, Drawing	+ Fees Earned	- Expenses
Bal.	25,000	2,000	75,000	12,000	90,000			
1.	+29,000						29,000	
2.	-20,000		+20,000					
3.	-14,000							-14,000
4.		+1,000		+1,000				
5.	- 2,000					-2,000		
6.	- 7,000			-7,000				
7.		-1800						-1,800
Bal.	11,000	1,200	95,000	6,000	90,000	-2,000	29,000	-15,800

- Describe each transaction.
- What is the amount of net decrease in cash during the month?
- What is the amount of net increase in owner's equity during the month?
- What is the amount of the net income for the month?
- How much of the net income for the month was retained in the business?

**OBJ. 5****EX 1-14 Net income and owner's withdrawals**

The income statement of a proprietorship for the month of December indicates a net income of \$120,000. During the same period, the owner withdrew \$130,000 in cash from the business for personal use.

 Would it be correct to say that the business incurred a net loss of \$10,000 during the month? Discuss.

**OBJ. 5**

✓ Leo: Net income, \$60,000

**EX 1-15 Net income and owner's equity for four businesses**

Four different proprietorships, Aries, Gemini, Leo, and Pisces, show the same balance sheet data at the beginning and end of a year. These data, exclusive of the amount of owner's equity, are summarized as follows:

	Total Assets	Total Liabilities
Beginning of the year	\$400,000	\$100,000
End of the year	750,000	300,000

On the basis of the above data and the following additional information for the year, determine the net income (or loss) of each company for the year. (*Hint:* First determine the amount of increase or decrease in owner's equity during the year.)

- Aries: The owner had made no additional investments in the business and had made no withdrawals from the business.
- Gemini: The owner had made no additional investments in the business but had withdrawn \$40,000.
- Leo: The owner had made an additional investment of \$90,000 but had made no withdrawals.
- Pisces: The owner had made an additional investment of \$90,000 and had withdrawn \$40,000.





## OBJ. 5

**EX 1-16 Balance sheet items**

From the following list of selected items taken from the records of Hoosier Appliance Service as of a specific date, identify those that would appear on the balance sheet:

- |                          |                      |
|--------------------------|----------------------|
| 1. Accounts Receivable   | 6. Supplies          |
| 2. Cash                  | 7. Supplies Expense  |
| 3. Fees Earned           | 8. Utilities Expense |
| 4. Land                  | 9. Wages Expense     |
| 5. Patsy Adkins, Capital | 10. Wages Payable    |

## OBJ. 5

**EX 1-17 Income statement items**

Based on the data presented in Exercise 1-16, identify those items that would appear on the income statement.

## OBJ. 5

✓ Penny Beall, capital,  
June 30, 2012: \$482,000

**EX 1-18 Statement of owner's equity**

Financial information related to Lost Trail Company, a proprietorship, for the month ended June 30, 2012, is as follows:

Net income for June	\$125,000
Penny Beall's withdrawals during June	18,000
Penny Beall's capital, June 1, 2012	375,000

- Prepare a statement of owner's equity for the month ended June 30, 2012.
- Why is the statement of owner's equity prepared before the June 30, 2012, balance sheet?

## OBJ. 5

✓ Net income:  
\$449,000

**EX 1-19 Income statement**

Universal Services was organized on October 1, 2012. A summary of the revenue and expense transactions for October follows:

Fees earned	\$800,000
Wages expense	270,000
Rent expense	60,000
Supplies expense	9,000
Miscellaneous expense	12,000

Prepare an income statement for the month ended October 31.

## OBJ. 5

✓ (a) \$45,000

**EX 1-20 Missing amounts from balance sheet and income statement data**

One item is omitted in each of the following summaries of balance sheet and income statement data for the following four different proprietorships:

	Aquarius	Libra	Scorpio	Taurus
Beginning of the year:				
Assets	\$300,000	\$500,000	\$100,000	(d)
Liabilities	120,000	260,000	76,000	\$120,000
End of the year:				
Assets	420,000	700,000	90,000	248,000
Liabilities	110,000	220,000	80,000	136,000
During the year:				
Additional investment in the business	(a)	100,000	10,000	40,000
Withdrawals from the business	25,000	32,000	(c)	60,000
Revenue	190,000	(b)	115,000	112,000
Expenses	80,000	128,000	122,500	128,000

Determine the missing amounts, identifying them by letter. (*Hint:* First determine the amount of increase or decrease in owner's equity during the year.)



## OBJ. 5

✓ b. \$40,000

**EX 1-21 Balance sheets, net income**

Financial information related to the proprietorship of Lady Interiors for July and August 2012 is as follows:

	July 31, 2012	August 31, 2012
Accounts payable	\$ 90,000	\$100,000
Accounts receivable	200,000	240,000
Garth Jacobs, capital	?	?
Cash	80,000	95,000
Supplies	20,000	15,000

- Prepare balance sheets for Lady Interiors as of July 31 and August 31, 2012.
- Determine the amount of net income for August, assuming that the owner made no additional investments or withdrawals during the month.
- Determine the amount of net income for August, assuming that the owner made no additional investments but withdrew \$35,000 during the month.

## OBJ. 5

**EX 1-22 Financial statements**

Each of the following items is shown in the financial statements of **ExxonMobil Corporation**.

- |                         |                             |
|-------------------------|-----------------------------|
| 1. Accounts payable     | 9. Marketable securities    |
| 2. Cash equivalents     | 10. Notes and loans payable |
| 3. Crude oil inventory  | 11. Notes receivable        |
| 4. Equipment            | 12. Operating expenses      |
| 5. Exploration expenses | 13. Prepaid taxes           |
| 6. Income taxes payable | 14. Sales                   |
| 7. Investments          | 15. Selling expenses        |
| 8. Long-term debt       |                             |

- Identify the financial statement (balance sheet or income statement) in which each item would appear.
- Can an item appear on more than one financial statement?
- Is the accounting equation relevant for ExxonMobil Corporation?

## OBJ. 5

**EX 1-23 Statement of cash flows**

Indicate whether each of the following activities would be reported on the statement of cash flows as (a) an operating activity, (b) an investing activity, or (c) a financing activity:

- Cash received from fees earned.
- Cash paid for expenses.
- Cash paid for land.
- Cash received as an additional investment by owner.

## OBJ. 5

**EX 1-24 Statement of cash flows**

A summary of cash flows for Absolute Consulting Group for the year ended July 31, 2012, is shown below.

Cash receipts:	
Cash received from customers	\$187,500
Cash received from additional investment of owner	40,000
Cash payments:	
Cash paid for operating expenses	127,350
Cash paid for land	30,000
Cash paid to owner for personal use	5,000

The cash balance as of August 1, 2011, was \$27,100.

Prepare a statement of cash flows for Absolute Consulting Group for the year ended July 31, 2012.

**OBJ. 5**

✓ Correct amount  
of total assets is  
\$88,200.

**EX 1-25 Financial statements**

Empire Realty, organized May 1, 2012, is owned and operated by Bertram Mitchell. How many errors can you find in the following statements for Empire Realty, prepared after its first month of operations?

**Empire Realty  
Income Statement  
May 31, 2012**

Sales commissions .....	\$233,550
Expenses:	
Office salaries expense .....	\$145,800
Rent expense .....	49,500
Automobile expense .....	11,250
Miscellaneous expense .....	3,600
Supplies expense .....	1,350
Total expenses .....	211,500
Net income .....	<u>\$ 67,050</u>

**Bertram Mitchell  
Statement of Owner's Equity  
May 31, 2011**

Bertram Mitchell, capital, May 1, 2012 .....	\$ 46,800
Less withdrawals during May .....	9,000
	<u>\$ 37,800</u>
Additional investment during May .....	11,250
	<u>\$ 49,050</u>
Net income for May .....	67,050
Bertram Mitchell, capital, May 31, 2012 .....	<u>\$ 116,100</u>

**Balance Sheet  
For the Month Ended May 31, 2012**

Assets		Liabilities	
Cash .....	\$14,850	Accounts receivable .....	\$ 64,350
Accounts payable .....	17,100	Supplies .....	9,000
		Owner's Equity	
		Bertram Mitchell, capital .....	116,100
Total assets .....	<u>\$31,950</u>	Total liabilities and owner's equity .....	<u>\$189,450</u>

**OBJ. 6****EX 1-26 Ratio of liabilities to stockholders' equity**

**The Home Depot, Inc.**, is the world's largest home improvement retailer and one of the largest retailers in the United States based on net sales volume. The Home Depot operates over 2,000 Home Depot® stores that sell a wide assortment of building materials and home improvement and lawn and garden products.

The Home Depot reported the following balance sheet data (in millions):

	Feb. 1, 2009	Feb. 3, 2008
Total assets	\$41,164	\$44,324
Total stockholders' equity	17,777	17,714

- Determine the total liabilities as of February 1, 2009, and February 3, 2008.
- Determine the ratio of liabilities to stockholders' equity for 2009 and 2008. Round to two decimal places.
- What conclusions regarding the margin of protection to the creditors can you draw from (b)?

**OBJ. 6****EX 1-27 Ratio of liabilities to stockholders' equity**

**Lowe's**, a major competitor of **The Home Depot** in the home improvement business, operates over 1,600 stores. For the years ending January 30, 2009, and February 1, 2008, Lowe's reported the following balance sheet data (in millions):





	Jan. 30, 2009	Feb. 1, 2008
Total assets	\$32,686	\$30,869
Total liabilities	14,631	14,771

- Determine the total stockholders' equity as of January 30, 2009, and February 1, 2008.
- Determine the ratio of liabilities to stockholders' equity for 2009 and 2008. Round to two decimal places.
- What conclusions regarding the margin of protection to the creditors can you draw from (b)?
- Using the balance sheet data for The Home Depot in Exercise 1-26, how does the ratio of liabilities to stockholders' equity of Lowe's compare to that of The Home Depot?

## Problems Series A

### OBJ. 4

✓ Cash bal. at end of September: \$37,700

### PR 1-1A Transactions

On September 1 of the current year, Maria Edsall established a business to manage rental property. She completed the following transactions during September:

- Opened a business bank account with a deposit of \$40,000 from personal funds.
- Purchased supplies (pens, file folders, and copy paper) on account, \$2,200.
- Received cash from fees earned for managing rental property, \$6,000.
- Paid rent on office and equipment for the month, \$2,700.
- Paid creditors on account, \$1,000.
- Billed customers for fees earned for managing rental property, \$5,000.
- Paid automobile expenses (including rental charges) for month, \$600, and miscellaneous expenses, \$300.
- Paid office salaries, \$1,900.
- Determined that the cost of supplies on hand was \$1,300; therefore, the cost of supplies used was \$900.
- Withdrew cash for personal use, \$1,800.

### Instructions

- Indicate the effect of each transaction and the balances after each transaction, using the following tabular headings:

Assets		= Liabilities +		Owner's Equity					
Accounts		Accounts	Maria Edsall,	Maria Edsall,	Fees	Rent	Salaries	Supplies	Auto
Cash + Receivable + Supplies	=	Payable	+ Capital	- Drawing	+ Earned	- Expense	- Expense	- Expense	- Expense
									Misc.
									Expense

- Briefly explain why the owner's investment and revenues increased owner's equity, while withdrawals and expenses decreased owner's equity.
- Determine the net income for September.
- How much did September's transactions increase or decrease Maria Edsall's capital?

### OBJ. 5

✓ 1. Net income: \$40,000



### PR 1-2A Financial statements

Following are the amounts of the assets and liabilities of New World Travel Agency at December 31, 2012, the end of the current year, and its revenue and expenses for the year. The capital of Kris Taber, owner, was \$120,000 on January 1, 2012, the beginning of the current year. During the current year, Kris withdrew \$10,000.

Accounts payable	\$ 25,000	Rent expense	\$45,000
Accounts receivable	60,000	Supplies	5,000
Cash	110,000	Supplies expense	3,000
Fees earned	200,000	Utilities expense	18,000
Miscellaneous expense	4,000	Wages expense	90,000

### Instructions

- Prepare an income statement for the current year ended December 31, 2012.
- Prepare a statement of owner's equity for the current year ended December 31, 2012.

(Continued)

3. Prepare a balance sheet as of December 31, 2012.
4. What item appears on both the statement of owner's equity and the balance sheet?

**OBJ. 5**

✓ 1. Net income:  
\$26,400

**PR 1-3A Financial statements**

Heidi Fritz established Freedom Financial Services on March 1, 2012. Freedom Financial Services offers financial planning advice to its clients. The effect of each transaction and the balances after each transaction for March are shown below.

Assets			= Liabilities +	Owner's Equity							
	Cash	+ Accounts Receivable + Supplies	= Accounts Payable +	Heidi Fritz, Capital	Heidi Fritz, Drawing	+ Fees Earned	- Salaries Expense	- Rent Expense	- Auto Expense	- Supplies Expense	- Misco. Expense
a.	+45,000			+45,000							
b.		+6,540	+6,540								
Bal.	45,000	6,540	6,540	45,000							
c.	-1,800		-1,800								
Bal.	43,200	6,540	4,740	45,000							
d.	+84,000					+84,000					
Bal.	127,200	6,540	4,740	45,000		84,000					
e.	-22,500							-22,500			
Bal.	104,700	6,540	4,740	45,000		84,000		-22,500			
f.	-17,100								-13,500		-3,600
Bal.	87,600	6,540	4,740	45,000		84,000		-22,500	-13,500		-3,600
g.	-48,000						-48,000				
Bal.	39,600	6,540	4,740	45,000		84,000	-48,000	-22,500	-13,500		-3,600
h.		-4,500								-4,500	
Bal.	39,600	2,040	4,740	45,000		84,000	-48,000	-22,500	-13,500	-4,500	-3,600
i.		+34,500				+34,500					
Bal.	39,600	34,500	2,040	45,000		118,500	-48,000	-22,500	-13,500	-4,500	-3,600
j.	-15,000				-15,000						
Bal.	24,600	34,500	2,040	45,000	-15,000	118,500	-48,000	-22,500	-13,500	-4,500	-3,600

**Instructions**

1. Prepare an income statement for the month ended March 31, 2012.
2. Prepare a statement of owner's equity for the month ended March 31, 2012.
3. Prepare a balance sheet as of March 31, 2012.
4. (Optional). Prepare a statement of cash flows for the month ending March 31, 2012.

**OBJ. 4, 5**

✓ 2. Net income:  
\$12,150

**PR 1-4A Transactions; financial statements**

On January 1, 2012, Carlton Myers established Vista Realty. Carlton completed the following transactions during the month of January:

- a. Opened a business bank account with a deposit of \$25,000 from personal funds.
- b. Purchased supplies (pens, file folders, paper, etc.) on account, \$2,500.
- c. Paid creditor on account, \$1,600.
- d. Earned sales commissions, receiving cash, \$25,500.
- e. Paid rent on office and equipment for the month, \$5,000.
- f. Withdrew cash for personal use, \$8,000.
- g. Paid automobile expenses (including rental charge) for month, \$2,500, and miscellaneous expenses, \$1,200.
- h. Paid office salaries, \$3,000.
- i. Determined that the cost of supplies on hand was \$850; therefore, the cost of supplies used was \$1,650.

**Instructions**

1. Indicate the effect of each transaction and the balances after each transaction, using the following tabular headings:





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## Analyzing Transactions

### *Apple, Inc.™*

**E**veryday it seems like we get an incredible amount of incoming e-mail messages; you get them from your friends, relatives, subscribed e-mail lists, and even spammers! But how do you organize all of these messages? You might create folders to sort messages by sender, topic, or project. Perhaps you use keyword search utilities. You might even use filters/rules to automatically delete spam or send messages from your best friend to a special folder. In any case, you are organizing information so that it is simple to retrieve and allows you to understand, respond, or refer to the messages.

In the same way that you organize your e-mail, companies develop an organized method for processing, recording, and summarizing financial transactions. For example, **Apple, Inc.**, has a huge volume of financial transactions, resulting from sales of its innovative computers, digital media

(iTunes), iPods, iPhones, and iPads. When Apple sells an iPad, a customer has the option of paying with credit card, a debit or check card, an Apple gift card, a financing arrangement, or cash. In order to analyze only the information related to Apple's cash transactions, the company must record or summarize all these similar sales using a single category or "cash" account. Similarly, Apple will record credit card payments for iPads and sales from financing arrangements in different accounts (records).

While Chapter 1 uses the accounting equation ( $\text{Assets} = \text{Liabilities} + \text{Owner's Equity}$ ) to analyze and record financial transactions, this chapter presents more practical and efficient recording methods that most companies use. In addition, this chapter discusses possible accounting errors that may occur, along with methods to detect and correct them.





## Learning Objectives

After studying this chapter, you should be able to:

Example Exercises

Page

OBJ.  
1

Describe the characteristics of an account and a chart of accounts.

Using Accounts to Record Transactions  
Chart of Accounts

OBJ.  
2

Describe and illustrate journalizing transactions using the double-entry accounting system.

Double-Entry Accounting System  
Balance Sheet Accounts  
Income Statement Accounts  
Owner Withdrawals  
Normal Balances  
Journalizing

EE 2-1

56

EE 2-2

61

OBJ.  
3

Describe and illustrate the journalizing and posting of transactions to accounts.

Posting Journal Entries to Accounts

EE 2-3

65

EE 2-4

68

EE 2-5

68

OBJ.  
4

Prepare an unadjusted trial balance and explain how it can be used to discover errors.

Trial Balance

Errors Affecting the Trial Balance

Errors Not Affecting the Trial Balance

EE 2-6

72

EE 2-7

73

OBJ.  
5

Describe and illustrate the use of horizontal analysis in evaluating a company's performance and financial condition.

Financial Analysis and Interpretation: Horizontal Analysis

EE 2-8

75

At a Glance 2

Page 75

OBJ.  
1

Describe the characteristics of an account and a chart of accounts.

## Using Accounts to Record Transactions

In Chapter 1, the November transactions for NetSolutions were recorded using the accounting equation format shown in Exhibit 1. However, this format is not efficient or practical for companies that have to record thousands or millions of transactions daily. As a result, accounting systems are designed to show the increases and decreases in each accounting equation element as a separate record. This record is called an **account**.

To illustrate, the Cash column of Exhibit 1 records the increases and decreases in cash. Likewise, the other columns in Exhibit 1 record the increases and decreases in the other accounting equation elements. Each of these columns can be organized into a separate account.

An account, in its simplest form, has three parts.

1. A title, which is the name of the accounting equation element recorded in the account.
2. A space for recording increases in the amount of the element.
3. A space for recording decreases in the amount of the element.

The account form presented below is called a **T account** because it resembles the letter T. The left side of the account is called the *debit* side, and the right side is called the *credit* side.<sup>1</sup>

Title	
Left side <i>debit</i>	Right side <i>credit</i>

<sup>1</sup> The terms *debit* and *credit* are derived from the Latin *debere* and *credere*.

**EXHIBIT 1** NetSolutions November Transactions

Assets				=	Liabilities +		Owner's Equity							
Cash	+ Supp.	+ Land	=	Accounts Payable	+ Chris Clark, Capital	- Chris Clark, Drawing	+ Fees Earned	- Wages Exp.	- Rent Exp.	+ Supplies Exp.	- Utilities Exp.	- Misc. Exp.		
a. +25,000					+25,000									
b. -20,000		+20,000												
Bal. 5,000		20,000			25,000									
c. +1,350				+1,350										
Bal. 5,000	1,350	20,000		1,350	25,000									
d. +7,500							+7,500							
Bal. 12,500	1,350	20,000		1,350	25,000		7,500							
e. -3,650								-2,125	-800			-450	-275	
Bal. 8,850	1,350	20,000		1,350	25,000		7,500	-2,125	-800			-450	-275	
f. -950				-950										
Bal. 7,900	1,350	20,000		400	25,000		7,500	-2,125	-800			-450	-275	
g. -800										-800				
Bal. 7,900	550	20,000		400	25,000		7,500	-2,125	-800	-800		-450	-275	
h. -2,000						-2,000								
Bal. 5,900	550	20,000		400	25,000	-2,000	7,500	-2,125	-800	-800		-450	-275	

The amounts shown in the Cash column of Exhibit 1 would be recorded in a cash account as follows:

Cash				
Debit	(a) 25,000	(b) 20,000	Credit	
Side of	(d) 7,500	(e) 3,650	Side of	
Account		(f) 950	Account	
		(h) 2,000		
	Balance 5,900			
	Balance of account			

**Note:**

Amounts entered on the left side of an account are debits, and amounts entered on the right side of an account are credits.

Recording transactions in accounts must follow certain rules. For example, increases in assets are recorded on the **debit** (left side) of an account. Likewise, decreases in assets are recorded on the **credit** (right side) of an account. The excess of the debits of an asset account over its credits is the **balance of the account**.

To illustrate, the receipt (increase in Cash) of \$25,000 in transaction (a) is entered on the debit (left) side of the cash account shown above. The letter or date of the transaction is also entered into the account. This is done so if any questions later arise related to the entry, the entry can be traced back to the underlying transaction data. In contrast, the payment (decrease in Cash) of \$20,000 to purchase land in transaction (b) is entered on the credit (right) side of the account.

The balance of the cash account of \$5,900 is the excess of the debits over the credits as shown below.

Debits (\$25,000 + \$7,500) .....	\$32,500
Less credits (\$20,000 + \$3,650 + \$950 + \$2,000) .....	26,600
Balance of Cash as of November 30, 2011 .....	<u>\$ 5,900</u>

The balance of the cash account is inserted in the account, in the Debit column. In this way, the balance is identified as a debit balance.<sup>2</sup> This balance represents NetSolutions' cash on hand as of November 30, 2011. This balance of \$5,900 is reported on the November 30, 2011, balance sheet for NetSolutions as shown in Exhibit 6 of Chapter 1.

<sup>2</sup> The totals of the debit and credit columns may be shown separately in an account. When this is done, these amounts should be identified in some way so that they are not mistaken for entries or the ending balance of the account.



In an actual accounting system, a more formal account form replaces the T account. Later in this chapter, a four-column account is illustrated. The T account, however, is a simple way to illustrate the effects of transactions on accounts and financial statements. For this reason, T accounts are often used in business to explain transactions.

Each of the columns in Exhibit 1 can be converted into an account form in a similar manner as was done for the Cash column of Exhibit 1. However, as mentioned earlier, recording increases and decreases in accounts must follow certain rules. These rules are discussed after the chart of accounts is described.

## Chart of Accounts

A group of accounts for a business entity is called a **ledger**. A list of the accounts in the ledger is called a **chart of accounts**. The accounts are normally listed in the order in which they appear in the financial statements. The balance sheet accounts are listed first, in the order of assets, liabilities, and owner's equity. The income statement accounts are then listed in the order of revenues and expenses.

**Assets** are resources owned by the business entity. These resources can be physical items, such as cash and supplies, or intangibles that have value. Examples of intangible assets include patent rights, copyrights, and trademarks. Assets also include accounts receivable, prepaid expenses (such as insurance), buildings, equipment, and land.

**Liabilities** are debts owed to outsiders (creditors). Liabilities are often identified on the balance sheet by titles that include *payable*. Examples of liabilities include accounts payable, notes payable, and wages payable. Cash received before services are delivered creates a liability to perform the services. These future service commitments are called *unearned revenues*. Examples of unearned revenues include magazine subscriptions received by a publisher and tuition received at the beginning of a term by a college.

**Owner's equity** is the owner's right to the assets of the business after all liabilities have been paid. For a proprietorship, the owner's equity is represented by the balance of the owner's **capital account**. A **drawing** account represents the amount of withdrawals made by the owner.

**Revenues** are increases in owner's equity as a result of selling services or products to customers. Examples of revenues include fees earned, fares earned, commissions revenue, and rent revenue.

## BusinessConnection



### THE HIJACKING RECEIVABLE

A company's chart of accounts should reflect the basic nature of its operations. Occasionally, however, transactions take place that give rise to unusual accounts. The following is a story of one such account.

Before strict airport security was implemented across the United States, several airlines experienced hijacking incidents. One such incident occurred when a **Southern Airways** DC-9 en route from Memphis to Miami was hijacked during a stopover in Birmingham, Alabama. The three hijackers boarded the plane in Birmingham armed with handguns and hand grenades. At gunpoint, the hijackers took the plane, the plane's crew, and the passengers to nine American cities, Toronto, and eventually to Havana, Cuba.

During the long flight, the hijackers demanded a ransom of \$10 million. Southern Airways, however, was only

able to come up with \$2 million. Eventually, the pilot talked the hijackers into settling for the \$2 million when the plane landed in Chattanooga for refueling.

Upon landing in Havana, the Cuban authorities arrested the hijackers and, after a brief delay, sent the plane, passengers, and crew back to the United States. The hijackers and \$2 million stayed in Cuba.

How did Southern Airways account for and report the hijacking payment in its subsequent financial statements? As you might have analyzed, the initial entry credited Cash for \$2 million. The debit was to an account entitled "Hijacking Payment." This account was reported as a type of receivable under "other assets" on Southern's balance sheet. The company maintained that it would be able to collect the cash from the Cuban government and that, therefore, a receivable existed. In fact, Southern Airways was repaid \$2 million by the Cuban government, which was, at that time, attempting to improve relations with the United States.



**Expenses** result from using up assets or consuming services in the process of generating revenues. Examples of expenses include wages expense, rent expense, utilities expense, supplies expense, and miscellaneous expense.

A chart of accounts should meet the needs of a company's managers and other users of its financial statements. The accounts within the chart of accounts are numbered for use as references. A numbering system is normally used, so that new accounts can be added without affecting other account numbers.

Exhibit 2 is NetSolutions' chart of accounts that is used in this chapter. Additional accounts will be introduced in later chapters. In Exhibit 2, each account number has two digits. The first digit indicates the major account group of the ledger in which the account is located. Accounts beginning with 1 represent assets; 2, liabilities; 3, owner's equity; 4, revenue; and 5, expenses. The second digit indicates the location of the account within its group.



Procter & Gamble's account numbers have over 30 digits to reflect P&G's many different operations and regions.

## EXHIBIT 2

### Chart of Accounts for NetSolutions

Balance Sheet Accounts		Income Statement Accounts	
<b>1. Assets</b>		<b>4. Revenue</b>	
11	Cash	41	Fees Earned
12	Accounts Receivable	<b>5. Expenses</b>	
14	Supplies	51	Wages Expense
15	Prepaid Insurance	52	Rent Expense
17	Land	54	Utilities Expense
18	Office Equipment	55	Supplies Expense
<b>2. Liabilities</b>		59	Miscellaneous Expense
21	Accounts Payable		
23	Unearned Rent		
<b>3. Owner's Equity</b>			
31	Chris Clark, Capital		
32	Chris Clark, Drawing		

Each of the columns in Exhibit 1 has been assigned an account number in the chart of accounts shown in Exhibit 2. In addition, Accounts Receivable, Prepaid Insurance, Office Equipment, and Unearned Rent have been added. These accounts will be used in recording NetSolutions' December transactions.

## Double-Entry Accounting System

All businesses use what is called the **double-entry accounting system**. This system is based on the accounting equation and requires:

1. Every business transaction to be recorded in at least two accounts.
2. The total debits recorded for each transaction to be equal to the total credits recorded.

The double-entry accounting system also has specific **rules of debit and credit** for recording transactions in the accounts.

### Balance Sheet Accounts

The debit and credit rules for balance sheet accounts are as follows:

Balance Sheet Accounts					
ASSETS		LIABILITIES		OWNER'S EQUITY	
Asset Accounts		Liability Accounts		Owner's Equity Accounts	
Debit for increases (+)	Credit for decreases (-)	Debit for decreases (-)	Credit for increases (+)	Debit for decreases (-)	Credit for increases (+)



Describe and illustrate journalizing transactions using the double-entry accounting system.

## Income Statement Accounts

The debit and credit rules for income statement accounts are based on their relationship with owner's equity. As shown on page 55, owner's equity accounts are increased by credits. Since revenues increase owner's equity, revenue accounts are increased by credits and decreased by debits. Since owner's equity accounts are decreased by debits, expense accounts are increased by debits and decreased by credits. Thus, the rules of debit and credit for revenue and expense accounts are as follows:

Income Statement Accounts			
Revenue Accounts		Expense Accounts	
Debit for decreases (–)	Credit for increases (+)	Debit for increases (+)	Credit for decreases (–)

## Owner Withdrawals

The debit and credit rules for recording owner withdrawals are based on the effect of owner withdrawals on owner's equity. Since owner's withdrawals decrease owner's equity, the owner's drawing account is increased by debits. Likewise, the owner's drawing account is decreased by credits. Thus, the rules of debit and credit for the owner's drawing account are as follows:

Drawing Account	
Debit for increases (+)	Credit for decreases (–)

## Normal Balances

The sum of the increases in an account is usually equal to or greater than the sum of the decreases in the account. Thus, the **normal balance of an account** is either a debit or credit depending on whether increases in the account are recorded as debits or credits. For example, since asset accounts are increased with debits, asset accounts normally have debit balances. Likewise, liability accounts normally have credit balances.

The rules of debit and credit and the normal balances of the various types of accounts are summarized in Exhibit 3. Debits and credits are sometimes abbreviated as Dr. for debit and Cr. for credit.

When an account normally having a debit balance has a credit balance, or vice versa, an error may have occurred or an unusual situation may exist. For example, a credit balance in the office equipment account could result only from an error. This

### Example Exercise 2-1 Rules of Debit and Credit and Normal Balances

**OBJ.**  
**2**

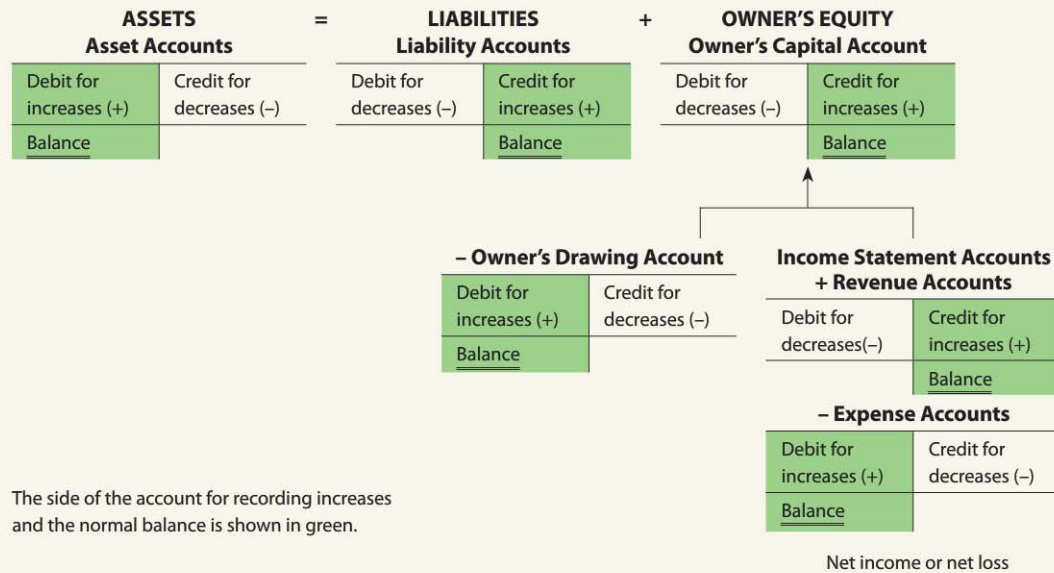
State for each account whether it is likely to have (a) debit entries only, (b) credit entries only, or (c) both debit and credit entries. Also, indicate its normal balance.

- |                            |                      |
|----------------------------|----------------------|
| 1. Amber Saunders, Drawing | 4. Fees Earned       |
| 2. Accounts Payable        | 5. Supplies          |
| 3. Cash                    | 6. Utilities Expense |

### Follow My Example 2-1

- |  |   |
|--|---|
| 1. Debit entries only; normal debit balance        | 4. Credit entries only; normal credit balance     |
| 2. Debit and credit entries; normal credit balance | 5. Debit and credit entries; normal debit balance |
| 3. Debit and credit entries; normal debit balance  | 6. Debit entries only; normal debit balance       |

Practice Exercises: **PE 2-1A, PE 2-1B**

**EXHIBIT 3** Rules of Debit and Credit, Normal Balances of Accounts

is because a business cannot have more decreases than increases of office equipment. On the other hand, a debit balance in an accounts payable account could result from an overpayment.

## Journalizing

Using the rules of debit and credit, transactions are initially entered in a record called a **journal**. In this way, the journal serves as a record of when transactions occurred and were recorded. To illustrate, the November transactions of NetSolutions from Chapter 1 are used.

*Nov. 1 Chris Clark deposited \$25,000 in a bank account in the name of NetSolutions.* **Transaction A**

This transaction increases an asset account and increases an owner's equity account. It is recorded in the journal as an increase (debit) to Cash and an increase (credit) to Chris Clark, Capital.

### Analysis

Journal						Page 1
Date	Step 2	Description	Post. Ref.	Debit	Credit	
2011 Nov. 1	↓	Cash		25,000		<b>Journal Entry</b>  Step 2 → Step 3 →
		Chris Clark, Capital			25,000	
		Invested cash in NetSolutions.				
Step 1	Step 3	Step 4	Step 5			

Assets		=	Liabilities	+	Owner's Equity (Investment)	Accounting Equation Impact
Cash					Chris Clark, Capital	
Nov. 1	25,000				Nov. 1 25,000	





A journal can be thought of as being similar to an individual's diary of significant day-to-day life events.

The transaction is recorded in the journal using the following steps:

- Step 1. The date of the transaction is entered in the Date column.
- Step 2. The title of the account to be debited is recorded at the left-hand margin under the Description column, and the amount to be debited is entered in the Debit column.
- Step 3. The title of the account to be credited is listed below and to the right of the debited account title, and the amount to be credited is entered in the Credit column.
- Step 4. A brief description may be entered below the credited account.
- Step 5. The Post. Ref. (Posting Reference) column is left blank when the journal entry is initially recorded. This column is used later in this chapter when the journal entry amounts are transferred to the accounts in the ledger.

The process of recording a transaction in the journal is called **journalizing**. The entry in the journal is called a **journal entry**.

The following is a useful method for analyzing and journalizing transactions:

1. Carefully read the description of the transaction to determine whether an asset, a liability, an owner's equity, a revenue, an expense, or a drawing account is affected.
2. For each account affected by the transaction, determine whether the account increases or decreases.
3. Determine whether each increase or decrease should be recorded as a debit or a credit, following the rules of debit and credit shown in Exhibit 3.
4. Record the transaction using a journal entry.

The following table summarizes terminology that is often used in describing a transaction along with the related accounts that would be debited and credited.

Common transaction terminology	Journal Entry Account	
	Debit	Credit
Received cash for services provided	Cash	Fees Earned
Services provided on account	Accounts Receivable	Fees Earned
Received cash on account	Cash	Accounts Receivable
Purchased on account	Asset Account	Accounts Payable
Paid on account	Accounts Payable	Cash
Paid cash	Asset or Expense Account	Cash
Owner investments	Cash and/or other assets	(Owner's Name), Capital
Owner withdrawals	(Owner's Name), Drawing	Cash

The remaining transactions of NetSolutions for November are analyzed and journalized next.

**Transaction B** Nov. 5 NetSolutions paid \$20,000 for the purchase of land as a future building site.

#### Analysis

This transaction increases one asset account and decreases another. It is recorded in the journal as a \$20,000 increase (debit) to Land and a \$20,000 decrease (credit) to Cash.

#### Journal Entry

Nov.	5	Land		20,000	
		Cash			20,000
		Purchased land for building site.			

#### Accounting Equation Impact

Assets		=	Liabilities		+	Owner's Equity	
<b>Land</b>							
Nov. 5	20,000						
<b>Cash</b>							
						Nov. 5	20,000

Nov. 10 NetSolutions purchased supplies on account for \$1,350.

### Transaction C

This transaction increases an asset account and increases a liability account. It is recorded in the journal as a \$1,350 increase (debit) to Supplies and a \$1,350 increase (credit) to Accounts Payable.

#### Analysis

Nov.	10	Supplies		1,350	
		Accounts Payable			1,350
		Purchased supplies on account.			

#### Journal Entry

Assets		=	Liabilities		+	Owner's Equity	
Supplies			Accounts Payable				
Nov. 10	1,350			Nov. 10	1,350		

#### Accounting Equation Impact

Nov. 18 NetSolutions received cash of \$7,500 from customers for services provided.

### Transaction D

This transaction increases an asset account and increases a revenue account. It is recorded in the journal as a \$7,500 increase (debit) to Cash and a \$7,500 increase (credit) to Fees Earned.

#### Analysis

Nov.	18	Cash		7,500	
		Fees Earned			7,500
		Received fees from customers.			

#### Journal Entry

Assets		=	Liabilities		+	Owner's Equity (Revenue)	
Cash						Fees Earned	
Nov. 18	7,500					Nov. 18	7,500

#### Accounting Equation Impact

Nov. 30 NetSolutions incurred the following expenses: wages, \$2,125; rent, \$800; utilities, \$450; and miscellaneous, \$275.

### Transaction E

This transaction increases various expense accounts and decreases an asset (Cash) account. You should note that regardless of the number of accounts, *the sum of the debits is always equal to the sum of the credits in a journal entry*. It is recorded in the journal with increases (debits) to the expense accounts (Wages Expense, \$2,125; Rent Expense, \$800; Utilities Expense, \$450; and Miscellaneous Expense, \$275) and a decrease (credit) to Cash, \$3,650.

#### Analysis

Nov.	30	Wages Expense	2274573 2013/10/03 147.70.115.36	2,125	
		Rent Expense		800	
		Utilities Expense		450	
		Miscellaneous Expense		275	
		Cash			3,650
		Paid expenses.			

#### Journal Entry

Assets		=	Liabilities		+	Owner's Equity (Expense)	
Cash						Wages Expense	
	Nov. 30	3,650				Nov. 30	2,125

#### Accounting Equation Impact

Rent Expense	
Nov. 30	800

Utilities Expense	
Nov. 30	450

Miscellaneous Expense	
Nov. 30	275

**Transaction F** Nov. 30 NetSolutions paid creditors on account, \$950.**Analysis**

This transaction decreases a liability account and decreases an asset account. It is recorded in the journal as a \$950 decrease (debit) to Accounts Payable and a \$950 decrease (credit) to Cash.

**Journal Entry**

Nov.	30	Accounts Payable		950	
		Cash			950
		Paid creditors on account.			

**Accounting Equation Impact**

Assets			=	Liabilities		+	Owner's Equity	
Cash				Accounts Payable				
	Nov. 30	950		Nov. 30	950			

**Transaction G** Nov. 30 Chris Clark determined that the cost of supplies on hand at November 30 was \$550.**Analysis**

NetSolutions purchased \$1,350 of supplies on November 10. Thus, \$800 (\$1,350 – \$550) of supplies must have been used during November. This transaction is recorded in the journal as an \$800 increase (debit) to Supplies Expense and an \$800 decrease (credit) to Supplies.

**Journal Entry**

Nov.	30	Supplies Expense		800	
		Supplies			800
		Supplies used during November.			

**Accounting Equation Impact**

Assets			=	Liabilities		+	Owner's Equity (Expense)	
Supplies							Supplies Expense	
	Nov. 30	800					Nov. 30	800

**Transaction H** Nov. 30 Chris Clark withdrew \$2,000 from NetSolutions for personal use.**Analysis**

This transaction decreases assets and owner's equity. This transaction is recorded in the journal as a \$2,000 increase (debit) to Chris Clark, Drawing and a \$2,000 decrease (credit) to Cash.

**Journal Entry**

Journal						Page 2
Date		Description	Post. Ref.	Debit	Credit	
2011 Nov.	30	Chris Clark, Drawing		2,000		
		Cash			2,000	
		Chris Clark withdrew cash for personal use.				

**Accounting Equation Impact**

Assets			=	Liabilities		+	Owner's Equity (Drawing)	
Cash							Chris Clark, Drawing	
	Nov. 30	2,000					Nov. 30	2,000

## Integrity, Objectivity, and Ethics in Business

**WILL JOURNALIZING PREVENT FRAUD?**

While journalizing transactions reduces the possibility of fraud, it by no means eliminates it. For example, embezzlement can be hidden within the double-entry bookkeeping system by creating fictitious suppliers to whom checks are issued.



## CHAPTER 2



© AP Photo/Paul Sakuma

# Analyzing Transactions

## Apple, Inc.™

Everyday it seems like we get an incredible amount of incoming e-mail messages; you get them from your friends, relatives, subscribed e-mail lists, and even spammers! But how do you organize all of these messages? You might create folders to sort messages by sender, topic, or project. Perhaps you use keyword search utilities. You might even use filters/rules to automatically delete spam or send messages from your best friend to a special folder. In any case, you are organizing information so that it is simple to retrieve and allows you to understand, respond, or refer to the messages.

In the same way that you organize your e-mail, companies develop an organized method for processing, recording, and summarizing financial transactions. For example, **Apple, Inc.**, has a huge volume of financial transactions, resulting from sales of its innovative computers, digital media

(iTunes), iPods, iPhones, and iPads. When Apple sells an iPad, a customer has the option of paying with credit card, a debit or check card, an Apple gift card, a financing arrangement, or cash. In order to analyze only the information related to Apple's cash transactions, the company must record or summarize all these similar sales using a single category or "cash" account. Similarly, Apple will record credit card payments for iPads and sales from financing arrangements in different accounts (records).

While Chapter 1 uses the accounting equation ( $\text{Assets} = \text{Liabilities} + \text{Owner's Equity}$ ) to analyze and record financial transactions, this chapter presents more practical and efficient recording methods that most companies use. In addition, this chapter discusses possible accounting errors that may occur, along with methods to detect and correct them.



## Learning Objectives

After studying this chapter, you should be able to:

Example Exercises

Page

**OBJ. 1**

Describe the characteristics of an account and a chart of accounts.  
Using Accounts to Record Transactions  
Chart of Accounts

**OBJ. 2**

Describe and illustrate journalizing transactions using the double-entry accounting system.  
Double-Entry Accounting System  
Balance Sheet Accounts  
Income Statement Accounts  
Owner Withdrawals  
Normal Balances  
Journalizing

EE 2-1  
EE 2-2

56  
61

**OBJ. 3**

Describe and illustrate the journalizing and posting of transactions to accounts.  
Posting Journal Entries to Accounts

EE 2-3  
EE 2-4  
EE 2-5

65  
68  
68

**OBJ. 4**

Prepare an unadjusted trial balance and explain how it can be used to discover errors.  
Trial Balance  
Errors Affecting the Trial Balance  
Errors Not Affecting the Trial Balance

EE 2-6  
EE 2-7

72  
73

**OBJ. 5**

Describe and illustrate the use of horizontal analysis in evaluating a company's performance and financial condition.  
Financial Analysis and Interpretation: Horizontal Analysis

EE 2-8

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**At a Glance 2**

Page 75

**OBJ. 1**

Describe the characteristics of an account and a chart of accounts.

## Using Accounts to Record Transactions

In Chapter 1, the November transactions for NetSolutions were recorded using the accounting equation format shown in Exhibit 1. However, this format is not efficient or practical for companies that have to record thousands or millions of transactions daily. As a result, accounting systems are designed to show the increases and decreases in each accounting equation element as a separate record. This record is called an **account**.

To illustrate, the Cash column of Exhibit 1 records the increases and decreases in cash. Likewise, the other columns in Exhibit 1 record the increases and decreases in the other accounting equation elements. Each of these columns can be organized into a separate account.

An account, in its simplest form, has three parts.

1. A title, which is the name of the accounting equation element recorded in the account.
2. A space for recording increases in the amount of the element.
3. A space for recording decreases in the amount of the element.

The account form presented below is called a **T account** because it resembles the letter T. The left side of the account is called the *debit* side, and the right side is called the *credit* side.<sup>1</sup>

Title	
Left side <i>debit</i>	Right side <i>credit</i>

<sup>1</sup> The terms *debit* and *credit* are derived from the Latin *debere* and *credere*.

**EXHIBIT 1** NetSolutions November Transactions

Assets				=	Liabilities +		Owner's Equity																
	Cash	+	Supp.	+	Land	=	Accounts Payable	+	Chris Clark, Capital	-	Chris Clark, Drawing	+	Fees Earned	-	Wages Exp.	-	Rent Exp.	-	Supplies Exp.	-	Utilities Exp.	-	Misc. Exp.
a.	+25,000								+25,000														
b.	-20,000				+20,000																		
Bal.	5,000				20,000				25,000														
c.			+1,350				+1,350																
Bal.	5,000		1,350		20,000		1,350		25,000														
d.	+7,500												+7,500										
Bal.	12,500		1,350		20,000		1,350		25,000				7,500										
e.	-3,650													-2,125	-800						-450	-275	
Bal.	8,850		1,350		20,000		1,350		25,000				7,500	-2,125	-800						-450	-275	
f.	-950						-950																
Bal.	7,900		1,350		20,000		400		25,000				7,500	-2,125	-800						-450	-275	
g.			-800																-800				
Bal.	7,900		550		20,000		400		25,000				7,500	-2,125	-800				-800		-450	-275	
h.	-2,000										-2,000												
Bal.	5,900		550		20,000		400		25,000		-2,000		7,500	-2,125	-800				-800		-450	-275	

The amounts shown in the Cash column of Exhibit 1 would be recorded in a cash account as follows:

Cash							
Debit Side of Account	{	(a)	25,000	(b)	20,000	{	Credit Side of Account
		(d)	7,500	(e)	3,650		
				(f)	950		
				(h)	2,000		
		Balance	<u>5,900</u>				
		Balance of account					

**Note:**

Amounts entered on the left side of an account are debits, and amounts entered on the right side of an account are credits.

Recording transactions in accounts must follow certain rules. For example, increases in assets are recorded on the **debit** (left side) of an account. Likewise, decreases in assets are recorded on the **credit** (right side) of an account. The excess of the debits of an asset account over its credits is the **balance of the account**.

To illustrate, the receipt (increase in Cash) of \$25,000 in transaction (a) is entered on the debit (left) side of the cash account shown above. The letter or date of the transaction is also entered into the account. This is done so if any questions later arise related to the entry, the entry can be traced back to the underlying transaction data. In contrast, the payment (decrease in Cash) of \$20,000 to purchase land in transaction (b) is entered on the credit (right) side of the account.

The balance of the cash account of \$5,900 is the excess of the debits over the credits as shown below.

Debits (\$25,000 + \$7,500) .....	\$32,500
Less credits (\$20,000 + \$3,650 + \$950 + \$2,000) .....	26,600
Balance of Cash as of November 30, 2011 .....	<u>\$ 5,900</u>

The balance of the cash account is inserted in the account, in the Debit column. In this way, the balance is identified as a debit balance.<sup>2</sup> This balance represents NetSolutions' cash on hand as of November 30, 2011. This balance of \$5,900 is reported on the November 30, 2011, balance sheet for NetSolutions as shown in Exhibit 6 of Chapter 1.

<sup>2</sup> The totals of the debit and credit columns may be shown separately in an account. When this is done, these amounts should be identified in some way so that they are not mistaken for entries or the ending balance of the account.



In an actual accounting system, a more formal account form replaces the T account. Later in this chapter, a four-column account is illustrated. The T account, however, is a simple way to illustrate the effects of transactions on accounts and financial statements. For this reason, T accounts are often used in business to explain transactions.

Each of the columns in Exhibit 1 can be converted into an account form in a similar manner as was done for the Cash column of Exhibit 1. However, as mentioned earlier, recording increases and decreases in accounts must follow certain rules. These rules are discussed after the chart of accounts is described.

## Chart of Accounts

A group of accounts for a business entity is called a **ledger**. A list of the accounts in the ledger is called a **chart of accounts**. The accounts are normally listed in the order in which they appear in the financial statements. The balance sheet accounts are listed first, in the order of assets, liabilities, and owner's equity. The income statement accounts are then listed in the order of revenues and expenses.

**Assets** are resources owned by the business entity. These resources can be physical items, such as cash and supplies, or intangibles that have value. Examples of intangible assets include patent rights, copyrights, and trademarks. Assets also include accounts receivable, prepaid expenses (such as insurance), buildings, equipment, and land.

**Liabilities** are debts owed to outsiders (creditors). Liabilities are often identified on the balance sheet by titles that include *payable*. Examples of liabilities include accounts payable, notes payable, and wages payable. Cash received before services are delivered creates a liability to perform the services. These future service commitments are called *unearned revenues*. Examples of unearned revenues include magazine subscriptions received by a publisher and tuition received at the beginning of a term by a college.

**Owner's equity** is the owner's right to the assets of the business after all liabilities have been paid. For a proprietorship, the owner's equity is represented by the balance of the owner's **capital account**. A **drawing** account represents the amount of withdrawals made by the owner.

**Revenues** are increases in owner's equity as a result of selling services or products to customers. Examples of revenues include fees earned, fares earned, commissions revenue, and rent revenue.

## BusinessConnection



### THE HIJACKING RECEIVABLE

A company's chart of accounts should reflect the basic nature of its operations. Occasionally, however, transactions take place that give rise to unusual accounts. The following is a story of one such account.

Before strict airport security was implemented across the United States, several airlines experienced hijacking incidents. One such incident occurred when a **Southern Airways** DC-9 en route from Memphis to Miami was hijacked during a stopover in Birmingham, Alabama. The three hijackers boarded the plane in Birmingham armed with handguns and hand grenades. At gunpoint, the hijackers took the plane, the plane's crew, and the passengers to nine American cities, Toronto, and eventually to Havana, Cuba.

During the long flight, the hijackers demanded a ransom of \$10 million. Southern Airways, however, was only

able to come up with \$2 million. Eventually, the pilot talked the hijackers into settling for the \$2 million when the plane landed in Chattanooga for refueling.

Upon landing in Havana, the Cuban authorities arrested the hijackers and, after a brief delay, sent the plane, passengers, and crew back to the United States. The hijackers and \$2 million stayed in Cuba.

How did Southern Airways account for and report the hijacking payment in its subsequent financial statements? As you might have analyzed, the initial entry credited Cash for \$2 million. The debit was to an account entitled "Hijacking Payment." This account was reported as a type of receivable under "other assets" on Southern's balance sheet. The company maintained that it would be able to collect the cash from the Cuban government and that, therefore, a receivable existed. In fact, Southern Airways was repaid \$2 million by the Cuban government, which was, at that time, attempting to improve relations with the United States.

**Expenses** result from using up assets or consuming services in the process of generating revenues. Examples of expenses include wages expense, rent expense, utilities expense, supplies expense, and miscellaneous expense.

A chart of accounts should meet the needs of a company's managers and other users of its financial statements. The accounts within the chart of accounts are numbered for use as references. A numbering system is normally used, so that new accounts can be added without affecting other account numbers.

Exhibit 2 is NetSolutions' chart of accounts that is used in this chapter. Additional accounts will be introduced in later chapters. In Exhibit 2, each account number has two digits. The first digit indicates the major account group of the ledger in which the account is located. Accounts beginning with 1 represent assets; 2, liabilities; 3, owner's equity; 4, revenue; and 5, expenses. The second digit indicates the location of the account within its group.



Procter & Gamble's account numbers have over 30 digits to reflect P&G's many different operations and regions.

## EXHIBIT 2

### Chart of Accounts for NetSolutions

Balance Sheet Accounts	Income Statement Accounts
<b>1. Assets</b> 11 Cash 12 Accounts Receivable 14 Supplies 15 Prepaid Insurance 17 Land 18 Office Equipment <b>2. Liabilities</b> 21 Accounts Payable 23 Unearned Rent <b>3. Owner's Equity</b> 31 Chris Clark, Capital 32 Chris Clark, Drawing	<b>4. Revenue</b> 41 Fees Earned <b>5. Expenses</b> 51 Wages Expense 52 Rent Expense 54 Utilities Expense 55 Supplies Expense 59 Miscellaneous Expense

Each of the columns in Exhibit 1 has been assigned an account number in the chart of accounts shown in Exhibit 2. In addition, Accounts Receivable, Prepaid Insurance, Office Equipment, and Unearned Rent have been added. These accounts will be used in recording NetSolutions' December transactions.

## Double-Entry Accounting System

All businesses use what is called the **double-entry accounting system**. This system is based on the accounting equation and requires:

1. Every business transaction to be recorded in at least two accounts.
2. The total debits recorded for each transaction to be equal to the total credits recorded.

The double-entry accounting system also has specific **rules of debit and credit** for recording transactions in the accounts.

### Balance Sheet Accounts

The debit and credit rules for balance sheet accounts are as follows:

Balance Sheet Accounts					
ASSETS		LIABILITIES		OWNER'S EQUITY	
Asset Accounts		Liability Accounts		Owner's Equity Accounts	
Debit for increases (+)	Credit for decreases (–)	Debit for decreases (–)	Credit for increases (+)	Debit for decreases (–)	Credit for increases (+)



Describe and illustrate journalizing transactions using the double-entry accounting system.



## Income Statement Accounts

The debit and credit rules for income statement accounts are based on their relationship with owner's equity. As shown on page 55, owner's equity accounts are increased by credits. Since revenues increase owner's equity, revenue accounts are increased by credits and decreased by debits. Since owner's equity accounts are decreased by debits, expense accounts are increased by debits and decreased by credits. Thus, the rules of debit and credit for revenue and expense accounts are as follows:

Income Statement Accounts			
Revenue Accounts		Expense Accounts	
Debit for decreases (–)	Credit for increases (+)	Debit for increases (+)	Credit for decreases (–)

## Owner Withdrawals

The debit and credit rules for recording owner withdrawals are based on the effect of owner withdrawals on owner's equity. Since owner's withdrawals decrease owner's equity, the owner's drawing account is increased by debits. Likewise, the owner's drawing account is decreased by credits. Thus, the rules of debit and credit for the owner's drawing account are as follows:

Drawing Account	
Debit for increases (+)	Credit for decreases (–)

## Normal Balances

The sum of the increases in an account is usually equal to or greater than the sum of the decreases in the account. Thus, the **normal balance of an account** is either a debit or credit depending on whether increases in the account are recorded as debits or credits. For example, since asset accounts are increased with debits, asset accounts normally have debit balances. Likewise, liability accounts normally have credit balances.

The rules of debit and credit and the normal balances of the various types of accounts are summarized in Exhibit 3. Debits and credits are sometimes abbreviated as Dr. for debit and Cr. for credit.

When an account normally having a debit balance has a credit balance, or vice versa, an error may have occurred or an unusual situation may exist. For example, a credit balance in the office equipment account could result only from an error. This

### Example Exercise 2-1 Rules of Debit and Credit and Normal Balances

**OBJ.**  
**2**

State for each account whether it is likely to have (a) debit entries only, (b) credit entries only, or (c) both debit and credit entries. Also, indicate its normal balance.

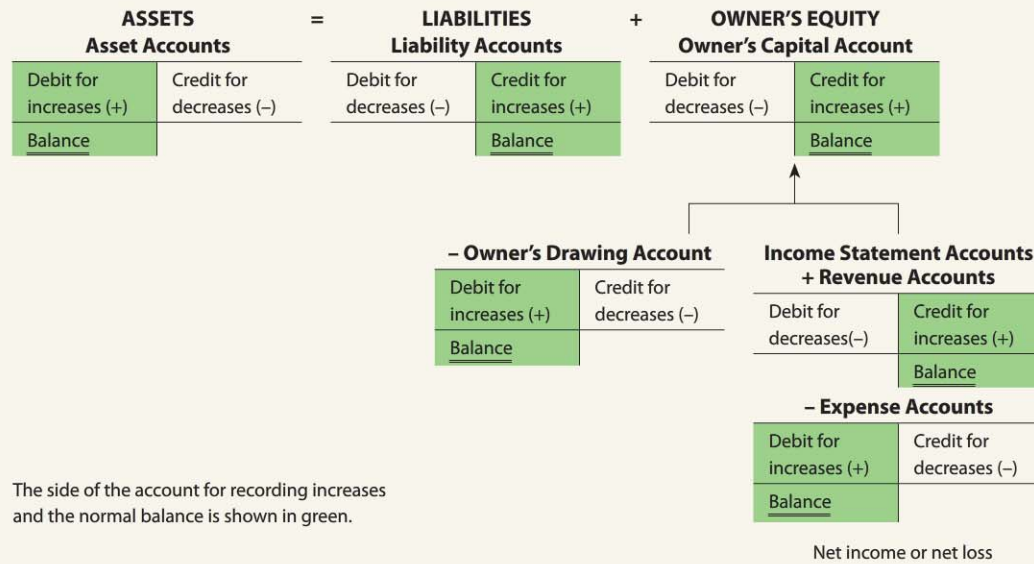
- |                            |                      |
|----------------------------|----------------------|
| 1. Amber Saunders, Drawing | 4. Fees Earned       |
| 2. Accounts Payable        | 5. Supplies          |
| 3. Cash                    | 6. Utilities Expense |

### Follow My Example 2-1

- |  |   |
|--|---|
| 1. Debit entries only; normal debit balance        | 4. Credit entries only; normal credit balance     |
| 2. Debit and credit entries; normal credit balance | 5. Debit and credit entries; normal debit balance |
| 3. Debit and credit entries; normal debit balance  | 6. Debit entries only; normal debit balance       |

Practice Exercises: **PE 2-1A, PE 2-1B**



**EXHIBIT 3** Rules of Debit and Credit, Normal Balances of Accounts

is because a business cannot have more decreases than increases of office equipment. On the other hand, a debit balance in an accounts payable account could result from an overpayment.

## Journalizing

Using the rules of debit and credit, transactions are initially entered in a record called a **journal**. In this way, the journal serves as a record of when transactions occurred and were recorded. To illustrate, the November transactions of NetSolutions from Chapter 1 are used.

*Nov. 1 Chris Clark deposited \$25,000 in a bank account in the name of NetSolutions.* **Transaction A**

This transaction increases an asset account and increases an owner's equity account. It is recorded in the journal as an increase (debit) to Cash and an increase (credit) to Chris Clark, Capital.

### Analysis

Journal						Page 1
Date	Step 2	Description	Post. Ref.	Debit	Credit	
2011						
Nov. 1	↓	Cash		25,000		Step 2
	↓	Chris Clark, Capital			25,000	Step 3
	↓	Invested cash in NetSolutions.				

Step 1 Step 3 Step 4 Step 5

**Assets** = **Liabilities** + **Owner's Equity (Investment)**

<b>Cash</b>		<b>Chris Clark, Capital</b>
Nov. 1 25,000		Nov. 1 25,000

**Accounting Equation Impact**



A journal can be thought of as being similar to an individual's diary of significant day-to-day life events.

The transaction is recorded in the journal using the following steps:

- Step 1. The date of the transaction is entered in the Date column.
- Step 2. The title of the account to be debited is recorded at the left-hand margin under the Description column, and the amount to be debited is entered in the Debit column.
- Step 3. The title of the account to be credited is listed below and to the right of the debited account title, and the amount to be credited is entered in the Credit column.
- Step 4. A brief description may be entered below the credited account.
- Step 5. The Post. Ref. (Posting Reference) column is left blank when the journal entry is initially recorded. This column is used later in this chapter when the journal entry amounts are transferred to the accounts in the ledger.

The process of recording a transaction in the journal is called **journalizing**. The entry in the journal is called a **journal entry**.

The following is a useful method for analyzing and journalizing transactions:

1. Carefully read the description of the transaction to determine whether an asset, a liability, an owner's equity, a revenue, an expense, or a drawing account is affected.
2. For each account affected by the transaction, determine whether the account increases or decreases.
3. Determine whether each increase or decrease should be recorded as a debit or a credit, following the rules of debit and credit shown in Exhibit 3.
4. Record the transaction using a journal entry.

The following table summarizes terminology that is often used in describing a transaction along with the related accounts that would be debited and credited.

Common transaction terminology	Journal Entry Account	
	Debit	Credit
Received cash for services provided	Cash	Fees Earned
Services provided on account	Accounts Receivable	Fees Earned
Received cash on account	Cash	Accounts Receivable
Purchased on account	Asset Account	Accounts Payable
Paid on account	Accounts Payable	Cash
Paid cash	Asset or Expense Account	Cash
Owner investments	Cash and/or other assets	(Owner's Name), Capital
Owner withdrawals	(Owner's Name), Drawing	Cash

The remaining transactions of NetSolutions for November are analyzed and journalized next.

**Transaction B** Nov. 5 NetSolutions paid \$20,000 for the purchase of land as a future building site.

#### Analysis

This transaction increases one asset account and decreases another. It is recorded in the journal as a \$20,000 increase (debit) to Land and a \$20,000 decrease (credit) to Cash.

#### Journal Entry

Nov.	5	Land		20,000	
		Cash			20,000
		Purchased land for building site.			

#### Accounting Equation Impact

Assets	=	Liabilities	+	Owner's Equity
<b>Land</b>				
Nov. 5 20,000				
<b>Cash</b>				
				Nov. 5 20,000

Nov. 10 NetSolutions purchased supplies on account for \$1,350.

### Transaction C

This transaction increases an asset account and increases a liability account. It is recorded in the journal as a \$1,350 increase (debit) to Supplies and a \$1,350 increase (credit) to Accounts Payable.

### Analysis

Nov.	10	Supplies		1,350	
		Accounts Payable			1,350
		Purchased supplies on account.			

### Journal Entry

Assets		=	Liabilities		+	Owner's Equity	
Supplies			Accounts Payable				
Nov. 10	1,350			Nov. 10	1,350		

### Accounting Equation Impact

Nov. 18 NetSolutions received cash of \$7,500 from customers for services provided.

### Transaction D

This transaction increases an asset account and increases a revenue account. It is recorded in the journal as a \$7,500 increase (debit) to Cash and a \$7,500 increase (credit) to Fees Earned.

### Analysis

Nov.	18	Cash		7,500	
		Fees Earned			7,500
		Received fees from customers.			

### Journal Entry

Assets		=	Liabilities		+	Owner's Equity (Revenue)	
Cash						Fees Earned	
Nov. 18	7,500					Nov. 18	7,500

### Accounting Equation Impact

Nov. 30 NetSolutions incurred the following expenses: wages, \$2,125; rent, \$800; utilities, \$450; and miscellaneous, \$275.

### Transaction E

This transaction increases various expense accounts and decreases an asset (Cash) account. You should note that regardless of the number of accounts, *the sum of the debits is always equal to the sum of the credits in a journal entry*. It is recorded in the journal with increases (debits) to the expense accounts (Wages Expense, \$2,125; Rent Expense, \$800; Utilities Expense, \$450; and Miscellaneous Expense, \$275) and a decrease (credit) to Cash, \$3,650.

### Analysis

Nov.	30	Wages Expense	2,125		
		Rent Expense	800		
		Utilities Expense	450		
		Miscellaneous Expense	275		
		Cash		3,650	
		Paid expenses.			

### Journal Entry

Assets		=	Liabilities		+	Owner's Equity (Expense)	
Cash						Wages Expense	
	Nov. 30	3,650				Nov. 30	2,125

### Accounting Equation Impact

Rent Expense	
Nov. 30	800

Utilities Expense	
Nov. 30	450

Miscellaneous Expense	
Nov. 30	275



**Transaction F** Nov. 30 NetSolutions paid creditors on account, \$950.**Analysis**

This transaction decreases a liability account and decreases an asset account. It is recorded in the journal as a \$950 decrease (debit) to Accounts Payable and a \$950 decrease (credit) to Cash.

**Journal Entry**

Nov.	30	Accounts Payable		950	
		Cash			950
		Paid creditors on account.			

**Accounting Equation Impact**

Assets			=	Liabilities		+	Owner's Equity	
Cash				Accounts Payable				
	Nov. 30	950		Nov. 30	950			

**Transaction G** Nov. 30 Chris Clark determined that the cost of supplies on hand at November 30 was \$550.**Analysis**

NetSolutions purchased \$1,350 of supplies on November 10. Thus, \$800 (\$1,350 – \$550) of supplies must have been used during November. This transaction is recorded in the journal as an \$800 increase (debit) to Supplies Expense and an \$800 decrease (credit) to Supplies.

**Journal Entry**

Nov.	30	Supplies Expense		800	
		Supplies			800
		Supplies used during November.			

**Accounting Equation Impact**

Assets			=	Liabilities		+	Owner's Equity (Expense)	
Supplies							Supplies Expense	
	Nov. 30	800					Nov. 30	800

**Transaction H** Nov. 30 Chris Clark withdrew \$2,000 from NetSolutions for personal use.**Analysis**

This transaction decreases assets and owner's equity. This transaction is recorded in the journal as a \$2,000 increase (debit) to Chris Clark, Drawing and a \$2,000 decrease (credit) to Cash.

**Journal Entry**

Journal						Page 2
Date		Description	Post. Ref.	Debit	Credit	
2011						
Nov.	30	Chris Clark, Drawing		2,000		
		Cash			2,000	
		Chris Clark withdrew cash for personal use.				

**Accounting Equation Impact**

Assets			=	Liabilities		+	Owner's Equity (Drawing)	
Cash							Chris Clark, Drawing	
	Nov. 30	2,000					Nov. 30	2,000

**Integrity, Objectivity, and Ethics in Business****WILL JOURNALIZING PREVENT FRAUD?**

While journalizing transactions reduces the possibility of fraud, it by no means eliminates it. For example, embezzlement can be hidden within the double-entry bookkeeping system by creating fictitious suppliers to whom checks are issued.

**EXHIBIT 6****Trial Balance**

Step 1

**NetSolutions**  
**Unadjusted Trial Balance**  
**December 31, 2011**

Step 2

	Debit Balances	Credit Balances
Cash .....	2,065	
Accounts Receivable .....	2,220	
Supplies .....	2,000	
Prepaid Insurance .....	2,400	
Land .....	20,000	
Office Equipment .....	1,800	
Accounts Payable .....		900
Unearned Rent .....		360
Chris Clark, Capital .....		25,000
Chris Clark, Drawing .....	4,000	
Fees Earned .....		16,340
Wages Expense .....	4,275	
Rent Expense .....	1,600	
Utilities Expense .....	985	
Supplies Expense .....	800	
Miscellaneous Expense .....	455	
	42,600	42,600

Steps 3–4

The trial balance shown in Exhibit 6 is titled an **unadjusted trial balance**. This is to distinguish it from other trial balances that will be prepared in later chapters. These other trial balances include an adjusted trial balance and a post-closing trial balance.<sup>3</sup>

## Errors Affecting the Trial Balance

If the trial balance totals are not equal, an error has occurred. In this case, the error must be found and corrected. A method useful in discovering errors is as follows:

1. If the difference between the Debit and Credit column totals is 10, 100, or 1,000, an error in addition may have occurred. In this case, re-add the trial balance column totals. If the error still exists, recompute the account balances.
2. If the difference between the Debit and Credit column totals can be evenly divisible by 2, the error may be due to the entering of a debit balance as a credit balance, or vice versa. In this case, review the trial balance for account balances of one-half the difference that may have been entered in the wrong column. For example, if the Debit column total is \$20,640 and the Credit column total is \$20,236, the difference of \$404 (\$20,640 – \$20,236) may be due to a credit account balance of \$202 that was entered as a debit account balance.
3. If the difference between the Debit and Credit column totals is evenly divisible by 9, trace the account balances back to the ledger to see if an account balance was incorrectly copied from the ledger. Two common types of copying errors are transpositions and slides. A **transposition** occurs when the order of the digits is copied incorrectly, such as writing \$542 as \$452 or \$524. In a **slide**, the entire number is copied incorrectly one or more spaces to the right or the left, such as writing \$542.00 as \$54.20 or \$5,420.00. In both cases, the resulting error will be evenly divisible by 9.
4. If the difference between the Debit and Credit column totals is not evenly divisible by 2 or 9, review the ledger to see if an account balance in the amount of the error has been omitted from the trial balance. If the error is not discovered, review the journal postings to see if a posting of a debit or credit may have been omitted.

<sup>3</sup> The adjusted trial balance is discussed in Chapter 3, and the post-closing trial balance is discussed in Chapter 4.

5. If an error is not discovered by the preceding steps, the accounting process must be retraced, beginning with the last journal entry.

The trial balance does not provide complete proof of the accuracy of the ledger. It indicates only that the debits and the credits are equal. This proof is of value, however, because errors often affect the equality of debits and credits.

### Example Exercise 2-6 Trial Balance Errors

OBJ.  
4

For each of the following errors, considered individually, indicate whether the error would cause the trial balance totals to be unequal. If the error would cause the trial balance totals to be unequal, indicate whether the debit or credit total is higher and by how much.

- Payment of a cash withdrawal of \$5,600 was journalized and posted as a debit of \$6,500 to Salary Expense and a credit of \$6,500 to Cash.
- A fee of \$2,850 earned from a client was debited to Accounts Receivable for \$2,580 and credited to Fees Earned for \$2,850.
- A payment of \$3,500 to a creditor was posted as a debit of \$3,500 to Accounts Payable and a debit of \$3,500 to Cash.

### Follow My Example 2-6

- The totals are equal since both the debit and credit entries were journalized and posted for \$6,500.
- The totals are unequal. The credit total is higher by \$270 (\$2,850 – \$2,580).
- The totals are unequal. The debit total is higher by \$7,000 (\$3,500 + \$3,500).

Practice Exercises: PE 2-6A, PE 2-6B

## Errors Not Affecting the Trial Balance

An error may occur that does not cause the trial balance totals to be unequal. Such an error may be discovered when preparing the trial balance or may be indicated by an unusual account balance. For example, a credit balance in the supplies account indicates an error has occurred. This is because a business cannot have “negative” supplies. When such errors are discovered, they should be corrected. If the error has already been journalized and posted to the ledger, a **correcting journal entry** is normally prepared.

To illustrate, assume that on May 5 a \$12,500 purchase of office equipment on account was incorrectly journalized and posted as a debit to Supplies and a credit to Accounts Payable for \$12,500. This posting of the incorrect entry is shown in the following T accounts:

*Incorrect:*

Supplies	Accounts Payable
12,500	12,500

Before making a correcting journal entry, it is best to determine the debit(s) and credit(s) that should have been recorded. These are shown in the following T accounts:

*Correct:*

Office Equipment	Accounts Payable
12,500	12,500

Comparing the two sets of T accounts shows that the incorrect debit to Supplies may be corrected by debiting Office Equipment for \$12,500 and crediting Supplies for \$12,500. The following correcting journal entry is then journalized and posted:



Entry to Correct Error:

May	31	Office Equipment	18	12,500		
		Supplies	14		12,500	
		To correct erroneous debit to Supplies on May 5. See invoice from Bell Office Equipment Co.				

**Example Exercise 2-7 Correcting Entries****OBJ.**  
**4**

The following errors took place in journalizing and posting transactions:

- A withdrawal of \$6,000 by Cheri Ramey, owner of the business, was recorded as a debit to Office Salaries Expense and a credit to Cash.
- Utilities Expense of \$4,500 paid for the current month was recorded as a debit to Miscellaneous Expense and a credit to Accounts Payable.

Journalize the entries to correct the errors. Omit explanations.

**Follow My Example 2-7**

a. Cheri Ramey, Drawing .....	6,000	
Office Salaries Expense.....		6,000
b. Accounts Payable.....	4,500	
Miscellaneous Expense.....		4,500
Utilities Expense .....	4,500	
Cash.....		4,500

*Note:* The first entry in (b) reverses the incorrect entry, and the second entry records the correct entry. These two entries could also be combined into one entry; however, preparing two entries will make it easier for someone later to understand what had happened and why the entries were necessary.

Practice Exercises: **PE 2-7A, PE 2-7B**

## Financial Analysis and Interpretation: Horizontal Analysis



A single item in a financial statement, such as net income, is often useful in interpreting the financial performance of a company. However, a comparison with prior periods often makes the financial information even more useful. For example, comparing net income of the current period with the net income with the prior period will indicate whether the company's operating performance has improved.

In **horizontal analysis**, the amount of each item on a current financial statement is compared with the same item on an earlier statement. The increase or decrease in the *amount* of the item is computed together with the *percent* of increase or decrease. When two statements are being compared, the earlier statement is used as the base for computing the amount and the percent of change.

**OBJ.**  
**5** Describe and illustrate the use of horizontal analysis in evaluating a company's performance and financial condition.

To illustrate, the horizontal analysis of two income statements for J. Holmes, Attorney-at-Law, is shown below.

**J. Holmes, Attorney-at-Law**  
**Income Statements**  
**For the Years Ended December 31**

	2012	2011	Increase (Decrease)	
			Amount	Percent
Fees earned	\$187,500	\$150,000	\$37,500	25.0%*
Operating expenses:				
Wages expense	\$ 60,000	\$ 45,000	\$15,000	33.3
Rent expense	15,000	12,000	3,000	25.0
Utilities expense	12,500	9,000	3,500	38.9
Supplies expense	2,700	3,000	(300)	(10.0)
Miscellaneous expense	2,300	1,800	500	27.8
Total operating expenses	\$ 92,500	\$ 70,800	\$21,700	30.6
Net income	\$ 95,000	\$ 79,200	\$15,800	19.9

\*\$37,500 ÷ \$150,000

The horizontal analysis for J. Holmes, Attorney-at-Law, indicates both favorable and unfavorable trends. The increase in fees earned is a favorable trend, as is the decrease in supplies expense. Unfavorable trends include the increase in wages expense, utilities expense, and miscellaneous expense. These expenses increased the same as or faster than the increase in revenues, with total operating expenses increasing by 30.6%. Overall, net income increased by \$15,800, or 19.9%, a favorable trend.

The significance of the various increases and decreases in the revenue and expense items should be investigated to see if operations could be further improved. For example, the increase in utilities expense of 38.9% was the result of renting additional office space for use by a part-time law student in performing paralegal services. This explains the increase in rent expense of 25% and the increase in wages expense of 33.3%. The increase in revenues of 25% reflects the fees generated by the new paralegal.

The preceding example illustrates how horizontal analysis can be useful in interpreting and analyzing the income statement. Horizontal analyses can also be performed for the balance sheet, the statement of owner's equity, and the statement of cash flows.

To illustrate, horizontal analysis for Apple Inc.'s 2009 and 2008 statements of cash flows (in millions) is shown below.

**Apple Inc.**  
**Statements of Cash Flows**  
**For the Years Ended**

	Sept. 26, 2009	Sept. 27, 2008	Increase (Decrease)	
			Amount	Percent
Cash flows from operating activities	\$ 10,159	\$ 9,596	\$ 563	5.9%
Cash flows used for investing activities	(17,434)	(8,189)	(9,245)	(112.9)
Cash flows from financing activities	663	1,116	(453)	(40.6)
Net increase (decrease) in cash	\$ (6,612)	\$ 2,523	\$(9,135)	(362.1)
Beginning of the year balance of cash	11,875	9,352	2,523	27.0
End of the year balance of cash	\$ 5,263	\$11,875	\$(6,612)	(55.7)

The horizontal analysis of cash flows for Apple Inc. indicates an increase in cash flows from operating activities of 5.9%, which is a favorable trend. At the same time, Apple increased the cash used in its investing activities by over 112.9% and decreased the cash it received from financing activities by 40.6%. Overall, Apple had a 362.1% decrease in cash for the year, which decreased the end of the year cash balance by 55.7%. In contrast, in the prior year Apple increased its ending cash balance, which is the beginning cash balance of the current year, by 27%.

**Example Exercise 2-8 Horizontal Analysis****OBJ.**  
**5**

Two income statements for McCorkle Company are shown below.

**McCorkle Company**  
**Income Statements**  
**For the Years Ended December 31**

	2012	2011
Fees earned	\$210,000	\$175,000
Operating expenses	172,500	150,000
Net income	<u>\$ 37,500</u>	<u>\$ 25,000</u>

Prepare a horizontal analysis of McCorkle Company's income statements.

**Follow My Example 2-8**

**McCorkle Company**  
**Income Statements**  
**For the Years Ended December 31**

	2012	2011	Increase (Decrease)	
			Amount	Percent
Fees earned	\$210,000	\$175,000	\$35,000	20%
Operating expenses	172,500	150,000	22,500	15
Net income	<u>\$ 37,500</u>	<u>\$ 25,000</u>	<u>\$12,500</u>	50

Practice Exercises: **PE 2-8A, PE 2-8B**

**At a Glance 2****OBJ.**  
**1**

**Describe the characteristics of an account and a chart of accounts.**

**Key Points** The simplest form of an account, a T account, has three parts: (1) a title, which is the name of the item recorded in the account; (2) a left side, called the debit side; and (3) a right side, called the credit side. Periodically, the debits in an account are added, the credits in the account are added, and the balance of the account is determined.

The system of accounts that make up a ledger is called a chart of accounts.

**Learning Outcomes**

- Record transactions in T accounts.
- Determine the balance of a T account.
- Prepare a chart of accounts for a proprietorship.

**Example  
Exercises****Practice  
Exercises**



**OBJ.**  
**2****Describe and illustrate journalizing transactions using the double-entry accounting system.**

**Key Points** Transactions are initially entered in a record called a journal. The rules of debit and credit for recording increases or decreases in accounts are shown in Exhibit 3. Each transaction is recorded so that the sum of the debits is always equal to the sum of the credits. The normal balance of an account is indicated by the side of the account (debit or credit) that receives the increases.

**Learning Outcomes**

- Indicate the normal balance of an account.
- Journalize transactions using the rules of debit and credit.

**Example  
Exercises**

EE2-1  
EE2-2

**Practice  
Exercises**

PE2-1A, 2-1B  
PE2-2A, 2-2B

**OBJ.**  
**3****Describe and illustrate the journalizing and posting of transactions to accounts.**

**Key Points** Transactions are journalized and posted to the ledger using the rules of debit and credit. The debits and credits for each journal entry are posted to the accounts in the order in which they occur in the journal.

**Learning Outcomes**

- Journalize transactions using the rules of debit and credit.
- Given other account data, determine the missing amount of an account entry.
- Post journal entries to a standard account.
- Post journal entries to a T account.

**Example  
Exercises**

EE2-3  
EE2-4  
EE2-5

**Practice  
Exercises**

PE2-3A, 2-3B  
PE2-4A, 2-4B  
PE2-5A, 2-5B

**OBJ.**  
**4****Prepare an unadjusted trial balance and explain how it can be used to discover errors.**

**Key Points** A trial balance is prepared by listing the accounts from the ledger and their balances. The totals of the Debit column and Credit column of the trial balance must be equal. If the two totals are not equal, an error has occurred. Errors may occur even though the trial balance totals are equal. Such errors may require a correcting journal entry.

**Learning Outcomes**

- Prepare an unadjusted trial balance.
- Discover errors that cause unequal totals in the trial balance.
- Prepare correcting journal entries for various errors.

**Example  
Exercises**

EE2-6  
EE2-7

**Practice  
Exercises**

PE2-6A, 2-6B  
PE2-7A, 2-7B

**OBJ.**  
**5****Describe and illustrate the use of horizontal analysis in evaluating a company's performance and financial condition.**

**Key Points** In horizontal analysis, the amount of each item on a current financial statement is compared with the same item on an earlier statement. The increase or decrease in the *amount* of the item is computed together with the *percent* of increase or decrease. When two statements are being compared, the earlier statement is used as the base for computing the amount and the percent of change.

**Learning Outcomes**

- Describe horizontal analysis.
- Prepare a horizontal analysis report of a financial statement.

**Example Exercises****EE2-8****Practice Exercises****PE2-8A, 2-8B****Key Terms**

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account (52)  
account receivable (65)  
assets (54)  
balance of the account (53)  
capital account (54)  
chart of accounts (54)  
correcting journal entry (72)  
credit (53)  
debit (53)  
double-entry accounting system (55)

drawing (54)  
expenses (55)  
horizontal analysis (73)  
journal (57)  
journal entry (58)  
journalizing (58)  
ledger (54)  
liabilities (54)  
normal balance of an account (56)  
owner's equity (54)

posting (61)  
revenues (54)  
rules of debit and credit (55)  
slide (71)  
T account (52)  
transposition (71)  
trial balance (70)  
unadjusted trial balance (71)  
unearned revenue (63)

**Illustrative Problem**

J. F. Outz, M.D., has been practicing as a cardiologist for three years. During April 2011, Outz completed the following transactions in her practice of cardiology:

- Apr.
1. Paid office rent for April, \$800.
  3. Purchased equipment on account, \$2,100.
  5. Received cash on account from patients, \$3,150.
  8. Purchased X-ray film and other supplies on account, \$245.
  9. One of the items of equipment purchased on April 3 was defective. It was returned with the permission of the supplier, who agreed to reduce the account for the amount charged for the item, \$325.
  12. Paid cash to creditors on account, \$1,250.

- Apr. 17. Paid cash for renewal of a six-month property insurance policy, \$370.
20. Discovered that the balances of the cash account and the accounts payable account as of April 1 were overstated by \$200. A payment of that amount to a creditor in March had not been recorded. Journalize the \$200 payment as of April 20.
24. Paid cash for laboratory analysis, \$545.
27. Paid cash from business bank account for personal and family expenses, \$1,250.
30. Recorded the cash received in payment of services (on a cash basis) to patients during April, \$1,720.
30. Paid salaries of receptionist and nurses, \$1,725.
30. Paid various utility expenses, \$360.
30. Recorded fees charged to patients on account for services performed in April, \$5,145.
30. Paid miscellaneous expenses, \$132.

Outz's account titles, numbers, and balances as of April 1 (all normal balances) are listed as follows: Cash, 11, \$4,123; Accounts Receivable, 12, \$6,725; Supplies, 13, \$290; Prepaid Insurance, 14, \$465; Equipment, 18, \$19,745; Accounts Payable, 22, \$765; J. F. Outz, Capital, 31, \$30,583; J. F. Outz, Drawing, 32, \$0; Professional Fees, 41, \$0; Salary Expense, 51, \$0; Rent Expense, 53, \$0; Laboratory Expense, 55, \$0; Utilities Expense, 56, \$0; Miscellaneous Expense, 59, \$0.

### Instructions

1. Open a ledger of standard four-column accounts for Dr. Outz as of April 1. Enter the balances in the appropriate balance columns and place a check mark (✓) in the Posting Reference column. (*Hint:* Verify the equality of the debit and credit balances in the ledger before proceeding with the next instruction.)
2. Journalize each transaction in a two-column journal.
3. Post the journal to the ledger, extending the month-end balances to the appropriate balance columns after each posting.
4. Prepare an unadjusted trial balance as of April 30.



## Solution 1., 2., and 3.

Journal					Journal				
Date	Description	Post. Ref.	Debit	Credit	Date	Description	Post. Ref.	Debit	Credit
2011					2011				
Apr. 1	Rent Expense	53	800		Apr. 24	Laboratory Expense	55	545	
	Cash	11		800		Cash	11		545
	Paid office rent for April.					Paid for laboratory analysis.			
3	Equipment	18	2,100		27	J. F. Outz, Drawing	32	1,250	
	Accounts Payable	22		2,100		Cash	11		1,250
	Purchased equipment on account.					J. F. Outz withdrew cash for personal use.			
5	Cash	11	3,150		30	Cash	11	1,720	
	Accounts Receivable	12		3,150		Professional Fees	41		1,720
	Received cash on account.					Received fees from patients.			
8	Supplies	13	245		30	Salary Expense	51	1,725	
	Accounts Payable	22		245		Cash	11		1,725
	Purchased supplies.					Paid salaries.			
9	Accounts Payable	22	325		30	Utilities Expense	56	360	
	Equipment	18		325		Cash	11		360
	Returned defective equipment.					Paid utilities.			
12	Accounts Payable	22	1,250		30	Accounts Receivable	12	5,145	
	Cash	11		1,250		Professional Fees	41		5,145
	Paid creditors on account.					Recorded fees earned on account.			
17	Prepaid Insurance	14	370		30	Miscellaneous Expense	59	132	
	Cash	11		370		Cash	11		132
	Renewed six-month property policy.					Paid expenses.			
20	Accounts Payable	22	200						
	Cash	11		200					
	Recorded March payment to creditor.								

Account Cash					Account Accounts Receivable				
Date	Item	Post. Ref.	Debit	Credit	Date	Item	Post. Ref.	Debit	Credit
2011					2011				
Apr. 1	Balance	✓		4,123	Apr. 1	Balance	✓		6,725
1		27		800	5		27		3,150
5		27	3,150		30		28	5,145	
12		27		1,250					8,720
17		27		370					
20		27		200					
24		28		545					
27		28		1,250					
30		28	1,720						
30		28		1,725					
30		28		360					
30		28		132					

Account Supplies					Account No. 13				
Date	Item	Post. Ref.	Debit	Credit	Date	Item	Post. Ref.	Debit	Credit
2011					2011				
Apr. 1	Balance	✓			Apr. 1	Balance	✓		290
8		27	245		8		27	245	

Account <i>Prepaid Insurance</i>					Account No. 14	
Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2011						
Apr. 1	Balance	✓			465	
17		27	370		835	

Account <i>Equipment</i>					Account No. 18	
Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2011						
Apr. 1	Balance	✓			19,745	
3		27	2,100		21,845	
9		27		325	21,520	

Account <i>Accounts Payable</i>					Account No. 22	
Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2011						
Apr. 1	Balance	✓				765
3		27		2,100		2,865
8		27		245		3,110
9		27	325			2,785
12		27	1,250			1,535
20		27	200			1,335

Account <i>J. F. Outz, Capital</i>					Account No. 31	
Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2011						
Apr. 1	Balance	✓				30,583

Account <i>J. F. Outz, Drawing</i>					Account No. 32	
Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2011						
Apr. 27		28	1,250		1,250	

Account <i>Professional Fees</i>					Account No. 41	
Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2011						
Apr. 30		28		1,720		1,720
30		28		5,145		6,865

Account <i>Salary Expense</i>					Account No. 51	
Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2011						
Apr. 30		28	1,725		1,725	

Account <i>Rent Expense</i>					Account No. 53	
Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2011						
Apr. 1		27	800		800	

Account <i>Laboratory Expense</i>					Account No. 55	
Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2011						
Apr. 24		28	545		545	

Account <i>Utilities Expense</i>					Account No. 56	
Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2011						
Apr. 30		28	360		360	

Account <i>Miscellaneous Expense</i>					Account No. 59	
Date	Item	Post. Ref.	Debit	Credit	Balance	
					Debit	Credit
2011						
Apr. 30		28	132		132	

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4.

J. F. Outz, M.D. Unadjusted Trial Balance April 30, 2011		
	Debit Balances	Credit Balances
Cash .....	2,361	
Accounts Receivable .....	8,720	
Supplies .....	535	
Prepaid Insurance .....	835	
Equipment .....	21,520	
Accounts Payable .....		1,335
J. F. Outz, Capital .....		30,583
J. F. Outz, Drawing .....	1,250	
Professional Fees .....		6,865
Salary Expense .....	1,725	
Rent Expense .....	800	
Laboratory Expense .....	545	
Utilities Expense .....	360	
Miscellaneous Expense .....	132	
	<u>38,783</u>	<u>38,783</u>

## Discussion Questions

- What is the difference between an account and a ledger?
- Do the terms *debit* and *credit* signify increase or decrease or can they signify either? Explain.
- Weir Company adheres to a policy of depositing all cash receipts in a bank account and making all payments by check. The cash account as of December 31 has a credit balance of \$3,190, and there is no undeposited cash on hand. (a) Assuming no errors occurred during journalizing or posting, what caused this unusual balance? (b) Is the \$3,190 credit balance in the cash account an asset, a liability, owner's equity, a revenue, or an expense?
- Resource Services Company performed services in February for a specific customer, for a fee of \$11,250. Payment was received the following March. (a) Was the revenue earned in February or March? (b) What accounts should be debited and credited in (1) February and (2) March?
- If the two totals of a trial balance are equal, does it mean that there are no errors in the accounting records? Explain.
- Assume that a trial balance is prepared with an account balance of \$21,740 listed as \$2,174 and an account balance of \$4,500 listed as \$5,400. Identify the transposition and the slide.
- Assume that when a purchase of supplies of \$3,100 for cash was recorded, both the debit and the credit were journalized and posted as \$1,300. (a) Would this error cause the trial balance to be out of balance? (b) Would the trial balance be out of balance if the \$3,100 entry had been journalized correctly but the credit to Cash had been posted as \$1,300?
- Assume that Timberline Consulting erroneously recorded the payment of \$9,000 of owner withdrawals as a debit to Salary Expense. (a) How would this error affect the equality of the trial balance? (b) How would this error affect the income statement, statement of owner's equity, and balance sheet?
- Assume that Western Realty Co. borrowed \$200,000 from Mountain First Bank and Trust. In recording the transaction, Western erroneously recorded the receipt as a debit to Cash, \$200,000, and a credit to Fees Earned, \$200,000. (a) How would this error affect the equality of the trial balance? (b) How would this error affect the income statement, statement of owner's equity, and balance sheet?
- Checking accounts are the most common form of deposits for banks. Assume that Village Storage has a checking account at Camino Savings Bank. What type of account (asset, liability, owner's equity, revenue, expense, drawing) does the account balance of \$8,750 represent from the viewpoint of (a) Village Storage and (b) Camino Savings Bank?



## Practice Exercises

### Learning Objectives

OBJ. 2

### Example Exercises

EE 2-1 p. 56

#### PE 2-1A Rules of debit and credit and normal balances

State for each account whether it is likely to have (a) debit entries only, (b) credit entries only, or (c) both debit and credit entries. Also, indicate its normal balance.

- |                        |                       |
|------------------------|-----------------------|
| 1. Accounts Receivable | 4. Paul Howe, Capital |
| 2. Commissions Earned  | 5. Rent Revenue       |
| 3. Notes Payable       | 6. Wages Expense      |

OBJ. 2 EE 2-1 p. 56

#### PE 2-1B Rules of debit and credit and normal balances

State for each account whether it is likely to have (a) debit entries only, (b) credit entries only, or (c) both debit and credit entries. Also, indicate its normal balance.

- |                          |                          |
|--------------------------|--------------------------|
| 1. Accounts Payable      | 4. Miscellaneous Expense |
| 2. Cash                  | 5. Insurance Expense     |
| 3. Malissa Wahl, Drawing | 6. Fees Earned           |

OBJ. 2 EE 2-2 p. 61

#### PE 2-2A Journal entry for asset purchase

Prepare a journal entry for the purchase of office equipment on March 4 for \$27,150, paying \$5,000 cash and the remainder on account.

OBJ. 2 EE 2-2 p. 61

#### PE 2-2B Journal entry for asset purchase

Prepare a journal entry for the purchase of office supplies on August 7 for \$4,000, paying \$1,000 cash and the remainder on account.

OBJ. 3 EE 2-3 p. 65

#### PE 2-3A Journal entry for fees earned

Prepare a journal entry on September 6 for fees earned on account, \$8,000.

OBJ. 3 EE 2-3 p. 65

#### PE 2-3B Journal entry for fees earned

Prepare a journal entry on May 29 for cash received for services rendered, \$5,000.

OBJ. 3 EE 2-4 p. 68

#### PE 2-4A Journal entry for owner's withdrawal

Prepare a journal entry on December 22 for the withdrawal of \$10,000 by Jason Von Pentz for personal use.

OBJ. 3 EE 2-4 p. 68

#### PE 2-4B Journal entry for owner's withdrawal

Prepare a journal entry on February 3 for the withdrawal of \$7,500 by Allene Collette for personal use.

Learning  
ObjectivesExample  
Exercises

OBJ. 3

EE 2-5 p. 68

**PE 2-5A Missing amount from an account**

On June 1, the cash account balance was \$17,200. During June, cash payments totaled \$178,300, and the June 30 balance was \$23,900. Determine the cash receipts during June.

OBJ. 3

EE 2-5 p. 68

**PE 2-5B Missing amount from an account**

On October 1, the supplies account balance was \$900. During October, supplies of \$2,750 were purchased, and \$1,025 of supplies were on hand as of October 31. Determine supplies expense for October.

OBJ. 4

EE 2-6 p. 72

**PE 2-6A Trial balance errors**

For each of the following errors, considered individually, indicate whether the error would cause the trial balance totals to be unequal. If the error would cause the trial balance totals to be unequal, indicate whether the debit or credit total is higher and by how much.

- The payment of an insurance premium of \$4,800 for a two-year policy was debited to Prepaid Insurance for \$4,800 and credited to Cash for \$8,400.
- A payment of \$318 on account was debited to Accounts Payable for \$381 and credited to Cash for \$381.
- A purchase of supplies on account for \$1,200 was debited to Supplies for \$1,200 and debited to Accounts Payable for \$1,200.

OBJ. 4

EE 2-6 p. 72

**PE 2-6B Trial balance errors**

For each of the following errors, considered individually, indicate whether the error would cause the trial balance totals to be unequal. If the error would cause the trial balance totals to be unequal, indicate whether the debit or credit total is higher and by how much.

- The payment of cash for the purchase of office equipment of \$15,000 was debited to Land for \$15,000 and credited to Cash for \$15,000.
- The payment of \$5,200 on account was debited to Accounts Payable for \$520 and credited to Cash for \$5,200.
- The receipt of cash on account of \$1,270 was recorded as a debit to Cash for \$1,720 and a credit to Accounts Receivable for \$1,270.

OBJ. 4

EE 2-7 p. 73

**PE 2-7A Correcting entries**

The following errors took place in journalizing and posting transactions:

- Advertising expense of \$2,700 paid for the current month was recorded as a debit to Miscellaneous Expense and a credit to Advertising Expense.
- The payment of \$3,950 from a customer on account was recorded as a debit to Cash and a credit to Accounts Payable.

Journalize the entries to correct the errors. Omit explanations.

OBJ. 4

EE 2-7 p. 73

**PE 2-7B Correcting entries**

The following errors took place in journalizing and posting transactions:

- The receipt of \$5,800 for services rendered was recorded as a debit to Accounts Receivable and a credit to Fees Earned.
- The purchase of supplies of \$1,800 on account was recorded as a debit to Office Equipment and a credit to Supplies.

Journalize the entries to correct the errors. Omit explanations.

OBJ. 5

EE 2-8 p. 75

**PE 2-8A Horizontal analysis**

Two income statements for Boyer Company are shown on the following page.



**Boyer Company**  
**Income Statements**  
**For Years Ended December 31**

	2012	2011
Fees earned	\$315,000	\$300,000
Operating expenses	176,400	180,000
Net income	<u>\$138,600</u>	<u>\$120,000</u>

Prepare a horizontal analysis of Boyer Company's income statements.

OBJ. 5 EE 2-8 p. 75

**PE 2-8B Horizontal analysis**

Two income statements for Hitt Company are shown below.



**Hitt Company**  
**Income Statements**  
**For Years Ended December 31**

	2012	2011
Fees earned	\$937,500	\$750,000
Operating expenses	612,500	500,000
Net income	<u>\$325,000</u>	<u>\$250,000</u>

Prepare a horizontal analysis of Hitt Company's income statements.

## Exercises

OBJ. 1

**EX 2-1 Chart of accounts**

The following accounts appeared in recent financial statements of **Continental Airlines**:

Accounts Payable	Flight Equipment
Air Traffic Liability	Landing Fees (Expense)
Aircraft Fuel Expense	Passenger Revenue
Cargo and Mail Revenue	Purchase Deposits for Flight Equipment
Commissions (Expense)	Spare Parts and Supplies

Identify each account as either a balance sheet account or an income statement account. For each balance sheet account, identify it as an asset, a liability, or owner's equity. For each income statement account, identify it as a revenue or an expense.

OBJ. 1

**EX 2-2 Chart of accounts**

Innerscape Interiors is owned and operated by Jean Cartier, an interior decorator. In the ledger of Innerscape Interiors, the first digit of the account number indicates its major account classification (1—assets, 2—liabilities, 3—owner's equity, 4—revenues, 5—expenses). The second digit of the account number indicates the specific account within each of the preceding major account classifications.

Match each account number with its most likely account in the list below. The account numbers are 11, 12, 13, 21, 31, 32, 41, 51, 52, and 53.

Accounts Payable	Jean Cartier, Drawing
Accounts Receivable	Land
Cash	Miscellaneous Expense
Fees Earned	Supplies Expense
Jean Cartier, Capital	Wages Expense

OBJ. 1

**EX 2-3 Chart of accounts**

Alpha School is a newly organized business that teaches people how to inspire and influence others. The list of accounts to be opened in the general ledger is as follows:



Accounts Payable	Miscellaneous Expense
Accounts Receivable	Prepaid Insurance
Cash	Rent Expense
Equipment	Supplies
Fees Earned	Supplies Expense
Jan Pulver, Capital	Unearned Rent
Jan Pulver, Drawing	Wages Expense

List the accounts in the order in which they should appear in the ledger of Alpha School and assign account numbers. Each account number is to have two digits: the first digit is to indicate the major classification (1 for assets, etc.), and the second digit is to identify the specific account within each major classification (11 for Cash, etc.).

OBJ. 1,2

**EX 2-4 Rules of debit and credit**

The following table summarizes the rules of debit and credit. For each of the items (a) through (l), indicate whether the proper answer is a debit or a credit.

	Increase	Decrease	Normal Balance
Balance sheet accounts:			
Asset	(a)	Credit	(b)
Liability	Credit	(c)	(d)
Owner's equity:			
Capital	Credit	(e)	(f)
Drawing	(g)	(h)	(i)
Income statement accounts:			
Revenue	Credit	(j)	(k)
Expense	(l)	Credit	Debit

OBJ. 2

**EX 2-5 Normal entries for accounts**

During the month, Iris Labs Co. has a substantial number of transactions affecting each of the following accounts. State for each account whether it is likely to have (a) debit entries only, (b) credit entries only, or (c) both debit and credit entries.

- |                        |                           |
|------------------------|---------------------------|
| 1. Accounts Payable    | 5. Insurance Expense      |
| 2. Accounts Receivable | 6. Nicki Swanson, Drawing |
| 3. Cash                | 7. Utilities Expense      |
| 4. Fees Earned         |                           |

OBJ. 1,2

**EX 2-6 Normal balances of accounts**

Identify each of the following accounts of Advanced Services Co. as asset, liability, owner's equity, revenue, or expense, and state in each case whether the normal balance is a debit or a credit.

- |                             |                     |
|-----------------------------|---------------------|
| a. Accounts Payable         | f. Fees Earned      |
| b. Accounts Receivable      | g. Office Equipment |
| c. Barbara Mallary, Capital | h. Rent Expense     |
| d. Barbara Mallary, Drawing | i. Supplies         |
| e. Cash                     | j. Wages Expense    |

OBJ. 2

**EX 2-7 Transactions**

Chalet Co. has the following accounts in its ledger: Cash; Accounts Receivable; Supplies; Office Equipment; Accounts Payable; Andee Freese, Capital; Andee Freese, Drawing; Fees Earned; Rent Expense; Advertising Expense; Utilities Expense; Miscellaneous Expense.

Journalize the following selected transactions for October 2012 in a two-column journal. Journal entry explanations may be omitted.



- Oct. 1. Paid rent for the month, \$2,000.  
2. Paid advertising expense, \$900.  
5. Paid cash for supplies, \$1,300.  
6. Purchased office equipment on account, \$16,000.  
10. Received cash from customers on account, \$6,700.  
15. Paid creditor on account, \$1,200.  
27. Paid cash for repairs to office equipment, \$600.  
30. Paid telephone bill for the month, \$180.  
31. Fees earned and billed to customers for the month, \$26,800.  
31. Paid electricity bill for the month, \$400.  
31. Withdrew cash for personal use, \$3,000.

OBJ. 2,3

**EX 2-8 Journalizing and posting**

On February 3, 2012, Wilco Co. purchased \$3,250 of supplies on account. In Wilco Co.'s chart of accounts, the supplies account is No. 15, and the accounts payable account is No. 21.

- Journalize the February 3, 2012, transaction on page 19 of Wilco Co.'s two-column journal. Include an explanation of the entry.
- Prepare a four-column account for Supplies. Enter a debit balance of \$975 as of February 1, 2012. Place a check mark (✓) in the Posting Reference column.
- Prepare a four-column account for Accounts Payable. Enter a credit balance of \$13,150 as of February 1, 2012. Place a check mark (✓) in the Posting Reference column.
- Post the February 3, 2012, transaction to the accounts.
- Do the rules of debit and credit apply to all companies?

OBJ. 2,3

**EX 2-9 Transactions and T accounts**

The following selected transactions were completed during August of the current year:

- Billed customers for fees earned, \$35,700.
  - Purchased supplies on account, \$2,000.
  - Received cash from customers on account, \$26,150.
  - Paid creditors on account, \$800.
- Journalize the above transactions in a two-column journal, using the appropriate number to identify the transactions. Journal entry explanations may be omitted.
  - Post the entries prepared in (a) to the following T accounts: Cash, Supplies, Accounts Receivable, Accounts Payable, Fees Earned. To the left of each amount posted in the accounts, place the appropriate number to identify the transactions.
  - Assume that the unadjusted trial balance on August 31 shows a credit balance for Accounts Receivable. Does this credit balance mean an error has occurred?

OBJ. 1,2,3

**EX 2-10 Cash account balance**

During the month, Lathers Co. received \$400,000 in cash and paid out \$290,000 in cash.

- Do the data indicate that Lathers Co. had net income of \$110,000 during the month? Explain.
- If the balance of the cash account is \$185,000 at the end of the month, what was the cash balance at the beginning of the month?

OBJ. 1,2,3

✓ c. \$284,175

**EX 2-11 Account balances**

- During October, \$90,000 was paid to creditors on account, and purchases on account were \$125,000. Assuming the October 31 balance of Accounts Payable was \$40,000, determine the account balance on October 1.
- On May 1, the accounts receivable account balance was \$25,000. During May, \$240,000 was collected from customers on account. Assuming the May 31 balance was \$36,000, determine the fees billed to customers on account during May.

- c. On November 1, the cash account balance was \$18,275. During November, cash receipts totaled \$279,100 and the November 30 balance was \$13,200. Determine the cash payments made during November.

OBJ. 1,2

**EX 2-12 Capital account balance**

As of January 1, Brenda Cikan, Capital, had a credit balance of \$125,000. During the year, withdrawals totaled \$7,000, and the business incurred a net loss of \$130,000.

- Compute the balance of Brenda Cikan, Capital, as of the end of the year.
- Assuming that there have been no recording errors, will the balance sheet prepared at December 31 balance? Explain.

OBJ. 1,2

**EX 2-13 Identifying transactions**

Southwest Tours Co. is a travel agency. The nine transactions recorded by Southwest Tours during May 2012, its first month of operations, are indicated in the following T accounts:

Cash		Equipment		Mickey O'Dell, Drawing	
(1) 40,000	(2) 2,000	(3) 18,000		(9) 4,000	
(7) 10,000	(3) 3,600				
	(4) 2,700				
	(6) 9,000				
	(9) 4,000				
Accounts Receivable		Accounts Payable		Service Revenue	
(5) 18,500	(7) 10,000	(6) 9,000	(3) 14,400		(5) 18,500
Supplies		Mickey O'Dell, Capital		Operating Expenses	
(2) 2,000	(8) 1,050		(1) 40,000	(4) 2,700	
				(8) 1,050	

Indicate for each debit and each credit: (a) whether an asset, liability, owner's equity, drawing, revenue, or expense account was affected and (b) whether the account was increased (+) or decreased (-). Present your answers in the following form, with transaction (1) given as an example:

Transaction	Account Debited		Account Credited	
	Type	Effect	Type	Effect
(1)	asset	+	owner's equity	+

OBJ. 1,2

**EX 2-14 Journal entries**

Based upon the T accounts in Exercise 2-13, prepare the nine journal entries from which the postings were made. Journal entry explanations may be omitted.

OBJ. 4



✓ Total Debit column:  
\$63,900

OBJ. 4

✓ Total of Credit  
column: \$491,400

**EX 2-15 Trial balance**

Based upon the data presented in Exercise 2-13, (a) prepare an unadjusted trial balance, listing the accounts in their proper order. (b) Based upon the unadjusted trial balance, determine the net income or net loss.

**EX 2-16 Trial balance**

The accounts in the ledger of Diva Co. as of July 31, 2012, are listed in alphabetical order as follows. All accounts have normal balances. The balance of the cash account has been intentionally omitted.





Accounts Payable	\$ 28,000	Notes Payable	\$ 50,000
Accounts Receivable	40,000	Prepaid Insurance	6,400
Cash	?	Rent Expense	36,000
Cheryl Sievert, Capital	49,900	Supplies	4,000
Cheryl Sievert, Drawing	25,000	Supplies Expense	9,000
Fees Earned	350,000	Unearned Rent	13,500
Insurance Expense	6,000	Utilities Expense	18,000
Land	125,000	Wages Expense	195,000
Miscellaneous Expense	12,000		

Prepare an unadjusted trial balance, listing the accounts in their normal order and inserting the missing figure for cash.

**OBJ. 4****EX 2-17 Effect of errors on trial balance**

Indicate which of the following errors, each considered individually, would cause the trial balance totals to be unequal:

- A fee of \$15,000 earned and due from a client was not debited to Accounts Receivable or credited to a revenue account, because the cash had not been received.
- A receipt of \$6,000 from an account receivable was journalized and posted as a debit of \$6,000 to Cash and a credit of \$6,000 to Fees Earned.
- A payment of \$1,200 to a creditor was posted as a debit of \$1,200 to Accounts Payable and a debit of \$1,200 to Cash.
- A payment of \$10,000 for equipment purchased was posted as a debit of \$1,000 to Equipment and a credit of \$1,000 to Cash.
- Payment of a cash withdrawal of \$10,000 was journalized and posted as a debit of \$1,000 to Salary Expense and a credit of \$10,000 to Cash.

Indicate which of the preceding errors would require a correcting entry.

**OBJ. 4**

✓ Total of Credit column: \$225,000

**EX 2-18 Errors in trial balance**

The following preliminary unadjusted trial balance of Seats-For-You Co., a sports ticket agency, does not balance:

Seats-For-You Co. Unadjusted Trial Balance March 31, 2012		
	Debit Balances	Credit Balances
Cash .....	98,000	
Accounts Receivable .....	17,800	
Prepaid Insurance .....		9,000
Equipment .....	7,500	
Accounts Payable .....		16,500
Unearned Rent .....		11,600
Gina Ness, Capital .....	81,700	
Gina Ness, Drawing .....	13,000	
Service Revenue .....		125,000
Wages Expense .....		60,000
Advertising Expense .....	11,300	
Miscellaneous Expense .....		15,400
	<u>229,300</u>	<u>237,500</u>

When the ledger and other records are reviewed, you discover the following: (1) the debits and credits in the cash account total \$98,000 and \$82,500, respectively; (2) a billing of \$8,000 to a customer on account was not posted to the accounts receivable account; (3) a payment of \$3,600 made to a creditor on account was not posted to the accounts payable account; (4) the balance of the unearned rent account is \$5,400; (5) the correct balance of the equipment account is \$75,000; and (6) each account has a normal balance.

Prepare a corrected unadjusted trial balance.

**OBJ. 4****EX 2-19 Effect of errors on trial balance**

The following errors occurred in posting from a two-column journal:

1. A credit of \$7,150 to Accounts Payable was not posted.
2. An entry debiting Accounts Receivable and crediting Fees Earned for \$11,000 was not posted.
3. A debit of \$1,000 to Accounts Payable was posted as a credit.
4. A debit of \$800 to Supplies was posted twice.
5. A debit of \$900 to Cash was posted to Miscellaneous Expense.
6. A credit of \$360 to Cash was posted as \$630.
7. A debit of \$9,420 to Wages Expense was posted as \$9,240.

Considering each case individually (i.e., assuming that no other errors had occurred), indicate: (a) by "yes" or "no" whether the trial balance would be out of balance; (b) if answer to (a) is "yes," the amount by which the trial balance totals would differ; and (c) whether the Debit or Credit column of the trial balance would have the larger total. Answers should be presented in the following form, with error (1) given as an example:

Error	(a) Out of Balance	(b) Difference	(c) Larger Total
1.	yes	\$7,150	debit

**OBJ. 4**

✓ Total of Credit column: \$750,000

**EX 2-20 Errors in trial balance**

Identify the errors in the following trial balance. All accounts have normal balances.

Bluefin Co. Unadjusted Trial Balance For the Month Ending August 31, 2012		
	Debit Balances	Credit Balances
Cash .....	45,000	
Accounts Receivable .....		98,400
Prepaid Insurance .....	21,600	
Equipment .....	300,000	
Accounts Payable .....	11,100	
Salaries Payable .....		7,500
Ken Frye, Capital .....		259,200
Ken Frye, Drawing .....		36,000
Service Revenue .....		472,200
Salary Expense .....	196,860	
Advertising Expense .....		43,200
Miscellaneous Expense .....	8,940	
	<u>916,500</u>	<u>916,500</u>

**OBJ. 4****EX 2-21 Entries to correct errors**

The following errors took place in journalizing and posting transactions:

- a. Rent of \$12,500 paid for the current month was recorded as a debit to Rent Expense and a credit to Prepaid Rent.
- b. A withdrawal of \$7,500 by Trent Benedict, owner of the business, was recorded as a debit to Wages Expense and a credit to Cash.

Journalize the entries to correct the errors. Omit explanations.

**OBJ. 4****EX 2-22 Entries to correct errors**

The following errors took place in journalizing and posting transactions:

- a. Cash of \$12,975 received on account was recorded as a debit to Fees Earned and a credit to Cash.
- b. A \$3,200 purchase of supplies for cash was recorded as a debit to Supplies Expense and a credit to Accounts Payable.

Journalize the entries to correct the errors. Omit explanations.

## OBJ. 5

**EX 2-23 Horizontal analysis of income statement**

The following data (in millions) is taken from the financial statements of **Target Corporation**.

	2009	2008
Net sales (revenues)	\$64,948	\$63,367
Total operating expenses	60,546	58,095

- For Target Corporation, comparing 2009 with 2008, determine the amount of change in millions and the percent of change for:
  - Net sales (revenues)
  - Total operating expenses
- What conclusions can you draw from your analysis of the net sales and the total operating expenses?

## OBJ. 5

**EX 2-24 Horizontal analysis of income statement**

The following data were adapted from the financial statements of **Kmart Corporation**, prior to its filing for bankruptcy:

For years ending January 31	In millions	
	2000	1999
Sales	\$ 37,028	\$ 35,925
Cost of sales (expense)	(29,658)	(28,111)
Selling, general, and administrative expenses	(7,415)	(6,514)
Operating income (loss)	\$ (45)	\$ 1,300

- Prepare a horizontal analysis for the income statement showing the amount and percent of change in each of the following:
  - Sales
  - Cost of sales
  - Selling, general, and administrative expenses
  - Operating income (loss)
- Comment on the results of your horizontal analysis in part (a).

## Problems Series A

## OBJ. 1,2,3,4

✓ 3. Total of Debit column: \$78,350

**PR 2-1A Entries into T accounts and trial balance**

Leila Durkin, an architect, opened an office on May 1, 2012. During the month, she completed the following transactions connected with her professional practice:

- Transferred cash from a personal bank account to an account to be used for the business, \$30,000.
- Paid May rent for office and workroom, \$3,500.
- Purchased used automobile for \$25,000, paying \$5,000 cash and giving a note payable for the remainder.
- Purchased office and computer equipment on account, \$9,000.
- Paid cash for supplies, \$1,200.
- Paid cash for annual insurance policies, \$2,400.
- Received cash from client for plans delivered, \$8,150.
- Paid cash for miscellaneous expenses, \$300.
- Paid cash to creditors on account, \$2,500.
- Paid installment due on note payable, \$400.
- Received invoice for blueprint service, due in June, \$1,200.
- Recorded fee earned on plans delivered, payment to be received in June, \$12,900.
- Paid salary of assistant, \$1,800.
- Paid gas, oil, and repairs on automobile for May, \$600.