CHAPTER 3

Preparing Financial Statements

OBJECTIVES

After reading this chapter, the student should be able to:

1. Describe the general process by which financial statements are prepared,
2. Define general journal, account, ledger of accounts, posting, transactions, debit and credit, trial balance, and adjusting entries, and
3. Prepare financial statements from a list of transactions.

Financial management is based on proper use and interpretation of financial statements. This chapter will present a brief overview of the accounting involved in preparing financial statements. Students interested in a more comprehensive coverage should refer to one of the financial accounting texts listed at the end of the chapter.

The preparation of financial statements begins with analysis of transactions. Transactions are broadly defined as events that have an economic impact on the business. Examples include sale of merchandise, purchase of inventory, and paying of salaries and utilities. Because a typical business will experience thousands of transactions in a year, a system is needed to track them. The system most commonly used consists of a *general journal* and a *ledger of accounts*.

The basic component of this system is the *account*. There is a separate account for every asset, liability, owner equity, revenue, and expense that appears on the financial statements. For example, there are cash accounts, accounts payable accounts, retained earnings accounts, cash sales accounts, credit sales accounts, rent expense accounts, and salary expense accounts. The account is simply a central place used to collect relevant information about all transactions that affect a particular item on the financial statements. For example, all transactions that affect cash would be recorded in the cash account. Accounts may be kept in several physical forms. Early on, they were kept as pages in a loose-leaf folder or notebook. More recently, accounts have been kept as computer files.

Accounts are kept in a *ledger of accounts*. They appear in the ledger in the same order that they appear on the financial statements, as follows—current assets, noncurrent assets, current liabilities, noncurrent liabilities, owners' equity, revenues, and expenses.

The *general journal* is a chronologic listing of transactions. As transactions occur, they are *journalized*, or recorded in the journal. Later, they are *posted* to the proper accounts in the ledger.

In recording transactions, businesses need a system that ensures that assets always equal the sum of liabilities and owners' equity and that can be used to detect and minimize errors. The system used is called the system of *debits and credits*.

DEBITS AND CREDITS

Every account has two sides: left and right. The left side (or column) is referred to as the *debit* side and the right side (or column) as the *credit* side. (For purposes of instruction, we will use "T-accounts" such as shown in Figure 3-1. Businesses typically use "balance column accounts" such as shown in Figure 3-2. Both are used in the same manner—only the physical appearance of the account is different.)

The following rules govern the recording of transactions in the debit and credit system:

- An increase in an asset is a debit and is recorded on the left side of the asset account.
- An increase in a liability or owners' equity is a credit and is recorded on the right side of the liability or owners' equity account.
- A decrease in an asset is a credit and is recorded on the right side of the asset account.
- A decrease in a liability or owners' equity is a debit and is recorded on the left side of the liability or owners' equity account.
- Because an expense decreases owners' equity, it is a debit and is recorded on the left side of the expense account.
- Because a revenue increases owners' equity, it is a credit and is recorded on the right side of the revenue account.

Four basic rules govern the recording of transactions:

1. Each transaction must be recorded separately.
2. The transaction must be recorded so that ASSETS = LIABILITIES + OWNERS' EQUITY. For example, if the transaction includes an increase in an asset, it must

Accounts Receivable	
425	250
150	125
200	

FIGURE 3–1 T-account.

Accounts Receivable

Date	Debit	Credit	Balance
3-22	425		425
3-25	150		575
3-27		250	325
3-28		125	200

FIGURE 3–2 Balance column account.

also include a corresponding decrease in some other asset or a corresponding increase in a liability or owners' equity.

3. Each transaction will affect at least two accounts. Because of this, the system is referred to as dual-entry accounting. The transaction may affect more than two accounts, but it must always affect at least two.
4. Every transaction must be recorded such that debits equal credits.

The following example shows how the system of debits and credits is used to record transactions in the journal and ledger.

SAMPLE PROBLEM: PHIL DILL CONSULTING SERVICE

Phil Dill is a pharmacist who provides consultant pharmacy services to long-term care facilities (nursing homes). He provides no drug products to the facilities. Rather, he reads patients' charts and makes suggestions as to the adequacy of their drug therapy and how it might be improved. This example presents the sequence of transactions that occurs as Phil Dill establishes his business, PD Consulting Service, and operates it for several weeks. Remember that even though Phil Dill is the owner and sole employee of the business, accountants consider him and his business as separate entities.

On June 1, 20X0, Phil Dill begins a pharmacy consulting service by investing $1,000 in a business, which he names PD Consulting Service.

To record this transaction, we must determine which accounts were affected and how they were affected. The transaction increased cash by $1,000 and owner's equity by $1,000. The increase in cash is a debit and the increase in owner's equity is a credit. Thus, as must always be true, debits equal credits and assets equal liabilities plus owner's equity.

The transaction is first entered in the journal, or journalized:

Journal
PD Consulting Service

Date	Account Title and Explanation	Dr.	Cr.
6-1-X0	Cash	1,000	
	P. Dill, Capital		1,000
	Record owner investment in business		

Note the following practices that are used in journalizing entries:

1. Each entry is dated.
2. The debit is entered first.
3. Credits are entered last and are indented.
4. There is a short note explaining the transaction.

During the month he provides consulting services to Glow Years Retirement Home. He bills the home for $500. On June 23, Glow Years pays $300 cash and agrees to pay the remaining $200 in 30 days.

6-23-X0	Cash	300	
	Accounts receivable	200	
	Revenues		500
	Record revenues from services provided to Glow Years Retirement Home		

All $500 is recorded as a revenue on the date that services were provided. This is true in the accrual system, even though full payment has not yet been received. In this particular transaction, more than two accounts are affected. On June 28, Dill withdraws $100 in cash from the business for personal use.

6-28-X0	P. Dill, Withdrawals	100	
	Cash		100
	Record owner withdrawal of $100		

On June 29, the rent of $100 is paid.

6-29-X0	Rent expense	100	
	Cash		100
	Record payment of June rent		

On June 30, a $25 phone bill is received. The bill will not be paid until July 15.

6-30-X0	Phone expense	25	
	Accounts payable		25
	Record phone expense for June		

At this point, all transactions for the month have been journalized. The journal page, as it would appear at the end of the month, is shown in Figure 3-3. The next step is to post the transactions to the ledger of accounts.

Journal

P. Dill, Consultant Pharmacist Services

Date	Account Title and Explanation	Dr.	Cr.
6-1-X0	Cash	1,000	
	P. Dill, Capital		1,000
	Record owner investment in business		
6-23-X0	Cash	300	
	Accounts receivable	200	
	Revenues		500
	Record revenues from services provided to Glow Years Retirement Home		
6-28-X0	P. Dill, Withdrawals	100	
	Cash		100
	Record owner withdrawal of $100		
6-29-X0	Rent expense	100	
	Cash		100
	Record payment of June rent		
6-30-X0	Phone expense	25	
	Accounts payable		25
	Record phone expense for june		

FIGURE 3–3 Journal for PD Consulting Service.

POSTING TO THE LEDGER OF ACCOUNTS

Transactions are typically journalized soon after they occur. They are posted after some longer period of time. For example, they may be journalized daily and posted weekly or monthly. This section explains how the transactions for PD Consulting Service for the month of June would be posted to the ledger.

The first transaction (June 1) involves $1,000 increases in cash and capital. Thus, the cash account would be debited $1,000. The entry is recorded as $1,000 on the left side of the cash account. Next, the $1,000 increase in capital is recorded on the right side of the P. Dill, Capital account. These entries are shown below:

Ledger of Accounts

Cash (Dr.)	Cash (Cr.)	P. Dill, Capital (Dr.)	P. Dill, Capital (Cr.)
1,000			1,000

The remaining entries are posted in a similar manner. The ledger of accounts for PD Consulting Service after posting is shown in Figure 3-4.

PD Consulting Service
Ledger of Accounts

Cash	
1,000	100
300	100
1,100	

P. Dill, Capital	
	1,000

Rent Expense	
100	

Accounts Receivable	
200	

P. Dill, Withdrawals	
100	

Phone Expense	
25	

Accounts Payable	
	25

Consulting Revenue	
	500

FIGURE 3–4 Ledger of accounts for PD Consulting Service.

TRIAL BALANCE

At the end of the accounting period, after all journal entries have been posted to the ledger of accounts, a *trial balance* is prepared. This is a list of all accounts, in the order in which they appear in the ledger, and their debit or credit balances. The trial balance is prepared to check for errors and to place data in a convenient form for making financial statements. A trial balance for PD Consulting Service is shown in Figure 3-5.

To check for errors, the debit and credit columns of the trial balance are totaled. If the sums are not equal, an error has been made. On the other hand, if they are equal, this is not conclusive proof that no errors have been made. For example, if the accountant had mistakenly recorded a $1,000 increase in cash as a credit and the corresponding $1,000 increase in capital as a debit, the debit and credit columns would be equal, but the balances in the cash and capital accounts would be incorrect.

Financial statements can be prepared from the trial balance. Figures 3-6 through 3-8 show financial statements for PD Consulting Service for its first month of operation. The revenue and expense amounts shown on the income statement are taken directly from the trial balance. Net income is calculated as the difference between revenues and expenses (Fig. 3-6). The capital statement is then prepared using the amount of net income shown on the income statement and the amounts for capital and owner withdrawal from the trial balance (Fig. 3-7). Finally, the balance sheet is prepared using asset and liability amounts from the trial balance and the ending capital amount calculated on the capital statement (Fig. 3-8).

PD Consulting Service
Trial Balance
June 30, 20X0

Account Name	*Debit*	*Credit*
Cash	$1,100	
Accounts receivable	200	
Accounts payable		25
P. Dill, capital		1,000
P. Dill, withdrawal	100	
Consulting revenue		500
Rent expense	100	
Phone expense	25	
Totals	$1,525	$1,525

FIGURE 3–5 Trial balance for PD Consulting Service.

PD Consulting Service
Income Statement
For the Month Ended June 30, 20X0

Consulting revenue		$500
Expenses		
Rent	$100	
Phone	25	
Totals expenses		125
Net income		$375

FIGURE 3–6 Income statement for PD Consulting Service.

PD Consulting Service
Statement of Capital
For the Month Ended June 30, 20X0

Capital, P. Dill, June 1, 20X0	$1,000
Add: Net income	375
Less: P. Dill, withdrawal	100
Capital, P. Dill, June 30, 20X0	$1,275

FIGURE 3–7 Statement of capital for PD Consulting Service.

PD Consulting Service
Balance Sheet
June 30, 20X0

Assets		
Cash	$1,100	
Accounts receivable	200	
Total assets		$1,300
Liabilities		
Accounts payable	$ 25	
Total liabilities		$ 25
Owner's equity		
P. Dill, capital		$1,275
Total liabilities plus owner's equity		$1,300

FIGURE 3–8 Balance sheet for PD Consulting Service.

ADJUSTING ENTRIES

Financial statements must be prepared at the end of each accounting period (which is generally the end of each fiscal year). Some transactions begin in 1 year and are not concluded until a later one. This causes problems in accurately matching expenses and revenues in the proper year. Recall that revenues are recognized in the year in which the sale is made, and that all expenses required to generate revenues are recognized in the same year as the associated revenues. If a transaction begins in 1 year and is not concluded until a later one, accountants must adjust the accounting records to indicate what portion of the transaction is a revenue or expense in each of the affected years.

For example, a pharmacy may purchase a computer and use it over a 3-year period. Because the computer is used to generate revenues in each of 3 years, part of its cost must be recognized as an expense in each of those years. To do this, the accountant must make an *adjusting entry* at the end of each year. The following journal entries record the purchase and depreciation of the computer, which was purchased for $3,000, was expected to last 3 years, and was expected to have no residual value. The first entry records the purchase of the computer. This is not an adjusting entry.

1-1-X0	Computer	3,000	
	Cash		3,000
	Record purchase of computer		

At the end of 19X0 an adjusting entry must be made to recognize that the computer has been used for 1 year and, consequently, that some expense for use of the computer has been incurred. The adjusting entry required is shown.

12-31-X0	Depreciation expense	1,000	
	Accumulated depreciation: computer		1,000
	Record depreciation expense on computer for 20X0		

A similar entry is required at the end of each of the next 2 years.

12-31-X1	Depreciation expense	1,000	
	Accumulated depreciation: computer		1,000
	Record depreciation expense on computer for 20X1		
12-31-X2	Depreciation expense	1,000	
	Accumulated depreciation: computer		1,000
	Record depreciation expense on computer for 20X2		

Other common situations in which adjusting entries are used include prepaid and accrued expenses. *Prepaid expenses* occur when a pharmacy must pay for a good or service in a year prior to the one in which the good or service is used. For example, a pharmacy may have to pay rent 1 month in advance. So, as of the end of December, the pharmacy would already have paid the rent for January of the next year. The accountant would make an adjusting entry to show that rent had been paid prior to the rent expense being incurred. The prepayment would be listed on the balance sheet as an asset called *prepaid rent.*

Accrued expenses occur when, as of the end of the year, the pharmacy has incurred an expense but has not yet paid for it. For example, a pharmacy may have incurred an expense for property taxes but not have paid it as of the end of the year. The accountant would note this using an adjusting entry. The unpaid tax expense would appear on the balance sheet as a liability called an *accrued tax payable.*

CLOSING ENTRIES

Balance sheet accounts accumulate transaction data over the entire life of the business. The account balances are carried from year to year such that 1 year's ending balance becomes the next year's beginning balance.

Income statement accounts, on the other hand, accumulate transaction data for a set period of time—one accounting period (which is usually 1 year). At the end of each accounting period, income statement accounts are closed. This means their balances are removed and reset to zero. Hence, the balances in the revenue and expense accounts at the beginning of each accounting period are always zero. This is necessary so that net income can be measured for each accounting period.

The closing process consists of four entries:

1. An entry to close the revenue account and transfer its balance to the income summary account (ISA). The ISA is a special temporary account used to make year-end adjusting and closing entries.

2. An entry to close each of the expense accounts and transfer their balances to the ISA
3. An entry to close the ISA and transfer its balance to the owners' equity account—either capital (for a sole proprietorship) or retained earnings (for a corporation)
4. An entry to close the owner withdrawal account (of a sole proprietorship) or the dividends paid account (of a corporation) and transfer the balance to the capital account

Closing entries are dated as of the last day of the accounting period. They are journalized and then posted to the ledger. Closing entries are made after all other entries have been recorded. The closing process has two effects:

1. It transfers net income (or net loss) to the capital account. Before it is closed, the ISA contains revenue on the credit side and expenses on the debit side. Hence, a credit balance indicates net income and a debit balance indicates net loss.
2. It establishes zero balances in each of the income statement accounts so they are ready for use in the next accounting period.

EXAMPLE PROBLEM: PD CONSULTING SERVICE CONTINUED

Figure 3-9 shows the year-end ledger of accounts for PD Consulting Service before closing. The balance in each account and the account name are listed to prepare the trial balance shown in Figure 3-10. The trial balance is then used to prepare the financial statements shown in Figures 3-11 through 3-13.

PD Consulting Service
Ledger of Accounts

Account	Debit	Credit
Cash	950	
Accounts Receivable	1,100	
Accounts Payable		500
P. Dill, Capital		1,000
P. Dill, Withdrawals	500	
Consulting Revenue		14,500
Rent Expense	1,200	
Phone Expense	300	
Salary Expense	12,000	

FIGURE 3–9 Year-end ledger of accounts for PD Consulting Service before closing entries are posted.

PD Consulting Service
Trial Balance
May 31, 20X1

Account Name	*Debit*	*Credit*
Cash	$ 950	
Accounts receivable	1,100	
Accounts payable		550
P. Dill, capital		1,000
P. Dill, withdrawal	500	
Consulting revenue		14,500
Rent expense	1,200	
Phone expense	300	
Salary expense	12,000	
Totals	$16,050	16,050

FIGURE 3–10 Trial balance for PD Consulting Service.

PD Consulting Service
Income Statement
Year Ended May 31, 20X1

Consulting revenue		$14,500
Expenses		
Rent	$ 1,200	
Phone	300	
Salary	12,000	
Total		13,500
Net income		$ 1,000

FIGURE 3–11 Income statement for PD Consulting Service.

PD Consulting Service
Statement of Capital
For the Year Ended May 31, 20X1

Capital, P. Dill, June 1, 20X1	$1,000
Add: Net income	1,000
Less: P. Dill, withdrawal	500
Capital, P. Dill, May 31, 20X1	$1,500

FIGURE 3–12 Statement of capital for PD Consulting Service.

PD Consulting Service
Balance Sheet
May 31, 20X1

Assets		
Cash	$ 950	
Accounts receivable	1,100	
Total assets		$2,050
Liabilities		
Accounts payable	$ 550	
Total liabilities		$ 550
Owner's equity		
P. Dill, capital		$1,500
Total liabilities plus owner's equity		$2,050

FIGURE 3–13 Balance sheet for PD Consulting Service.

Journal

PD Consulting Services

Date	Account Title and Explanation	Dr.	Cr.
5-31-X1	Consulting revenue	14,500	
	Income summary account		14,500
	Close consulting revenue to income summary account		
5-31-X1	Income summary account	13,500	
	Rent expense		1,200
	Phone expense		300
	Salary expense		12,000
	Close expenses to income summary		
5-31-X1	Income summary account	1,000	
	P. Dill, capital		1,000
	Close income summary to capital		
5-31-X1	P. Dill, capital	500	
	P. Dill, withdrawal		500
	Close owner withdrawal to capital		

FIGURE 3–14 Closing entries for PD Consulting Service.

Figure 3-14 shows the entries necessary to close PD Consulting Service's temporary accounts. Figure 3-15 shows the balances in the income summary, capital, and withdrawal accounts after each closing entry is made. As indicated, the first closing entry closes the consulting revenue account to the ISA. As shown in Figure 3-15, this results in a $14,500 credit balance in the ISA. It also results in a zero balance in the consulting revenue account. The second closing entry closes the expense accounts and transfers their balances to ISA. In our example, this adds a $13,500 debit to the ISA and results in zero balances in each of the expense accounts. The ISA is then closed to the capital account. This is done by means of a $1,000 debit to the ISA and a $1,000 credit to the P. Dill, Capital account. At this point, the ISA has a zero balance and the P. Dill, Capital account has a $2,000 credit balance. The last entry closes the owner withdrawal account to capital. This results in a $500 debit to P. Dill, Capital and a final balance of $1,500 in the P. Dill, Capital account. This is the same figure calculated on the capital statement (Fig. 3-12) and listed on the balance sheet (Fig. 3-13).

Balance after consulting revenue is closed to ISA:

Income Summary Account		P. Dill, Capital	
	14,500		1,000

Balance after expense accounts are closed to ISA:

Income Summary Account		P. Dill, Capital	
13,500	14,500		1,000

Balance after ISA is closed to capital account:

Income Summary Account		P. Dill, Capital	
13,500	14,500		1,000
1,000			1,000
0			

Balance after withdrawal account is closed to capital:

P. Dill, Withdrawal		P. Dill, Capital	
500	500		1,000
0			1,000
		500	
			1,500

FIGURE 3–15 Balance in income summary account and capital amount after each closing entry.

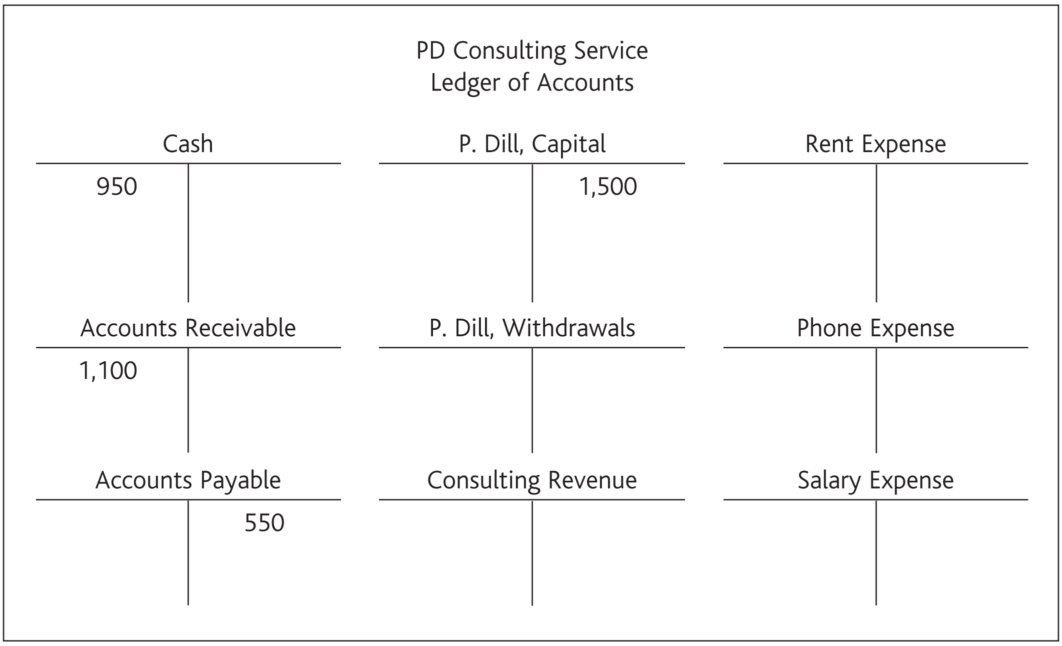

FIGURE 3–16 Ledger of accounts for PD Consulting Service after closing.

Figure 3-16 shows the ledger after closing. The balances for the asset and liability accounts remain, the capital account reflects the changes from net income and owner withdrawal, and the balances in the revenue and expense accounts are now set to zero.

Suggested Readings

Anthony RN, Breitner LK. Essentials of Accounting. 8th Ed. Upper Saddle River, NJ: Prentice Hall, 2003.

Anthony RN, Breitner LK. Essentials of Accounting and Post Test Booklet 8. 8th Ed. Upper Saddle River, NJ: Prentice Hall, 2003.

Warren CS, Reeve JM, Fess PE. Accounting. 21st Ed. Mason, OH: Thomson Southwestern, 2005.

Warren CS, Reeve JM, Fess PE. Financial Accounting. 9th Ed. Mason, OH: Thomson Southwestern, 2005.

QUESTIONS AND PROBLEMS

1. Indicate whether each of the following would be a debit or a credit.
   - **a.** Cash increases by $1,000
   - **b.** Accounts payable increase by $1,000
   - **c.** Owners' equity increases by $500
   - **d.** Rent expense of $850
   - **e.** Revenue of $250
   - **f.** Accounts receivable decrease by $400
   - **g.** Notes payable increase by $5000
   - **h.** Owner withdrawal of $100
   - **i.** Fixed assets increase by $5000
   - **j.** Inventory increases by $500

2. Record the following transactions.
   - **a.** On January 1, 20X1, Jones Pharmacy has cash sales of $5,000.
   - **b.** On January 5, 20X1, Jones Pharmacy pays its rent expense of $500.
   - **c.** On March 10, 20X1, Jones Pharmacy buys a computer for $9,000 cash.
   - **d.** On April 1, 20X1, Jones Pharmacy pays salaries of $5,000.
   - **e.** On May 30, 20X1, Jones Pharmacy pays its utility bill for $200.
   - **f.** On June 1, 20X1 Jones Pharmacy sells $500 worth of merchandise on credit.
   - **h.** On July 3, 20X1, Jones Pharmacy purchases $200 of supplies on credit.
   - **h.** On December 27, 20X1, Jones Pharmacy purchases $500 of supplies and pays cash for them.
3. Shown is a year-end ledger of accounts for Big Bill's Consulting Service. Using the ledger, make a trial balance, financial statements, and necessary closing entries.

Ledger of Accounts
Big Bill's Consulting Service

Account	Debit	Credit
Cash	950	
Accrued Salaries Payable		100
Phone Expense	25	
Accounts Receivable	1,100	
Accrued Taxes Payable		100
Salary Expense	1200	
Supplies	500	
B. Bill, Capital		1,900
Depreciation Expense	50	
Furniture	250	
B. Bill, Withdrawal	100	
Property Tax Expense	100	
Accumulated Depreciation		50
Consulting Revenue		2200
Supplies Expense	200	
Accounts Payable		225
Rent Expense	100	

4. Assume Piedmont Pharmacy's fiscal year ends on December 31. Which of the following would require adjusting entries? Explain your answers.
   a. Rent for November was paid the following December.
   b. Rent for December was paid the following January.
   c. Salary expense of $5,000 was incurred and paid in December.
   d. Salary expense of $2,500 was incurred, but not paid, during the last 2 weeks of December. Salaries will be paid on January 14.
   e. Credit sales of $1,000 are made during the last week of December. Payment for these sales will be made during the following January.
   f. A car is purchased and paid for, in cash, on March 31.
   g. A computer with an estimated life of 5 years is purchased on April 30. The money used to buy the computer was borrowed from a bank on a 5-year loan. Both principal and interest are due in 5 years.
5. For what period of time is transaction data collected in an income statement account? In a balance sheet account?
6. Which of the following accounts must be closed at the end of an accounting period?
   a. Cash
   b. Accounts receivable
   c. Sales
   d. Rent expense
   e. Owner withdrawal
   f. Consulting revenues
7. A year-end trial balance for New Service Company is shown. From this balance, prepare financial statements and necessary closing entries for New Service Company.

Trial Balance
New Service Company
December 31, 20X2

Account Name	Debit	Credit
Cash	4,000	
Accounts receivable	17,000	
Supplies	3,000	
Equipment	40,000	
Accumulated depreciation: equipment		4,000
Accounts payable		9,000
Note payable		10,000
Accrued interest payable		375
J. Smith, Capital		39,000
Consulting revenue		60,000
Salary expense	46,200	
Utility expense	1,800	
Misc. expense	1,000	
Depreciation expense	4,000	
Supplies expense	5,000	
Interest expense	375	
Totals	122,375	122,375

8. On August 1, 20X5, Linda Smith established a nursing home pharmacy consulting business named Long-Term Care Consultants. The business had the following transactions during the month:

- **a.** On August 1, Smith invested $1,000 in the business.
- **b.** On August 3, she purchased $100 of supplies with cash.
- **c.** On August 5, she purchased $500 of office furniture on account.
- **d.** On August 7, she provided services to the Golden Agers Home. She billed them for $250, which they agreed to pay in 30 days.
- **e.** On August 10, she provided services to the Old Sailors Home. She billed them for $400, which they paid.
- **f.** On August 18, she paid rent of $250 with cash.
- **g.** On August 25, she withdrew $100 cash for personal use.
- **h.** On August 28, she received and paid a utilities bill for $50.
- **i.** On August 30, she paid $100 on account for the previously purchased furniture.

Smith's accountant has set up the following accounts for use by the business:

Cash	L. Smith, Withdrawals
Accounts receivable	Consulting Fees
Supplies	Rent expense
Furniture	Utilities expense
Accounts payable	L. Smith, Capital

Record these transactions, post them to the ledger of accounts, and prepare a trial balance, income statement, balance sheet, and a statement of capital for August.