## ANSWERS TO QUESTIONS - CHAPTER 2

1. Accrual accounting attempts to record the effects of accounting events in the period when such events occur, regardless of when cash is received or paid. The goal is to match expenses with the revenues that they produce.
2. Recognition is the act of recording an event in the financial statements. When accruals are used, events are recognized before the associated cash is paid or collected.
3. Deferral is the recognition of revenue or expenses in a period after the cash consequences are realized, i.e., cash is collected in advance of performing the service.
4. If cash is collected in advance for services, the revenue is recognized when the services are rendered.
5. An asset source transaction increases assets and increases either liabilities or equity.
6. The issue of common stock, which is capital acquired from owners, increases business assets (usually cash) and equity (common stock).
7. The recognition of revenue on account increases the corresponding revenue account on the income statement, but does not affect the statement of cash flows. The cash flow statement is affected when the account is collected.
8. Asset Source Transaction

Issue of Common Stock

Revenue Earned

Borrowed Funds

Effect on Accounting Equation
Increases Assets Increases Common Stock

Increases Assets Increases Retained Earnings

Increases Assets
Increases Liabilities
9. Revenue is recognized under accrual accounting when a revenueproducing event occurs, i.e., when the revenue is earned, even if no cash is collected at the time of the transaction.
10. The collection of cash for accounts receivable is an asset exchange transaction. Only the asset side of the accounting equation is affected because one asset account increases (cash), and another asset account decreases (accounts receivable). Total assets are unchanged.
11. If cash is collected in advance for services, a liability is created (unearned revenue), increasing the claims side of the accounting equation.
12. Unearned revenue is cash that has been collected for services that have not yet been performed.
13. The recognition of expenses affects the accounting equation by either decreasing assets or increasing liabilities (payables) and by decreasing stockholders' equity (retained earnings).
14. A claims exchange transaction is one where the claims of creditors (liabilities) increase and the claims of stockholders (retained earnings) decrease, or vice versa. The total amount of claims is unchanged.
15. Cash payments to creditors are asset use transactions. These transactions result in the reduction of an asset account (cash) and the reduction of the corresponding liability account (payables).
16. Expenses are recognized under accrual accounting at the time the expense is incurred or resources are consumed, regardless of when cash payment is made.
17. Net cash flows from operations on the cash flow statement may be different from net income because of the application of accrual accounting. Revenues and expenses reported on the income statement may be recognized before or after the actual collection or payment of cash that is reported on the cash flow statement.
18. The income statement reflects the change in net assets associated with operating a business, as shown by revenues and expenses. Expenses may result from a decrease in assets or an increase in liabilities. Revenues may result from an increase in assets or a decrease in liabilities.
19. Net income increases stockholders' claims on business assets by increasing retained earnings.
20. A cost can be either an asset or an expense. If the item acquired has already been used in the process of earning revenue, its cost represents an expense. If the item will be used in the future to generate revenue, its cost represents an asset.
21. A cost is held in the asset account until the item is used to produce revenue. When the revenue is generated, the asset is converted into an expense in order to match revenues with related expenses. Not all costs become expenses. If the value of an asset will not expire in the revenue-generating process, the asset will not become an expense. For example, the cost of land will not become an expense because land does not depreciate.
22. Supplies used during the accounting period are recognized in a single adjusting entry at the end of the period. The amount of supplies used is determined by subtracting the amount of supplies on hand at the end of the period from the amount of supplies that were available for use (beginning supplies balance plus supplies purchased).
23. An expense is a decrease in assets or an increase in liabilities that occurs in the process of generating revenue.
24. Revenue is an increase in assets or a decrease in liabilities that results from the operating activities of the business.
25. The purpose of the statement of changes in stockholders' equity is to display the effects of business operations and stock issued to owners and dividends paid to stockholders. It identifies the ways that an entity's equity increased and decreased as a result of its operations and transactions with its stockholders.
26. The purpose of the balance sheet is to provide information about an entity's assets, liabilities, and stockholders' equity and their relationships to each other at a particular point in time. It provides a list of the economic resources that the enterprise has available for its operating activities and the claims to those resources.
27. The balance sheet is dated as of a specific date because it shows information about an entity's assets, liabilities, and stockholders' equity as of that date, not measured over a time period. The statement of changes in stockholders' equity, the income statement, and the statement of cash flows reflect transactions that occur over a period of time.
28. Assets are listed on the balance sheet in accordance with their respective levels of liquidity (how rapidly they can be converted to cash).
29. The statement of cash flows explains the change in cash from one accounting period to the next. It is prepared by analyzing the cash account and summarizing where cash came from and how it was used.
30. An adjusting entry is an entry that updates account balances prior to preparation of the financial statements. The entry means that there is an item that needs proper measurement on the income statement and an adjustment will reflect the correct time period of earning or usage. Example: entry to recognize accrued interest revenue where the revenue has been earned but not yet collected and therefore revenue had not yet been recorded for the time period.
31. Temporary accounts (revenue, expense, and dividends) are closed at the end of the accounting period. It is necessary to close these accounts so that revenue, expense, and dividends can be accumulated from a beginning balance of zero for the next period.
32. Period costs are costs that are recognized in an accounting period. Examples of period costs include rent expense, utilities expense, and salaries expense.
33. Salary of the tax return preparer could be directly matched with the revenue that it produces.
34. The four stages of the accounting cycle: Record transactions; adjust the accounts; prepare statements; and close the temporary accounts. The adjustment and closing processes have been added to the cycle in this chapter. It is necessary to adjust accounts so that the accounts will reflect the correct balances under the accrual basis of accounting. The closing process (transferring the balances of the temporary accounts to retained earnings) is necessary so that the temporary accounts have a zero balance at the beginning of the next accounting cycle.

## SOLUTIONS TO EXERCISES - CHAPTER 2

## EXERCISE 2-1

| Holloway Company <br> Effect of Events on the 2018 Accounting Equation |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Assets |  |  | $=$$=$ | Liabilities | + + | Stockholders' Equity |  |  |
| Event | Cash | $+$ | Accounts Rec. |  |  |  | Common Stock | + | Retained Earnings |
| Earned Revenue |  | + | 18,000 | $=$ |  | + |  | + | 18,000 |
| Coll. Acct. Rec. | 14,000 | + | $(14,000)$ | $=$ |  | + |  | + |  |
| Ending Balance | 14,000 | + | 4,000 | $=$ | -0- | + | 0 | + | 18,000 |
|  |  |  |  |  |  |  |  |  |  |

a. Accounts Receivable: $\$ 18,000-\$ 14,000=\$ 4,000$
b. \$18,000 Net Income
c. $\$ 14,000$ cash collected from accounts receivable.
d. $\$ 18,000$
e. $\$ 18,000$ of revenue was earned but only $\$ 14,000$ of it was collected.

EXERCISE 2-2
a.

| Chung Corporation Accounting Equation - 2018 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Event | Assets <br> Cash |  | Liabilities Salaries Payable |  | Stockholders' Equity |  |  |
|  |  |  |  |  | Common Stock | $+$ | Retained Earnings |
| Earned Rev. | 8,000 |  |  |  |  |  | 8,000 |
| Accrued Sal. |  |  | 5,000 |  |  |  | $(5,000)$ |
| Ending Bal. | 8,000 | , | 5,000 | $+$ | -0- | $+$ | 3,000 |


| Chung Corporation Balance Sheet <br> As of December 31, 2018 |  |  |
| :---: | :---: | :---: |
| Assets |  |  |
| Cash | \$8,000 |  |
| Total Assets |  | \$8,000 |
| Liabilities |  |  |
| Salaries Payable | \$5,000 |  |
| Total Liabilities |  | \$5,000 |
| Stockholders' Equity |  |  |
| Retained Earnings | \$3,000 |  |
| Total Stockholders' Equity |  | 3,000 |
| Total Liab. and Stockholders' Equity |  | \$8,000 |

b.

| Computation of Net Income |  |  |
| :--- | :--- | :--- |
| Revenue | $\$ 8,000$ |  |
| Less: Expenses |  |  |
| Net Income |  | $\$ 3,000)$ |

## EXERCISE 2-2 (cont.)

C.

| Cash Flow from Operating Activities |  |  |
| :--- | :--- | :--- |
| Cash from Revenue |  | $\$ 8,000$ |
| Net Cash Flow from Operating Act. | $\$ 8,000$ |  |

d. The salary expense is deducted from revenue in computing net income, but it has not been paid. This creates a difference of $\$ 5,000$ between net income and cash flow from operating activities. The revenue is the same because it has been earned and collected.

EXERCISE 2-3
a.

Milea, Inc.
General Ledger Accounts For the Year Ended December 31, 2018

b.

Milea, Inc.
Income Statement
For the Year Ended December 31, 2018

| Revenue |  | \$56,000 |
| :---: | :---: | :---: |
| Expenses |  |  |
| Utility Expense | \$ 2,500 |  |
| Salaries Expense | 10,000 |  |
| Total Expenses |  | $(12,500)$ |
| Net Income |  | \$43,500 |


| Milea, Inc. <br> Statement of Changes in Stockholders' Equity For the Year Ended December 31, 2018 |  |  |
| :---: | :---: | :---: |
| Beginning Common Stock | \$ - 0- |  |
| Plus: Common Stock Issued | 20,000 |  |
| Ending Common Stock |  | \$20,000 |
| Beginning Retained Earnings | -0- |  |
| Plus: Net Income | \$43,500 |  |
| Less: Dividends | $(2,000)$ |  |
| Ending Retained Earnings |  | 41,500 |
| Total Stockholders' Equity |  | \$61,500 |


| $\begin{gathered} \text { Milea, Inc. } \\ \text { Balance Sheet } \\ \text { As of December 31, } 2018 \end{gathered}$ |  |  |
| :---: | :---: | :---: |
| Assets |  |  |
| Cash | \$63,500 |  |
| Accounts Receivable | 8,000 |  |
| Total Assets |  | \$71,500 |
| Liabilities |  |  |
| Salaries Payable | \$10,000 |  |
| Total Liabilities |  | \$10,000 |
| Stockholders' Equity |  |  |
| Common Stock | \$20,000 |  |
| Retained Earnings | 41,500 |  |
| Total Stockholders' Equity |  | 61,500 |
| Total Liab. and Stockholders' Equity |  | \$71,500 |


| Milea, Inc. <br> Statement of Cash Flows <br> For the Year Ended December 31, 2018 |  |  |
| :---: | :---: | :---: |
| Cash Flow From Operating Activities |  |  |
| Cash Received from Customers | \$48,000 |  |
| Cash Paid for Expenses | $(2,500)$ |  |
| Net Cash Flow from Operating Act. |  | \$45,500 |
| Cash Flow From Investing Activities |  | -0- |
| Cash Flow From Financing Activities |  |  |
| Issue of Stock | \$20,000 |  |
| Paid Dividends | $(2,000)$ |  |
| Net Cash Flow from Financing Act. |  | 18,000 |
| Net Change in Cash |  | 63,500 |
| Plus: Beginning Cash Balance |  | -0- |
| Ending Cash Balance |  | \$63,500 |

c. Net income is the difference between services performed and expenses incurred, regardless of the cash collected or paid. Cash flow from operating activities is the difference between cash collected and paid for operating activities. There was $\$ 56,000$ of income earned, but only $\$ 48,000$ collected and $\$ 12,500$ of expenses incurred, but there was only \$2,500 paid.
a.

| Lewis and Harper <br> Statements Model for 2018 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Balance Sheet |  |  |  |  |  |  |  |  | Income Statement |  |  |  |  | Statement of |
|  | Assets |  |  | = Liabilities |  |  |  |  |  | Rev. | - | Exp. |  | Net Inc. | Cash Flows |
| $\begin{aligned} & \text { Event } \\ & \text { No. } \\ & \hline \end{aligned}$ | Cash | + | Accts. Rec. |  | Acct. Payable |  | Sal. Pay. |  |  |  |  |  |  |  |
| 1. | NA |  | 70,000 |  | NA |  | NA |  | 70,000 |  | 70,000 |  | NA |  | 70,000 | NA |
| 2. | 40,000 |  | NA |  | NA |  | NA |  | 40,000 | 40,000 |  | NA |  | 40,000 | 40,000 OA |
| 3. | NA |  | NA |  | 36,000 |  | NA |  | (36,000) | NA |  | 36,000 |  | (36,000) | NA |
| 4. | (10,000) |  | NA |  | NA |  | NA |  | (10,000) | NA |  | 10,000 |  | (10,000) | (10,000) OA |
| 5. | 47,000 |  | $(47,000)$ |  | NA |  | NA |  | NA | NA |  | NA |  | NA | 47,000 OA |
| 6. | $(16,000)$ |  | NA |  | $(16,000)$ |  | NA |  | NA | NA |  | NA |  | NA | $(16,000)$ OA |
| 7. | (8,000) |  | NA |  | NA |  | NA |  | (8,000) | NA |  | NA |  | NA | $(8,000)$ FA |
| 8. | NA |  | NA |  | NA |  | 2,000 |  | $(2,000)$ | NA |  | 2,000 |  | $(2,000)$ | NA |
| Totals | 53,000 | + | 23,000 | $=$ | 20,000 | + | 2,000 | + | 54,000 | 110,000 |  | 48,000 | $=$ | 62,000 | 53,000 NC |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

b. Total assets: \$76,000 (\$53,000 + \$23,000)
c. $\$ 23,000$
d. $\$ 20,000$
e. Accounts Receivable (an asset) is an amount owed to Lewis and Harper: \$23,000; Accounts Payable (a liability) is an amount that Lewis and Harper owes: $\mathbf{\$ 2 0 , 0 0 0}$
f. $\$ 62,000$
g. $\$ 61,000(\$ 40,000-\$ 10,000+\$ 47,000-\$ 16,000)$

EXERCISE 2-5
a.

| Computation of Net Income |  |
| :--- | :---: |
| Revenue recognized on account | $\$ 68,000$ |
| Less accrued salary expense | $(46,000)$ |
| Net Income | $\$ 22,000$ |

b.

| Computation of Cash Collected from Accounts Receivable |  |
| :--- | ---: |
| Beginning balance of Accounts Receivable | $\$ 4,000$ |
| Add revenue recognized on account | 68,000 |
| Less ending balance of Accounts Receivable | $(4,500)$ |
| Cash collected from accounts receivable | $\$ 67,500$ |


| Computation of Cash Paid for Salaries Expense |  |
| :--- | ---: |
| Beginning balance of Salaries Payable | $\$ 2,600$ |
| Add accrued salary expense recognized | 46,000 |
| Less ending balance of Salaries Payable | $(1,500)$ |
| Cash paid for Salary Expense | $\$ 47,100$ |


| Cash Flow from Operating Activities |  |
| :--- | :---: |
| Cash from Accounts Receivable |  |
| Cash paid for Salary Expense | $\$ 67,500$ |
| Net Cash Flow from Operating Act. | $(47,100)$ |

## EXERCISE 2-6

a. \& c.

| Event | Revenue | Expense | Statement of Cash Flows |
| :---: | :---: | :---: | :---: |
| 1. | NA | NA | \$40,000 FA |
| 2. | \$82,000 | NA | NA |
| 3. | NA | NA | $(6,000)$ FA |
| 4. | NA | NA | 76,000 OA |
| 5. | NA | \$53,000 | $(53,000)$ OA |
| 6. | 19,000 | NA | 19,000 OA |
| 7. | NA | 3,500 | NA |

b.

| Computation of Net Income |  |  |
| :--- | ---: | ---: |
| Revenue | $\$ 101,000$ |  |
| Less: Expenses | $\$ \times 7.7$ | $(56,500)$ |
| Net Income | $\$ 44,500$ |  |

d.

| Cash Flow from Operating Activities |  |  |
| :--- | :---: | :---: |
| Cash from Revenue |  |  |
| Cash paid for expenses | $\$ 95,000$ |  |
| Net Cash Flow from Operating Act. | $\$ 43,000)$ |  |

e. The before-closing balance in the Revenue account is $\$ 101,000$. After it is closed to Retained Earnings the balance will be zero. Other accounts that are closed at the end of the period include any other revenue accounts, the expense accounts, and the dividends account.
f. The balance of Retained Earnings on the 2018 Balance Sheet will be the amount of Net Income, $\$ 44,500$ minus $\$ 6,000$ of dividends that were paid during the year $=\$ 38,500$. There was no beginning balance in Retained Earnings.

| Lee Inc. <br> Effect of Events on the General Ledger Accounts |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Assets |  |  | $=$ | $\begin{array}{\|c\|} \hline \text { Liabilities } \\ \hline \text { Accounts } \\ \text { Payable } \end{array}$ | + | Stockholders' Equity |  |  |
| Event | Cash | Accounts Receivable | Land |  |  |  | Com. Stock | + | Retained Earnings |
| 1. Sales on Account |  | 62,000 |  |  |  |  |  |  | 62,000 |
| 2. Coll. Accts. Rec. | 51,000 | $(51,000)$ |  |  |  |  |  |  |  |
| 3. Incurred Expense |  |  |  |  | 39,000 |  |  |  | $(39,000)$ |
| 4. Pd. Acc. Pay. | $(31,000)$ |  |  |  | $(31,000)$ |  |  |  |  |
| 5. Issue of Stock | 40,000 |  |  |  |  |  | 40,000 |  |  |
| 6. Purchase Land | $(21,000)$ |  | 21,000 |  |  |  |  |  |  |
| Totals | 39,000 | 11,000 | 21,000 | $=$ | 8,000 | + | 40,000 | $+$ | 23,000 |
|  |  |  |  |  |  |  |  |  |  |

a. Revenue recognized, $\$ 62,000$.
b. Cash flow from revenue, $\$ 51,000$.
c. Revenue, $\$ 62,000$, less operating expenses, $\$ 39,000=\$ 23,000$ net income.
d. Accounts receivable collected, $\$ 51,000$, less cash paid for expenses, $\$ 31,000=$ \$20,000 cash flow from operating activities.
e. Income of $\$ 62,000$ was earned, but only $\$ 51,000$ was collected (a difference of $\$ 11,000$ ); operating expenses incurred were $\$ 39,000$ but only $\$ 31,000$ was paid during the period (a difference of $\$ 8,000$ ). Consequently, net income is $\$ 3,000$ more than cash flow from operating activities.
f. $\$ 21,000$ cash outflow for the purchase of land.
g. $\$ 40,000$ cash inflow from the issue of common stock.
$\begin{array}{ll}\text { h. } \begin{array}{l}\text { Total assets }\end{array}=\$ 71,000(\$ 39,000+\$ 11,000+\$ 21,000) \\ \text { Total liabilities } & =\$ 8,000 \\ \text { Total equity } & =\$ 63,000(\$ 40,000+\$ 23,000)\end{array}$
a.

| Pizza Express Inc. Effect of Events on Financial Statements for 2018 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Statement of Cash Flows |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Assets |  |  | + | Liab. <br> Accts. Pay. |  | Stockholders Equity |  |  | Income Statement |  |  |  |  |  |
| Event No. | Cash | + | Supplies |  |  |  | Com. Stock | $+1$ | Ret. Earn. | Rev. | - | Exp. | $=$ | Net Income |  |
| Beg. Bal | 2,500 | + | -0- | $=$ | -0- | + | 1,400 | + | 1,100 | -0- | - | -0- | $=$ | -0- | -0- |
| 1. | NA | + | 3,600 | = | 3,600 | + | NA | $+$ | NA | NA | - | NA | $=$ | NA | NA |
| 2. | 12,300 | + | NA | = | NA | $+$ | NA | + | 12,300 | 12,300 | - | NA | = | 12,300 | 12,300 OA |
| 3. | $(2,700)$ | + | NA | = | $(2,700)$ | $+$ | NA | + | NA | NA | - | NA | $=$ | NA | $(2,700)$ OA |
| 4. | NA | + | $(3,350)$ | - | NA | + | NA | + | $(3,350)$ | NA | - | 3,350 | $=$ | $(3,350)$ | NA |
| Totals | 12,100 | + | 250 | $=$ | 900 | $+$ | 1,400 | + | 10,050 | 12,300 | - | 3,350 | $=$ | 8,950 | 9,600 NC |

b. The difference in net income and cash flow from operating activities of $\$ 650(\$ 8,950-\$ 9,600)$ is attributed to recognizing supplies expense of $\$ 3,350$ in the income statement, whereas the cash payment on accounts payable (for supplies) was only $\$ 2,700$.

| Yard Professionals Inc. Effect of Events on the Accounting Equation |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Assets |  | $=$ | Liab. | + | Stk. Equity |
| Event | Cash | Supplies | $=$ | Accounts Payable |  | Retained Earnings |
| 1. Provided Service | 35,000 |  |  |  |  | 35,000 |
| 2. Purchased Supplies |  | 6,000 |  | 6,000 |  |  |
| 3. Used Supplies |  | $(4,200)$ |  |  |  | $(4,200)$ |
| Totals | 35,000 | 1,800 | $=$ | 6,000 |  | 30,800 |

b.

| Yard Professionals Inc. Income Statement <br> For the Year Ended December 31, 2018 |  |  |
| :---: | :---: | :---: |
| Revenue |  | \$35,000 |
| Expense |  | $(4,200)$ |
| Net Income |  | \$30,800 |
| Yard Professionals Inc. Balance Sheet As of December 31, 2018 |  |  |
| Assets |  |  |
| Cash | \$35,000 |  |
| Supplies | 1,800 |  |
| Total Assets |  | \$36,800 |
| Liabilities |  |  |
| Accounts Payable | \$ 6,000 |  |
| Total Liabilities |  | \$ 6,000 |
| Stockholders' Equity |  |  |
| Retained Earnings | 30,800 |  |
| Total Stockholders' Equity |  | 30,800 |
| Total Liab. and Stockholders' Equity |  | \$36,800 |

EXERCISE 2-9 b. (cont.)

| Yard Professionals Inc. Statement of Cash Flows <br> For the Year Ended December 31, 2018 |  |  |
| :---: | :---: | :---: |
| Cash Flows From Operating Activities: |  |  |
| Cash Receipt from Revenue | \$35,000 |  |
| Net Cash Flow from Operating Activities |  | \$35,000 |
| Cash Flows From Investing Activities |  | -0- |
| Cash Flows From Financing Activities: |  | -0- |
| Net Change in Cash |  | 35,000 |
| Plus: Beginning Cash Balance |  | -0- |
| Ending Cash Balance |  | \$35,000 |

c. The balance of the Supplies account on January 1, 2019 is $\mathbf{\$ 1 , 8 0 0}$, the same as the December 31, 2018 balance.
d. The balance of the Supplies Expense account on January 1, 2019 is zero because the expense account was closed to Retained Earnings at December 31, 2018.
a. A cost that is an asset is the cost of resources that are given up in acquiring some type of asset, such as an automobile, office equipment, or land. A cost that is an expense is the use of assets (depreciation) or the payment for an expense that is incurred in the current period (utilities, salaries, etc.).
b. Examples of costs that are assets:

1. Purchased land.
2. Paid for 12 months rent in advance.
3. Purchased supplies for future use.
c. Examples of costs that are expenses:
4. Recorded rent that has expired.
5. Paid monthly utilities expense.
6. Used supplies that had been previously purchased.

## EXERCISE 2-11

a.

| Life, Inc. <br> Effect of Events on the Accounting Equation |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Assets |  | $=$ | Stockholders' Equity |
| Event | Cash | Prepaid Rent | $=$ | Retained Earnings |
| 1. Performed Services | 36,000 |  |  | 36,000 |
| 2. Prepaid Rent | $(18,000)$ | 18,000 |  |  |
| 3. Used Rent |  | $(16,500) *$ |  | $(16,500)$ |
| Totals | 18,000 | 1,500 | $=$ | 19,500 |

*\$18,000 x 11/12 = \$16,500
b.

## Life, Inc. <br> Income Statement For the Year Ended December 31, 2018

| Revenue | \$36,000 |
| :---: | :---: |
| Expense | $(16,500)$ |
| Net Income | \$19,500 |

> Life, Inc.
> Balance Sheet
> As of December 31, 2018

| Assets |  |  |
| :---: | :---: | :---: |
| Cash | \$18,000 |  |
| Prepaid Rent | 1,500 |  |
| Total Assets |  | \$19,500 |
| Liabilities |  | -0- |
| Stockholders' Equity |  |  |
| Retained Earnings | 19,500 |  |
| Total Stockholders' Equity |  | 19,500 |
| Total Liab. and Stockholders' Equity |  | \$19,500 |

## EXERCISE 2-11 b. (cont.)

| Life, Inc. <br> Statement of Cash Flows <br> For the Year Ended December 31, 2018 |  |  |
| :---: | :---: | :---: |
| Cash Flows From Operating Activities: |  |  |
| Cash Receipt from Revenue | \$36,000 |  |
| Cash Payment for Rent | $(18,000)$ |  |
| Net Cash Flow from Operating Activities |  | \$18,000 |
| Cash Flows From Investing Activities |  | -0- |
| Cash Flows From Financing Activities: |  | -0- |
| Net Change in Cash |  | 18,000 |
| Plus: Beginning Cash Balance |  | -0- |
| Ending Cash Balance |  | \$18,000 |

c. The balance of the Prepaid Rent will be expensed in 2019, $\mathbf{\$ 1 , 5 0 0}$.
a.

| Maine Corporation Accounting Equation 2018 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Assets |  | + | Liab. | + | Stockholders' Equity |  |  |
| Event | Cash | Prepaid Rent |  |  | + | Com. Stock | $+$ | Retained Earnings |
| Paid rent in advance | $(18,000)$ | 18,000 |  |  |  |  |  |  |
| Adj. Rent exp. |  | $(13,500)^{*}$ |  |  |  |  |  | $(13,500)$ |
| Totals | $(18,000)$ | 4,500 | $=$ | -0-1 | + | -0. | + | $(13,500)$ |
|  |  |  |  |  |  |  |  |  |

b. The required entry would decrease assets by $\$ 13,500$ [(\$18,000 $\div$ 12) x 9] and decrease stockholders' equity by $\$ 13,500$ (retained earnings). If this entry is not made, assets and stockholders' equity would both be overstated on the balance sheet by $\$ 13,500$. On the income statement, expenses would be understated causing net income to be overstated by $\$ 13,500$.

## EXERCISE 2-13

| Yard Designs 2018 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Event | Assets | $=$ | Liabilities | $+$ | Stockholders' Equity |
|  | Cash | $=$ | Unearned Revenue | + | Retained Earnings |
| event | 54,000 |  | 54,000 |  |  |
| Adj. |  |  | $(13,500)^{*}$ |  | 13,500 |
|  | 54,000 | $=$ | 40,500 |  | 13,500 |

*\$54,000 x 3/12 = \$13,500
b.

| Yard Designs <br> Income Statement <br> For the Year Ended December 31, 2018 |  |
| :---: | :---: |
| Revenue |  |
| Expense |  |


|  |  |
| :---: | :---: |
|  | Yard Designs <br> Balance Sheet |
| As of December 31, 2018 |  |

EXERCISE 2-13 b. (cont.)

| Yard Designs <br> Statement of Cash Flows <br> For the Year Ended December 31, 2018 |
| :---: |
| Cash Flows From Operating Activities: |
| Cash Receipt from Revenue |
| Net Cash Flow from Operating Activities |
| Cash Flows From Investing Activities |
| Cash Flows From Financing Activities: |
| Net Change in Cash |
| Plus: Beginning Cash Balance |

c. Nine months of unearned revenue from 2018 will be recognized in 2019: $\$ 54,000 \times 9 / 12=\$ 40,500$

EXERCISE 2-14

Note: This exercise can be used to assess writing skills.
The fee that Matlock receives in advance is a liability at the time of receipt. Matlock has the duty to either perform the service or return the money received in advance. When Matlock performs the service, the liability will be satisfied and the revenue will be recognized.

## EXERCISE 2-15

| Hart, Attorney At Law <br> Effect of Transactions on the Financial Statements for 2018 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Balance Sheet |  |  |  |  |  |  |  |  | Income Statement |  |  |  |  | Statement of Cash Flows |
|  |  | se |  | = |  | bil | ties |  | S. Equity | Rev |  | Exp. | = | Net Inc. |  |
| No. | Cash | + | Supplies | $=$ | Accts. Payable | + | Unearn. Rev. |  | Retained Earnings |  |  |  |  |  |  |
| 1. | 36,000 | + | NA | = | NA | + | 36,000 |  | NA | NA |  | NA | $=$ | NA | 36,000 OA |
| 2. | 54,000 | + | NA | $=$ | NA | + | NA | + | 54,000 | 54,000 |  | NA | $=$ | 54,000 | 54,000 OA |
| 3. | NA | + | 2,800 | $=$ | 2,800 | + | NA | + | NA | NA |  | NA | $=$ | NA | NA |
| 4. | $(2,400)$ | + | NA | = | (2,400) | + | NA | + | NA | NA | - | NA | $=$ | NA | $(2,400)$ OA |
| 5. | (5,000) | + | NA | $=$ | NA | + | NA | + | (5,000) | NA |  | NA | $=$ | NA | $(5,000)$ FA |
| 6. | (31,000) | + | NA | $=$ | NA | + | NA | + | (31,000) | NA |  | 31,000 | $=$ | (31,000) | (31,000) OA |
| 7. | NA | + | $(2,600)$ | $=$ | NA | + | NA | + | $(2,600)$ | NA |  | 2,600 | $=$ | $(2,600)$ | NA |
| 8. | NA | + | NA | = | NA | + | (27,000) | + | 27,000 | 27,000 |  | NA | $=$ | 27,000 | NA |
| Totals | 51,600 | + | 200 | $=$ | 400 | + | 9,000 | + | 42,400 | 81,000 |  | 33,600 | $=$ | 47,400 | 51,600 NC |

[^0]
## EXERCISE 2-16

a.

| Bell Personal Financial Planning Horizontal Statements Model for 2018 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Assets | $=$ | Liabilities | + | Stk. Equity | Income Statement |  |  |  |  | Statement of Cash Flows |
| Event | Cash |  | Unearned Revenue | + | Retained Earnings | Rev. | - | Exp. | $=$ | $\begin{gathered} \text { Net } \\ \text { Income } \end{gathered}$ |  |
| 1. Advance Payment | 36,000 |  | 36,000 |  | NA | NA |  | NA |  | NA | 36,000 OA |
| 2. Revenue Earned | NA |  | $(21,000)^{*}$ |  | 21,000 | 21,000 |  | NA |  | 21,000 | NA |
| Totals | 36,000 | $=$ | 15,000 | $+$ | 21,000 | 21,000 | - | -0- | $=$ | 21,000 | 36,000 NC |

*\$36,000 x 7/12 = \$21,000
b. Revenue that will be recognized in 2019 is $\$ 15,000$, the remainder of the unearned revenue from 2018.
c. \$-0-, no cash is received. All cash was received in 2018.

## EXERCISE 2-17

a.

| Stokes Company Accounting Equation - 2018 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Event | Assets |  | $=$ | Liab. | + Stockholders' Equity |  |  |  |
|  | Cash | Prepaid Rent |  |  | + | Common Stock | + | Retained Earnings |
| Paid 12 months rent | $(4,800)$ | 4,800 |  |  |  |  |  |  |
| Adj. for 3 months used |  | $(1,200)^{*}$ |  |  |  |  |  | $(1,200)$ |

*\$4,800 x 3/12 = \$1,200
b.

| Eastport Rentals Accounting Equation - 2018 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Event | Assets <br> Cash | $=$ | Liabilities Unearned Revenue | +++ | Stockholders' Equity |  |  |
|  |  |  |  |  | Common Stock | $+$ | Retained Earnings |
| Recd. 12 months rent | 4,800 |  | 4,800 |  |  |  |  |
| Earned 3 months rent |  |  | (1,200)* |  |  |  | 1,200 |

[^1]
## EXERCISE 2-18

a. deferral
b. neither
c. neither
d. neither
e. deferral
f. accrual
g. neither
h. neither
i. accrual
j. neither
k. accrual
I. deferral

## EXERCISE 2-19

Note: There are many examples of events that illustrate the required effects. An example is given of each event.
a. Recognized accrued salaries expense.
b. Paid rent expense.
c. Recognized revenue for which cash had been received in advance (unearned revenue).
d. Provided service for cash.
a. Retained Earnings is a permanent account, meaning that one period's ending balance becomes the next period's beginning balance. Since the December 31, 2018 balance is $\$ 42,100$, this was also the balance on January 1, 2019.
b. The balance in the temporary accounts will be zero on January 1, 2018. The temporary accounts would have been closed to Retained Earnings on December 31, 2017, thus leaving a zero balance.
c. The December 31, 2017 balance in the Retained Earnings account is the same balance as the January 1, 2018 balance, computed as follows:

Beginning Retained Earnings Balance, January 1, 2018

+ Net Income, 2018 (Revenue \$19,400 - Expenses \$9,800)
- Dividends paid 2018
= Ending Retained Earnings Balance, December 31, 2018 \$42,100
Working backwards:
End. Retained Earnings + Dividends - Net Income = Beg. Retained
Earnings; and January 1, 2018 = December 31, 2017
$=\$ 42,100+\$ 500-\$ 9,600=\$ 33,000=$ January 1, 2018 Retained
Earnings
Therefore:
December 31, 2017 Retained Earnings = $\underline{\underline{\$ 33,000}}$
d. The revenue and expense data are recorded in Revenue and Expense accounts and do not affect retained earnings at the time of recognition. The balance in the Retained Earnings account on June 30, 2018 is the same as it was on January 1, 2018 which is $\$ 33,000$ (see answer (c) for calculation).


## EXERCISE 2-21

a.

| Event | Requires year-end adjusting entry? |
| :---: | :---: |
| 1. | No |
| 2. | No |
| 3. | No |
| 4. | Yes |
| 5. | No |
| 6. | Yes |
| 7. | No |
| 8. | No |
| 9. | No |
| 10. | No |

b. Adjusting entries are required to update accounting records for income that has been earned or expenses that have been incurred. Revenue and expenses are recognized in the period that they are earned or incurred, not necessarily when the cash is received or paid. After the adjusting entries are made at the end of the accounting period, the revenue, expense and dividends accounts are closed to Retained Earnings.

## EXERCISE 2-22

a.

| Permanent Accounts |
| :--- |
| Cash |
| Notes Payable |
| Land |
| Common Stock |
| Retained Earnings |


| Temporary (Nominal) |
| :--- |
| Accounts |
| Revenue |
| Expenses |
| Dividends |

b.

| Beginning Retained Earnings | $\$ 2,500$ |
| :--- | :---: |
| Add: Revenue | 7,500 |
| Less: Expenses | $(3,400)$ |
| Less: | Dividends |
| Ending Retained Earnings | $\$ 5$ |

C.

| Computation of Net Income |  |
| :--- | :---: |
| Revenue | $\$ 7,500$ |
| Less: Expenses | $(3,400)$ |
| Net Income | $\$ 4,100$ |

d. Net income is only the current year's net income. Retained Earnings is an accumulation of net income over the life of the business less any dividends that have been paid over the years.
e. All revenue, expense, and dividend accounts will have a zero balance because they have been closed to retained earnings.

## EXERCISE 2-23

a.

|  | Account |
| :--- | :---: |
| 1. | Other Operating Expenses |
| 2. | Utilities Expense |
| 3. | Retained Earnings |
| 4. | Salaries Expense |
| 5. | Land |
| 6. | Dividends |
| 7. | Service Revenue |
| 8. | Cash |
| 9. | Salaries Payable |
| 10. | Common Stock |

b. The four stages of the accounting cycle are:
recording transactions
adjusting the accounts
preparing financial statements
closing temporary accounts.
The first stage of the cycle must be recording accounting data in accounts to put it into usable form. Once the accounting data is summarized in the accounts, adjustments are made to reflect any unrecorded transactions. The account balances are then used to prepare the financial statements. After the financial statements are prepared, the temporary accounts (revenue, expenses, and dividends) must be closed to prepare these accounts for the next accounting period.

## EXERCISE 2-24

a. Examples of expenses that would be matched directly with revenue:

Sales commissions
Salaries expense
b. An example of a period cost that is difficult to match with revenue:

Advertising expense - A company can not be certain when dollars spent for advertising will produce benefits.

EXERCISE 2-25
a.

| Event | Classification |
| :---: | :---: |
| 1. | FA |
| 2. | NA |
| 3. | OA |
| 4. | OA |
| 5. | OA |
| 6. | NA |
| 7. | OA |
| 8. | FA |
| 9. | OA |
| 10. | NA |

b.

| Ewing Company Statement of Cash Flows For the Year Ended December 31, 2018 |  |  |
| :---: | :---: | :---: |
| Cash Flows From Operating Activities: |  |  |
| Cash from the collection of accts. rec. | \$51,000 |  |
| Cash from service revenue | 8,000 |  |
| Cash payment for supplies | $(1,200)$ |  |
| Cash payment on accounts payable | $(22,000)$ |  |
| Cash payment for rent | $(6,500)$ |  |
| Net Cash Flow from Operating Activities |  | \$29,300 |
| Cash Flows From Investing Activities |  | -0-0 |
| Cash Flows From Financing Activities: |  |  |
| Cash receipt from stock issue | \$30,000 |  |
| Cash payment for dividends | $(4,000)$ |  |
| Net Cash Flow from Financing Activities |  | 26,000 |
| Net Change in Cash |  | \$55,300 |
| Plus: Beginning Cash Balance |  | -0- |
| Ending Cash Balance |  | \$55,300 |

EXERCISE 2-26

| Item/Account | Statement | Item/Account | Statement |
| :---: | :---: | :---: | :---: |
| a. Supplies | BS | u. Rent Exp. | IS |
| b. Cash Flow from Financing Act. | CF | v. P/E Ratio | NA |
| c. "As of" Date Notation | BS | w. Taxes Payable | BS |
| d. End Retained Earn. | BS/SE | $x$ x. Unearned Revenue | BS |
| e. Net Income | IS/SE | y. Service Revenue | IS |
| e. Dividends | SE/CF | z. Cash Flow from Investing Activities | CF |
| g. Net Change in Cash | CF | aa. Consulting Revenue | IS |
| h. "For the Period Ended" | IS/CF/SE | bb. Utilities Expense | IS |
| i. Land | BS | cc. End. Common Stock | BS/SE |
| j. Ending Common Stock | BS/SE | dd. Total Liabilities | BS |
| k. Salaries Expense | IS | ee. Operating Cycle | NA |
| l. Prepaid Rent | BS | ff. Cash Flow from Operating Activities | CF |
| m. Accounts Payable | BS | gg. Operating Expenses | IS |
| n. Total Assets | BS | hh. Supplies Expense | IS |
| o. Salaries Payable | BS | ii. Beg. Retained Earn. | SE |
| p. Insurance Expense | IS | jj. Beg. Common Stock | SE |
| 9. Notes Payable | BS | kk. Prepaid Insurannce | BS |
| r. Accounts Receivable | BS | II. Salary Expense | IS |
| s. Interest Receivable | BS | mm. Beginning Cash | CF |
| t. Interest Revenue | IS | nn. Ending Cash | BS/CF |


| Horizontal Statements Model |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Stock. Equity |  |  | Income Statement |  |  |  |  | Statement of Cash |  |
|  | Type of |  |  |  | Com. |  | Ret. |  |  |  |  | Net |  |  |
| Event | Event | Assets | = Liab. | $+$ | Stock | + | Earn | Rev. | - | Exp | = | Inc. |  | ws |
| a. | AS | I | NA |  | NA |  | I | I |  | NA |  | , | , | OA |
| b. | AS | I | I |  | NA |  | NA | NA |  | NA |  | NA | NA |  |
| c. | AE | I/D | NA |  | NA |  | NA | NA |  | NA |  | NA | D | OA |
| d. | AE | I/D | NA |  | NA |  | NA | NA |  | NA |  | NA | D | IA |
| e. | AU | D | NA |  | NA |  | D | NA |  | NA |  | NA | D | FA |
| f. | AS | I | NA |  | I |  | NA | NA |  | NA |  | NA | I | FA |
| g. | AU | D | D |  | NA |  | NA | NA |  | NA |  | NA | D | OA |
| h. | AE | I/D | NA |  | NA |  | NA | NA |  | NA |  | NA | 1 | OA |
| i. | AS | 1 | 1 |  | NA |  | NA | NA |  | NA |  | NA | 1 | OA |
| j. | CE | NA | 1 |  | NA |  | D | NA |  | 1 |  | D | NA |  |
| k. | AS | 1 | NA |  | NA |  | 1 | 1 |  | NA |  | 1 | NA |  |
| 1. | AU | D | NA |  | NA |  | D | NA |  | I |  | D | NA |  |
| m. | AU | D | NA |  | NA |  | D | NA |  | I |  | D | D | OA |
| n. | AU | D | NA |  | NA |  | D | NA |  | 1 |  | D | NA |  |
| 0. | CE | NA | I |  | NA |  | D | NA |  | I |  | D | NA |  |
| p. | AU | D | D |  | NA |  | NA | NA |  | NA |  | NA | D | OA |
| q. | AS | I | NA |  | NA |  | 1 | I |  | NA |  | I | NA |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


|  | Net Income |  | Cash Flow from Operating Activities |  |
| :---: | :---: | :---: | :---: | :---: |
| Event/Adj. | Direction of Change | Amount of Change | Direction of Change | Amount of Change |
| a. Event Adj. | NA <br> Decrease | $\begin{array}{r} \text { NA } \\ \$ 2,250^{1} \end{array}$ | $\begin{gathered} \hline \text { Decrease } \\ \text { NA } \end{gathered}$ | $\begin{array}{r} \$ 9,000 \\ \text { NA } \end{array}$ |
| b. Event Adj. | NA Decrease | $\begin{array}{r} \text { NA } \\ \$ 1,700^{2} \end{array}$ | $\begin{gathered} \text { Decrease } \\ \text { NA } \end{gathered}$ | $\begin{array}{r} 500 \\ \text { NA } \end{array}$ |
| c. Event No adj. | Increase | \$10,000 | Increase | \$10,000 |
| d. Event Adj. | NA <br> Increase | $\begin{array}{r} N A \\ \$ 1,600^{3} \end{array}$ | $\begin{gathered} \text { Increase } \\ \text { NA } \end{gathered}$ | $\begin{array}{r} \$ 2,400 \\ \text { NA } \end{array}$ |
| e. Event No adj. | Decrease | \$5,600 | NA | NA |
| f. Event No adj. | NA | NA | NA | NA |
| g. Event No adj. | NA | NA | NA | NA |
| h. Event No adj. | Increase | \$12,000 | Increase | \$8,000 |
| i. Event No adj. | Decrease | \$4,500 | Decrease | \$4,500 |

¹ \$9,000 x 3/12 = \$2,250
${ }^{2}$ \$2,000 - \$300 $=\$ 1,700$
${ }^{3} \$ 2,400 \times 8 / 12=\$ 1,600$

## EXERCISE 2-29

The following are only example transactions. There are also other transactions that would cause the desired effect.
a. The business acquired cash by issuing stock to its owners.

Cash revenue is earned.
b. Paid cash dividends to stockholders.

Paid an expense with cash.
c. The business invested cash by purchasing a building.

Collected accounts receivable.
d. Unearned revenue is earned and recognized.
e. Recorded accrued salaries.

Recorded the expense for the utility bill received at the end of the month, but not due until next month.
f. Received cash in advance for services to be provided in the future. Borrowed cash from the bank.
g. Paid cash for operating expenses previously purchased on account. Repaid a loan with cash.

## EXERCISE 2-30

a. AS Asset Source
b. AU Asset Use
c. AU Asset Use
d. CE Claims Exchange
e. AU Asset Use
f. AS Asset Source
g. AS Asset Source
h. AE Asset Exchange
i. AS Asset Source
j. AE Asset Exchange

## EXERCISE 2-31

Note: These are only sample transactions. Other similar transactions will satisfy the requirements of this exercise.
a. Payment of a bank loan; payment of accounts payable.
b. Collection of accounts receivable; purchase of Land.
c. Borrowed cash from the bank; issued stock for cash.
d. Provide service on account.
e. Provide service for cash; provide service on account.

## SOLUTIONS TO PROBLEMS - CHAPTER 2

PROBLEM 2-32
Super Cleaning Company
Effect of Events on the Financial Statements

*\$4,800 x 9/12 = \$3,600

## PROBLEM 2-33

## The Accounting Equation

|  | Total Assets |  |  | $=$$=$ | Liabilitities |  | Stockholders. ${ }^{\text {a }}$ ' Equi...ity |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Event/ Adjust. | Cash | $+$ | Other Assets |  |  |  | Common Stock | + Retained |
| a. | $(4,800)$ |  | +4,800 |  | NA |  | NA | NA |
| a. Adj. | NA |  | $(1,200)^{1}$ |  | NA |  | NA | $(1,200)$ |
| b. | +3,600 |  | NA |  | +3,600 |  | NA | NA |
| b. Adj. | NA |  | NA |  | $(2,700)^{2}$ |  | NA | +2,700 |
| c. | NA |  | +1,200 |  | +1,200 |  | NA | NA |
| c. Adj. | NA |  | $(1,025)$ |  | NA |  | NA | $(1,025)$ |
| d. | $(9,600)$ |  | +9,600 |  | NA |  | NA | NA |
| d. Adj. | NA |  | $(4,000)^{4}$ |  | NA |  | NA | $(4,000)$ |

1 \$4,800 x 3/12 = \$1,200
${ }^{2}$ \$3,600 x 9/12 = \$2,700
${ }^{3} \$ 1,200-\$ 175=\$ 1,025$
${ }^{4} \$ 9,600 \times 5 / 12=\$ 4,000$

|  | Nowell Company <br> Income Statement |
| :---: | :---: | :---: | :---: |
| For the Year Ended December 31, 2018 |  |

b.

| Accounts to be Closed: |
| :--- |
| Consulting Revenue |
| Travel Expense |
| Dividends |
| Rent Expense |
| Salary Expense |
| Other Operating Expenses |

C.

| Computation of Retained Earnings: |  |
| :--- | ---: |
| Beginning Retained Earnings | $\$ 16,200$ |
| Add: Net Income | 3,100 |
| Less: Dividends | $(4,000)$ |
| Ending Retained Earnings | $\$ 15,300$ |

Net income only includes revenues and expenses for the current year. Retained earnings not only includes current year net income, but also the balance from previous years and reductions for dividends.
d. The balances are zero; they were closed to Retained Earnings on December 31, 2018. The December 31 closing balance of one year is the opening balance on January 1 of the next year.

## PROBLEM 2-35

Accounting Equation (Prepared for Instructor's Use)

| Waddell Company Accounting Equation |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets |  |  |  |  |  |  | Liabilities |  |  | Stk. Equity |  |
| Date | Cash | Acc Rec. | Pp. Rent | Supp. | Int. Rec. | Land | Acc. Pay. | Sal. Pay. | Unear. Rev. | Com. Stock | Ret. Earn |
| Bal. | 35,000 | 9,000 |  |  |  | 51,000 | 7,500 |  |  | 40,000 | 47,500 |
| 1/1 | 20,000 |  |  |  |  |  |  |  |  | 20,000 |  |
| 2/1 | $(6,000)$ |  | 6,000 |  |  |  |  |  |  |  |  |
| 3/1 | (2,000) |  |  |  |  |  |  |  |  |  | $(2,000)$ |
| 4/1 | $(15,000)$ |  |  |  |  | 15,000 |  |  |  |  |  |
| 5/1 | $(5,500)$ |  |  |  |  |  | $(5,500)$ |  |  |  |  |
| 7/1 | 9,600 |  |  |  |  |  |  |  | 9,600 |  |  |
| 9/1 | 30,000 |  |  |  |  | $(30,000)$ |  |  |  |  |  |
| 10/1 |  |  |  | 2,500 |  |  | 2,500 |  |  |  |  |
| 12/31 |  | 58,000 |  |  |  |  |  |  |  |  | 58,000 |
| 12/31 | 46,000 | $(46,000)$ |  |  |  |  |  |  |  |  |  |
| 12/31 |  |  |  |  |  |  | 28,000 |  |  |  | $(28,000)$ |
| 12/31 |  |  |  |  |  |  |  | 6,500 |  |  | (6,500) |
| 12/31 |  |  |  | $(2,450)$ |  |  |  |  |  |  | $(2,450)$ |
| 12/311 |  |  |  |  |  |  |  |  |  |  |  |
| 12/312 |  |  |  |  | 500 |  |  |  |  |  | 500 |
| 12/31a |  |  | $(5,500)^{3}$ |  |  |  |  |  |  |  | $(5,500)$ |
| 12/31a |  |  |  |  |  |  |  |  | $(4,800)^{4}$ |  | 4,800 |
| BaI. | 112,100 | 21,000 | 500 | 50 | 500 | 36,000 | 32,500 | 6,500 | 4,800 | 60,000 | 66,350 |
|  |  |  |  |  |  |  |  |  |  |  |  |

[^2]
## PROBLEM 2-35 (cont.)

a. The two transactions that need adjusting entries are as follows:

1. Feb. 1, prepaid rent.
2. July 1, unearned revenue; cash was received in advance.
b. $\mathbf{\$ 3 6 , 0 0 0}$; its historical cost.
c. $\$ 46,000+\$ 9,600-\$ 6,000-\$ 5,500=\$ 44,100$
d. $\mathbf{\$ 6 , 0 0 0} \times 11 / 12=\$ 5,500$
e. $\$ 32,500+\$ 6,500+\$ 4,800=\$ 43,800$
f. $\mathbf{\$ 2 , 5 0 0}-\$ 50=\$ 2,450$
g. $\$ 9,600-\$ 4,800(\$ 9,600 \times 6 / 12)=\$ 4,800$
h. $-\$ 15,000+\$ 30,000=\$ 15,000$
i. $\$ 28,000+\$ 6,500+\$ 2,450+\$ 5,500=\$ 42,450$
j. $\$ 58,000+\$ 4,800=\$ 62,800$
k. $\$ 20,000-\$ 2,000=\$ 18,000$
I. (j) $\mathbf{\$ 6 2 , 8 0 0}+\mathbf{5 0 0}$ - (i) $\$ 42,450=\$ 20,850$
m. Beg. RE \$47,500 + NI \$20,850 - Div. \$2,000 = Ending retained earnings \$66,350

| Barker Company Financial Statements <br> For the Year Ended December 31, 2018 |  |  |
| :---: | :---: | :---: |
| Income Statement |  |  |
| Revenue |  |  |
| Service Revenue | \$65,200 |  |
| Total Revenue |  | \$65,200 |
| Expenses |  |  |
| Other Operating Expenses | \$41,000 |  |
| Supplies Expense | 1,100 |  |
| Rent Expense | 2,500 |  |
| Insurance Expense | 2,100 |  |
| Total Expenses |  | $(46,700)$ |
| Net Income |  | \$18,500 |
| Statement of Changes in Stockholders' Equity |  |  |
| Beginning Common Stock | \$40,000 |  |
| Plus: Stock Issued | 5,000 |  |
| Ending Common Stock |  | \$45,000 |
| Beginning Retained Earnings | \$9,300 |  |
| Plus: Net Income | 18,500 |  |
| Less: Dividends | $(3,000)$ |  |
| Ending Retained Earnings |  | 24,800 |
| Total Stockholders' Equity |  | \$69,800 |


| Barker CompanyBalance SheetAs of December 31, 2018 |  |  |
| :---: | :---: | :---: |
| Assets |  |  |
| Cash |  | \$48,000 |
| Accounts Receivable |  | 14,200 |
| Supplies |  | 1,000 |
| Prepaid Insurance |  | 1,200 |
| Prepaid Rent |  | 4,800 |
| Land |  | 24,000 |
| Total Assets |  | \$93,200 |
| Liabilities |  |  |
| Accounts Payable | \$17,000 |  |
| Unearned Revenue | 6,400 |  |
| Total Liabilities |  | \$23,400 |
| Stockholders' Equity |  |  |
| Common Stock | \$45,000 |  |
| Retained Earnings | 24,800 |  |
| Total Stockholders' Equity |  | 69,800 |
| Total Liab. and Stockholders' Equity |  | \$93,200 |


| Barker Company <br> Statement of Cash Flows <br> For the Year Ended December 31, 2018 |  |
| :---: | :---: |
| Cash Flow From Operating Activities | \$15,600 |
| Cash Flow From Investing Activities | $(5,200)$ |
| Cash Flow From Financing Activities | $(5,000)$ |
| Net Change in Cash | 5,400 |
| Plus: Beginning Cash Balance | 42,600* |
| Ending Cash Balance | \$48,000 |

*Not given in the problem.
Ending Cash Balance - Increase in Cash = Beginning Cash Balance $\$ 48,000-\$ 5,400=\$ 42,600$

## PROBLEM 2-37

| FOR THE YEARS | 2018 | 2019 | 2020 |
| :---: | :---: | :---: | :---: |
| Income Statements |  |  |  |
| Revenue (cash) | \$ 700 | \$1,300 | \$ 2,000 |
| Expense (cash) | (a) (500) | (700) | $(1,300)$ |
| Net Income (Loss) | \$ 200 | (m) \$ 600 | \$ 700 |
| Statements of Changes in Stockholders' Equity |  |  |  |
| Beginning Common Stock | \$ -0- | (n) \$5,000 | \$6,000 |
| Plus: Common Stock Issued | 5,000 | 1,000 | 2,000 |
| Ending Common Stock | 5,000 | 6,000 | (t) 8,000 |
| Beginning Retained Earnings | -0-1 | 100 | 200 |
| Plus: Net Income (Loss) | (b) 200 | (0) 600 | 700 |
| Less: Dividends | (c) (100) | (500) | (300) |
| Ending Retained Earnings | 100 | (p) 200 | 600 |
| Total Stockholders' Equity | (d) $\$ 5,100$ | \$6,200 | \$8,600 |
| Balance Sheets |  |  |  |
| Assets |  |  |  |
| Cash | (e) $\$ 8,100$ | (q) $\$ 3,200$ | (u)\$ 2,600 |
| Land | -0- | (r) 8,000 | 8,000 |
| Total Assets | (f) $\$ 8,100$ | \$11,200 | \$10,600 |
| Liabilities | (g) $\$ 3,000$ | \$ 5,000 | \$ 2,000 |
| Stockholders' Equity |  |  |  |
| Common Stock | (h) 5,000 | (s) 6,000 | 8,000 |
| Retained Earnings | (i) 100 | 200 | 600 |
| Total Stockholders' Equity | (j) 5,100 | 6,200 | 8,600 |
| Total Liab. and Stk. Equity | \$8,100 | \$11,200 | \$10,600 |

PROBLEM 2-37 (cont.)

| FOR THE YEARS | 2018 | 2019 | 2020 |
| :---: | :---: | :---: | :---: |
| Statements of Cash Flows |  |  |  |
| Cash Flows From Oper. Activities: |  |  |  |
| Cash Receipts from Customers | (k)\$ 700 | \$ 1,300 | (v) \$ 2,000 |
| Cash Payments for Expenses | (l) (500) | (700) | (w) (1,300) |
| Net Cash Flows from Oper. Act. | 200 | 600 | 700 |
| Cash Flows From Invest. Activities: |  |  |  |
| Cash Payments for Land | -0-3 | $(8,000)$ | -0- |
| Cash Flows From Fin. Activities: |  |  |  |
| Cash Receipts from Loan | 3,000 | 3,000 | -0- |
| Cash Payments to Reduce Debt | -0- | $(1,000)$ | (x) (3,000) |
| Cash Receipts from Stock Issue | 5,000 | 1,000 | (y) 2,000 |
| Cash Payments for Dividends | (100) | (500) | (z) (300) |
| Net Cash Flows from Fin. Activities | 7,900 | 2,500 | $(1,300)$ |
| Net Change in Cash | 8,100 | $(4,900)$ | (600) |
| Plus: Beginning Cash Balance | -0- | 8,100 | 3,200 |
| Ending Cash Balance | \$8,100 | \$3,200 | \$2,600 |

## PROBLEM 2-37 (cont.)

Computations of amounts:
a. $\$ 500$ Expense $=\$ 700$ Revenue - $\$ 200$ Net Income.
b. $\$ 200$ Net Income $=\mathbf{\$ 2 0 0}$ Net Income from Income Statement.
c. $\$ 100$ Dividends $=\$ 200$ Net Income - $\$ 100$ Ending Ret. Earnings.
d. $\$ 5,100$ Total Stk. Equity $=\$ 5,000$ Ending Common Stock $+\$ 100$ Ending Retained Earnings.
e. $\mathbf{\$ 8 , 1 0 0}$ Cash = \$8,100 Total Assets - \$-0- Land.
f. $\$ 8,100$ Total Assets $=\$ 8,100$ Liabilities and Stockholders' Equity.
g. $\$ 3,000$ Liabilities $=\$ 3,000$ Cash Receipts from Loan from Statement of Cash Flows.
h. $\$ 5,000$ Common Stock $=\$ 5,000$ Com. Stock from Statement of Changes in Stockholders' Equity.
i. $\$ 100$ Retained Earnings $\mathbf{=} \mathbf{\$ 1 0 0}$ Ret. Earnings from Statement of Changes in Stockholders' Equity.
j. $\$ 5,100$ Total Stockholders' Equity $=\$ 5,000$ Common Stock $+\$ 100$ Retained Earnings or \$5,100 Total Stk. Equity from Statement of Changes in Stk. Equity.
k. $\$ 700$ Cash Receipts from Revenue $=\$ 700$ Revenue from Income Statement.
l. $\$ 500$ Cash Payment for Expenses = \$500 Expense from Income Statement.
m. $\$ 600$ Net Income $=\$ 1,300$ Revenue - $\$ 700$ Expense.
n. \$5,000 Beginning Common Stock = \$5,000 Ending Common Stock 2018.
0. $\$ 600$ Net Income $=\$ 600$ Net Income from Income Statement.
p. $\$ 200$ Ending Retained Earnings = \$100 Beginning Ret. Earnings + $\$ 600$ Net Income - \$500 Dividends.
q. \$3,200 Cash = Ending Cash Balance from Statement of Cash Flows.
r. $\$ 8,000$ Land $=\$ 8,000$ Cash Payment for Land from Statement of Cash Flows.
S. $\$ 6,000$ Common Stock $=\$ 6,000$ Ending Common Stock from Statement of Changes in Equity.
t. $\$ 8,000$ Ending Common Stock $=\mathbf{\$ 6 , 0 0 0}$ Beginning Common Stock $\boldsymbol{+} \mathbf{2 , 0 0 0}$ Common Stock Issued.
u. \$2,600 Cash = \$2,600 Ending Cash Balance from Statement of Cash Flows.
v. \$2,000 Cash Receipts from Revenue = \$2,000 Revenue from Income Statement.
w. \$1,300 Cash Payments for Expenses = \$1,300 Expense from Income Statement.
X. \$3,000 Cash Payment to Reduce Debt = \$5,000 Balance of Liabilities, 2019 - \$2,000 Balance of Liabilities, 2020.
y. $\$ 2,000$ Cash Receipts from Stock Issue $=\mathbf{\$ 2 , 0 0 0}$ Stock Issued from Statement of Changes in Stockholders' Equity.
z. $\$ 300$ Cash Payment for Dividends = \$300 Dividends from Statement of Changes in Stockholders' Equity

PROBLEM 2-38
a.

| Alcorn Service Company Accounting Equation for 2018 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Assets |  |  |  |  | = | Liabilities |  |  | + | Stk. Equity |  |
| Event | Type of Event | Cash | Accts. Rec. | Supp. | Prepd. Rent | Land | $=$ | Accts. Pay. | Salaries Payable | Unearn. Rev. | + | Com. Stock | Ret. Earn. |
| 1. | AS | 20,000 |  |  |  |  |  |  |  |  |  | 20,000 |  |
| 2. | AS |  |  | 800 |  |  |  | 800 |  |  |  |  |  |
| 3. | AE | $(14,000)$ |  |  |  | 14,000 |  |  |  |  |  |  |  |
| 4. | AU | (800) |  |  |  |  |  | (800) |  |  |  |  |  |
| 5. | AS |  | 10,500 |  |  |  |  |  |  |  |  |  | 10,500 |
| 6. | AU | (3,800) |  |  |  |  |  |  |  |  |  |  | (3,800) |
| 7. | AE | 7,000 | $(7,000)$ |  |  |  |  |  |  |  |  |  |  |
| 8. | CE |  |  |  |  |  |  |  | 3,600 |  |  |  | (3,600) |
| 9. | AU |  |  | (700) |  |  |  |  |  |  |  |  | (700) |
| Totals |  | 8,400 | 3,500 | 100 | -0- | 14,000 | $=$ | -0- | 3,600 | -0- | + | 20,000 | 2,400 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

PROBLEM 2-38 a. (cont.)
Alcorn Service Company
Accounting Equation for 2019

|  |  | Assets |  |  |  |  |  |  | Liabilities |  |  | + | Stk. Equity |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Event | Type of Event | Cash | Accts. Rec. | Supp. | Prepd. Rent | Land | Int. Rec. |  | Accts. Pay. | Salaries Payable | Unearn Rev. | + | Com. Stock | Ret. Earn. |
| Bal. |  | 8,400 | 3,500 | 100 | -0- | 14,000 |  |  | -0- | 3,600 | -0- |  | 20,000 | 2,400 |
| 1. | AS | 15,000 |  |  |  |  |  |  |  |  |  |  | 15,000 |  |
| 2. | AU | $(3,600)$ |  |  |  |  |  |  |  | $(3,600)$ |  |  |  |  |
| 3. | AE | (9,000) |  |  | 9,000 |  |  |  |  |  |  |  |  |  |
| 4. | AE | 14,000 |  |  |  | $(14,000)$ |  |  |  |  |  |  |  |  |
| 5. | AS | 6,000 |  |  |  |  |  |  |  |  | 6,000 |  |  |  |
| 6. | AS |  |  | 2,400 |  |  |  |  | 2,400 |  |  |  |  |  |
| 7. | AS |  | 24,500 |  |  |  |  |  |  |  |  |  |  | 24,500 |
| 8. | AE | 12,600 | $(12,600)$ |  |  |  |  |  |  |  |  |  |  |  |
| 9. | AU | $(2,000)$ |  |  |  |  |  |  |  |  |  |  |  | $(2,000)$ |
| 10. | AU | $(2,850)$ |  |  |  |  |  |  |  |  |  |  |  | $(2,850)$ |
| 11. | AU |  |  |  | $(7,500)^{1}$ |  |  |  |  |  |  |  |  | $(7,500)$ |
| 12. | CE |  |  |  |  |  |  |  |  |  | $(1,500)$ |  |  | 1,500 |
| 13. | AU |  |  | $(2,200)^{3}$ |  |  |  |  |  |  |  |  |  | (2,200) |
| 14. | CE |  |  |  |  |  |  |  |  | 4,800 |  |  |  | $(4,800)$ |
| 15. | AS |  |  |  |  |  | 500 |  |  |  |  |  |  | 500 |
| Totals |  | 38,550 | 15,400 | 300 | 1,500 | -0- | 500 |  | 2,400 | 4,800 | 4,500 | + | 35,000 | 9,550 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^3]PROBLEM 2-38 (cont.)
b.

| Alcorn Service Company <br> Financial Statements |
| :---: | :---: | :---: |
| For the Years Ended December 31, 2018 and 2019 |

PROBLEM 2-38 b. (cont.)

| Alcorn Service Company Balance Sheets <br> As of December 31, 2018 and 2019 |  |  |
| :---: | :---: | :---: |
|  | 2018 | 2019 |
| Assets |  |  |
| Cash | \$8,400 | \$38,550 |
| Accounts Receivable | 3,500 | 15,400 |
| Interest Receivable | -0- | 500 |
| Supplies | 100 | 300 |
| Prepaid Rent | -0- | 1,500 |
| Land | 14,000 | -0- |
| Total Assets | \$26,000 | \$56,250 |
| Liabilities |  |  |
| Accounts Payable | \$ -0- | \$ 2,400 |
| Salaries Payable | 3,600 | 4,800 |
| Unearned Revenue | -0- | 4,500 |
| Total Liabilities | 3,600 | 11,700 |
| Stockholders' Equity |  |  |
| Common Stock | 20,000 | 35,000 |
| Retained Earnings | 2,400 | 9,550 |
| Total Stockholders' Equity | 22,400 | 44,550 |
| Total Liab. and Stock. Equity | \$26,000 | \$56,250 |

PROBLEM 2-38 b. (cont.)

| Alcorn Service Company |
| :---: |
| Statements of Cash Flows |

For the Years Ended December 31, 2018 and 2019
${ }^{12019: ~ \$ 6,000 ~+~ \$ 12,600 ~=~ \$ 18,600 ~}$
22018: $\$ 3,800+\$ 800=\$ 4,600$
2019: $\$ 3,600+\$ 9,000+\$ 2,850=\$ 15,450$

## SOLUTIONS TO ANALYZE, THINK, COMMUNICATE - CHAPTER 2

ATC 2-1

All dollar amounts are in millions.
a. Target's accrual accounts are: Accounts payable and Accrued and other current liabilities. The Deferred income taxes account shown under Liabilities is probably best classified as an accrual account, but students will probably think it is a deferral account.
b. Target's deferral accounts are: Inventories, Buildings and improvements, Fixtures and equipment, Computer hardware and software, and construction in progress. Students might also list the Deferred income taxes account shown under Liabilities.
c. Net income for 2015 was

Cash provided by operating activities for 2015 was
\$3,363
\$5,844

Thus, cash flow from operating activities exceeded net income by \$2,481.
d. Net income increased by \$4,999 from 2014 to 2015 (\$3,363-(\$1,636)). Cash provided by operating activities increased by \$1,405 from 2014 to 2015 (\$5,844-\$4,439). Therefore, the change in net earnings was the greatest.
e. The large increase in net earnings was due to discontinued operations reported in 2014, which were the result of Target's plan to exit the Canadian market. Net earnings from continuing operations also increased from 2014 to 2015, but by a much smaller amount, \$872 (\$3,321-\$2,449).

ATC 2-2

Group Task (1)

|  | Exxon | \% | Apple | \% |
| :---: | :---: | :---: | :---: | :---: |
| Computation of Expenses |  |  |  |  |
| Revenue (in billions) | \$4119 | 100.0 | \$188 | 100.0 |
| Less, Net Income | 325 | 7.9 | 305 | 21.6 |
| Expenses (in billions) | \$379.4 | 92.1 | \$114.3 | 78.4 |

Group Task (2)
The conservatism principle guides accountants to select the alternative that produces the lowest amount of net income. The conservatism principle holds that it is better to understate income than to overstate it. If this holds true, Apple may be expensing more of its cost than Exxon Mobil.

## Group Task (3)

Investors may believe there is more growth opportunity in the technology field, where Apple operates than there is in the petroleum field, where Exxon Mobil operates. Additionally, if Apple's net income, as a percentage of sales, is higher, this would likely indicate a higher profit.

ATC 2-3

This solution is based on Netflix's 2015 financial report.
a. Netflix's accrual accounts are:

Accounts payable
Accrued expenses
Current content liabilities*
*Students probably will miss this one, as a careful reading of the Note 3 is needed to understand it.
b. Netflix's deferral accounts are:

Content assets, (short-term and long-term)
Property, plant and equipment, net
Other current assets
Other noncurrent assets (possibly, depending on the nature of the asset)
Deferred revenues

ATC 2-4
a.


Computations for Income Statement Items:
Revenue: $\$ 38,000$ + \$82,000 = \$120,000
Operating Expense: $\$ 70,000-\$ 30,000=\$ 40,000$

Computations for Balance Sheet Items:
Assets: $\$ 85,000$ + \$82,000 = \$167,000
Liabilities: $\$ 35,000-\$ 30,000=\$ 5,000$
Retained Earnings: $(\$ 32,000)+\$ 82,000+\$ 30,000=\$ 80,000$
b. The conservatism principal requires that revenue not be recognized before it is actually earned. Glenn actually recorded an amount that not only had not been earned, but the contract had not been finalized. Glenn has overstated his income by the $\$ 82,000$.
c. The accrued salaries are an expense that has already been accrued and is owed and these salary expense should be matched against the respective year's revenue. By removing these expenses from net income computation, Glenn is overstating net income.

## General Comments for Chapter 2 Accounting for Accruals and Deferrals

This chapter introduces accrual accounting. A key concept in this chapter is for the student to understand that revenues earned must be matched with expenses incurred to earn those revenues, regardless of when the cash exchange occurs. You can introduce the subject simply by using a single accounting event in which a business provides services on account. Chapter 1 assumed that all transactions were cash-based, but we all know that reality in the business world includes products and services purchased and sold 'on credit' or 'on account'. Show students the effect of this accrual by having them prepare an income statement, a statement of retained earnings, a balance sheet, and a statement of cash flows. Students will often stumble on the concept of Unearned Revenue, thinking that it's actually a revenue account when in fact it's a liability. Explain how customer payments that are received before goods or services are provided must be refunded to the customer if those promised goods or services are never actually delivered. Encourage students to record transactions using the horizontal financial statements model, even when problems do not require them to do so. Developing the habit of recording transactions using the model will help students see the impact of each transaction on the financial statements as well as help students identify their errors if the accounting equation is not in balance. Specific examples are provided in the detailed lesson plan outline. If you would like to begin the chapter with a prob-lem-based learning exercise, see the notes below.

## Problem-Based Learning Case: Accrual Accounting

(We describe problem-based learning in the introduction to this manual.)
Instructions: The case appears on the following page in a format you can copy or display. Distribute copies of the case to the class before explaining accrual accounting. Ask students to individually develop answers. After allowing students time to develop their individual answers, put them into groups to reach consensus on an answer. Also, ask each group to select a spokesperson. Allow groups time to develop answers, and then call on some of the spokespersons to share their solutions. As you respond to the student solutions, explain the basic concepts of accrual accounting with respect to revenues earned and expenses incurred on account.
The final result is:
Net income: revenue of $\$ 145,000$ less expenses of $\$ 80,000=\$ 65,000$.
Total assets: cash, $\$ 45,000$ plus accounts receivable, $\$ 25,000=\$ 70,000$.
Total liabilities: salaries payable: $\$ 5,000$.

## Chapter 2 Problem-Based Learning Case: Accrual Accounting

Professional Headhunters, Inc. (PHI), a job placement company, operates in the northeastern United States. During 2018, the company earned $\$ 145,000$ in revenue by providing services to customers. However, it collected only $\$ 120,000$ of the revenue in cash. PHI expected to collect the remaining $\$ 25,000$ in 2019. In addition, PHI incurred $\$ 80,000$ of expenses. However, by the end of 2018 , PHI had paid only $\$ 75,000$ of the cash owed for expenses because it had not yet paid $\$ 5,000$ to employees who had worked during 2018 but had not been paid by the end of the year. PHI expected to pay the $\$ 5,000$ in cash to the employees during 2019. Based on this information alone, determine the amount of net income, total assets, and total liabilities PHI should report on its 2018 financial statements.

## Detailed Outline of a Lesson Plan for Chapter 2

I. Distribute copies of Demonstration Problem 2-1, found near the back of this chapter of the Instructor's Manual.
A. Explain the phrase "on account." Tell students this means Packard recognizes the revenue when it is earned, which may be before it collects the cash. Packard's customers created charge accounts and purchased goods or services by charging the purchases to their accounts. Revenue is recognized in the accounting period in which the services are provided regardless of when cash changes hands. This discussion should lead to defining the term accrual. In general, transactions in which a revenue or expense is recognized before cash changes hands are called accruals. Demonstrate this point by recording the revenue recognition for Packard using the horizontal financial statements model. Next, have your students prepare an income statement, a statement of retained earnings, a balance sheet, and a statement of cash flows. To minimize the time required to prepare these financial statements, you may provide students with copies of the workpaper for Demonstration Problem 2-1. The workpaper is near the back of this chapter of the Instructor's Manual.
B. Since Packard did not issue any stock, the statement of changes in stockholders' equity becomes a statement of retained earnings. Although the text does not cover a statement of retained earnings, students should be able to infer the format from their experience with the statement of changes in stockholders' equity. Use the exercise to discuss diversity in reporting practice. Although there is general consistency in financial reporting, there is also variety. Students should learn to understand different reporting formats.
C. After accounting for the 2018 revenue, assume Packard collects the $\$ 5,000$ account receivable in 2019. This is the only 2019 transaction. Have students record the event using the horizontal financial statements model and prepare the four basic financial statements for the 2019 accounting period. Encourage students to analyze the difference between the amount of net income and the amount of cash flow from operating activities. This single transaction clearly illustrates differences between the income statement and the statement of cash flows.
D. Introduce the term unearned revenue before starting part B of this problem. Explain that unearned revenue is a liability because it represents an obligation to provide future services. Make the point that businesses can be obligated to provide services as well as to pay cash. Show your stu-
dents how to record the liability using the horizontal financial statements model.
E. Explain the year-end adjustment necessary to recognize three months of earned revenue on December 31. Emphasize the difference between the amount of cash collected and the amount of revenue recognized. Highlight that Jackson earned and recognized the revenue after it collected the cash. Draw a general definition of deferrals from this illustration. Transactions in which a revenue or expense is recognized after cash changes hands are termed deferrals. Contrast deferrals with accruals which were presented in part A of Demonstration Problem 2-1. For emphasis, reiterate the explanation of an accrual. Transactions in which a revenue or expense is recognized before cash changes hands are termed accruals. Although these are not precise definitions, they describe the basic concepts in terms students can understand. Explain that accrual accounting uses both accruals and deferrals.
F. Also note the connection between reducing the liability account (unearned revenue) and recognizing revenue, reinforcing that revenue is an increase in assets or a decrease in liabilities from providing services or products to customers. Similarly, an expense is a decrease in assets or an increase in liabilities that occurs in efforts to produce revenue. Net income is a change in wealth (increase in net assets). It is not enough to orally define terms. You must repeatedly demonstrate the definitions within the context of problems. Gradually, students will understand fundamental accounting interrelationships.
II. Use separate examples to introduce other types of deferrals (prepaid assets and supplies). You can use exercises 2-8, 2-9 or 2-11 in the textbook as demonstration problems, or create your own. We often make up demonstration problems like these in the classroom. Encourage students to think by asking them to attempt to record the effects of events before you discuss them. For example, instead of defining prepaid assets, simply give the students an event involving a prepaid asset. Say, "On October 1, 2018, ABC Company paid \$1,200 in advance for one year of property insurance protection." Without having ever discussed prepaid insurance, ask the students to record the event using the horizontal financial statements model. Make them write down an answer. Don't be concerned with accuracy. Be concerned with involvement. Walk around the room and look at what they are doing. Occasionally collect these exercises from the students as in-class assignments. Give them credit regardless of their answers. The grade is for participation, not accuracy. Your objective is to motivate them to think about the problem before you offer a solution. At this stage, you are not evaluating their performance.
III. Time considerations and homework assignments. Completing Demonstration Problems 2-1A \& B should require approximately one hour of class time. Have the students work
along with you as you explain the problems. Exercises 2-3, 2-15, 2-16, and 2-17 parallel the Demonstration Problems and can be considered for homework assignments.
IV. Use Demonstration Problem 2-2 as a comprehensive summary problem. This is a twocycle problem. Explain the first cycle (2018) and then use the second cycle as an in-class assignment. Allot approximately one hour to complete this assignment. Students needing additional time can finish the problem as homework. Problem 2-38 mirrors the demonstration problem and can be used as a homework assignment.
V. Use the horizontal financial statements model to highlight the differences between accrual and cash basis accounting. For example, suppose a company provides $\$ 5,000$ of services on account and later collects $\$ 3,000$ of the account receivable. The effect of these two events on the financial statements is shown below.


Include other events you deem appropriate. By this point students have a sufficient background to use the horizontal financial statements model. It is critically important to establish a firm foundation in the basics before progressing to more advanced representations. Introduce the model gradually.
VI. Hand out the official answers to any of the Demonstration Problems that you covered in class. Doing so allows the students to focus more on understanding the material than on taking notes for later reference. If they know that they will have access to the official answers to the problems worked in class, then they will not be as concerned about recording those answers during the discussion.

## Demonstration Problem 2-1A: Revenue Earned on Account

## Part A

Packard Consultants was started in 2018. During that year the company earned $\$ 5,000$ of consulting revenue on account. Assume this is the only event experienced by Packard during 2018.

## Required

1. Record the event using the horizontal financial statements model.
2. Prepare an income statement, a statement of retained earnings, a balance sheet, and a statement of cash flows for 2018.

## Part B

During 2019, Packard Consultants collected \$5,000 cash from the account receivable it established in Part A.

## Required

1. Record the event under using the horizontal financial statements model.
2. Prepare an income statement, a statement of retained earnings, a balance sheet, and a statement of cash flows for 2019.

## Demonstration Problem 2-1B: Unearned Revenue

Jackson Legal Services was started when a client paid the firm a $\$ 12,000$ cash retainer on October 1, 2018. Jackson agreed to provide legal advice to the client for a one-year period beginning on the date of the cash receipt. The closing date for the law practice is December 31.

## Required

1. Record the events for 2018 and 2019 using the horizontal financial statements model.
2. Prepare an income statement, a statement of retained earnings, a balance sheet, and a statement of cash flows for 2018 and 2019.

## Demonstration Problem 2-2: Accruals and Deferrals

Part A Smith Company experienced the following accounting events during 2018:

1. Smith Company was started on January 1 when it issued common stock for $\$ 2,000$ cash.
2. During the year, the company recognized $\$ 1,500$ of consulting revenue on account.
3. The company collected $\$ 1,200$ cash from accounts receivable.
4. Smith accrued salary expense during the year of $\$ 900$.
5. Paid $\$ 700$ of the salaries payable liability.
6. Paid dividends of $\$ 100$ to the stockholders.
7. Paid $\$ 360$ cash for an insurance policy that covered the company for one year beginning March 1, 2018.
8. On November 1, 2018, Smith collected $\$ 2,880$ cash in advance for consulting services to be provided under a one-year contract.
9. Recognized insurance expense (Policy in event 7) for ten months.
10. Recognized income earned under the one-year contract at December 31, 2018.

Part B Smith Company experienced the following accounting events during 2019:

1. Smith Company issued additional common stock for $\$ 3,000$ cash.
2. During the period, Smith recognized $\$ 2,700$ of consulting revenue earned on account.
3. Smith collected $\$ 2,800$ cash from accounts receivable.
4. Smith accrued salary expense of $\$ 1,500$.
5. The company paid $\$ 1,350$ of the salaries payable liability.
6. Smith paid dividends of $\$ 300$ to the stockholders.
7. Paid $\$ 420$ cash to renew the insurance policy for another one-year term.
8. Smith adjusted the books to reflect the insurance expense that had been incurred in 2019 (described in event 7 of 2018).
9. Smith adjusted the books to reflect the revenue earned in 2019 under the one-year consulting contract that began in 2018 (event 8 in 2018).

## Required

1. Record the events using the horizontal financial statements model.
2. For 2018 and 2019, prepare an income statement, a statement of retained earnings, a balance sheet, and a statement of cash flows.

## Demonstration Problem 2-1A: Solution, part 1.

|  | Assets |  | = Liabilities + |  |  | Equity |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Part A, 2018 | Cash | Accounts Receivable | $=1$ | Liabilities | $+$ | Common Stock | $+\begin{aligned} & \text { Retained } \\ & + \\ & \text { Earnings } \end{aligned}$ |
| Beginning balances | \$ 0 | \$ 0 |  | \$ 0 |  | \$ 0 | \$ 0 |
| Effect of recognizing revenue |  | 5,000 |  |  |  |  | 5,000 |
|  |  |  |  |  |  |  |  |
| Part B, 2019 |  |  |  |  |  |  |  |
| Effect of collecting cash | 5,000 | $(5,000)$ |  |  |  |  |  |
|  |  | - |  | - |  | - | - |
| Ending balances | \$5,000 | \$ 0 | $=$ | \$ 0 | + | \$ 0 | + \$5,000 |
|  |  | - |  | - |  | - | $\underline{=}$ |

## Demonstration Problem 2-1A: Solution, part 2. Financial Statements

| Packard Consultants |  |  |
| :---: | :---: | :---: |
| Income Statements |  |  |
| For the Years Ended December 31, | 2018 | 2019 |
| Consulting revenue | \$5,000 | \$ 0 |
| Expenses | 0 | 0 |
| Net income | \$5,000 | \$ 0 |
| Statements of Retained Earnings |  |  |
| Beginning retained earnings | \$ 0 | \$5,000 |
| Plus: Net income | 5,000 | 0 |
| Less: Dividends | 0 | 0 |
| Ending retained earnings | \$5,000 | \$5,000 |
| Balance Sheets at December 31 |  |  |
| Assets Cash Accounts receivable | $\begin{array}{r} \$ 0 \\ 5,000 \\ \hline \end{array}$ | $\begin{array}{r} \$ 5,000 \\ 0 \\ \hline \end{array}$ |
| Total assets | \$5,000 | \$5,000 |
| Equity <br> Retained earnings | \$5,000 | \$5,000 |
| Statements of Cash Flows |  |  |
| Cash flows from operating activities | \$ 0 | \$5,000 |
| Cash flows from investing activities | 0 | 0 |
| Cash flows from financing activities | 0 | 0 |
| Net change in cash | 0 | 5,000 |
| Beginning cash balance | 0 | 0 |
| Ending cash balance | \$ 0 | \$5,000 |


|  | Assets | = | Liabilities | + | Equity |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | Cash | $=$ | Unearned Revenue | $+$ |  | Com. Stock | + | Ret. Earn. |
| Beginning balances | \$ 0 |  | \$ 0 |  |  | \$ 0 |  | \$ 0 |
| 1. Recognize liability | 12,000 |  | 12,000 |  |  |  |  |  |
| 2. Adjustment for earned revenue |  |  | $(3,000)$ |  |  |  |  | 3,000 |
|  | - |  | - |  |  | - |  |  |
| Ending/beginning balances | \$12,000 | $=$ | \$ 9,000 | + | \$ | \$ 0 | + | \$3,000 |
| 2019 |  |  |  |  |  |  |  |  |
| 1. Adjustment for earned revenue |  |  | $(9,000)$ |  |  |  |  | 9,000 |
|  | - |  | - |  |  | - |  | - |
| Ending balances | \$12,000 |  | \$ 0 |  |  | \$ 0 |  | \$12,000 |
|  | $\underline{ }$ |  | = |  |  | $\underline{ }$ |  | $\underline{ }$ |

## Demonstration Problem 2-1B: Solution, part 2. Financial Statements

| Jackson Legal Services Financial Statements |  |  |
| :---: | :---: | :---: |
| Income Statements |  |  |
| For the Years Ended December 31, | 2018 | 2019 |
| Fees revenue | \$ 3,000 | \$ 9,000 |
| Expenses | 0 | 0 |
| Net income | \$ 3,000 | \$ 9,000 |
| Statements of Retained Earnings |  |  |
| Beginning retained earnings | \$ 0 | \$ 3,000 |
| Plus: Net income | 3,000 | 9,000 |
| Less: Dividends | 0 | 0 |
| Ending retained earnings | \$ 3,000 | \$12,000 |
| Balance Sheets as of December 31 |  |  |
| Assets Cash | \$12,000 | \$12,000 |
| Liabilities Unearned revenue | \$ 9,000 | \$ 0 |
| Equity Retained earnings | 3,000 | 12,000 |
| Total liabilities and equity | \$12,000 | \$12,000 |
| Statements of Cash Flows |  |  |
| Cash flows from operating activities | \$12,000 | \$ 0 |
| Cash flows from investing activities | 0 | 0 |
| Cash flows from financing activities | 0 | 0 |
| Net change in cash | 12,000 | 0 |
| Beginning cash balance | 0 | 12,000 |
| Ending cash balance | \$12,000 | \$12,000 |

## Demonstration Problem 2-2: Solution, parts A and B.

## Horizontal Financial Statements Model for 2018 and 2019

A spreadsheet is embedded to reflect the solution to this question. This spreadsheet covers both 2018 and 2019. The workpaper for students' use in answering this question would basically be the solution with the amounts deleted for all events except for the 2018 beginning balance.

|  |  |  |  | $=$ |  | ities | + | Equ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Event | Cash | Accts Receiv | Prepaid Insurance | $=$ | Salaries <br> Payable | Unearned Revenue | + | Com <br> Stock | Retained Earnings | Revenue | Expense | Cash Flow | Activity Type |
| 2014 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beg. Bal | \$- 0 | \$- 0 |  |  | \$- 0 |  |  | \$- 0 | \$- 0 | \$- 0 | \$- 0 |  |  |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| End. Bal. |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2015 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beg. Bal |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| End. Bal. | \$- 0 | \$- 0 | \$- 0 |  | \$- 0 | \$- 0 |  | \$- 0 | \$- 0 |  |  |  |  |



## Demonstration Problem 2-2: Solution, parts A \& B. Financial Statements



Demonstration Problem 2-1: Workpaper, part 1.

|  | Assets |  |  |  | $=$ Liabilities <br> $=$ Liabilities |  |  | Equity |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Part A, 2018 | Cash | Accounts <br> Receivable |  |  |  |  |  | + |  |  | + | Retained Earnings |
| Beginning balances | \$ 0 |  | \$ | 0 |  | \$ | 0 |  | \$ | 0 |  | \$ 0 |
| Effect of recognizing revenue |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Part B, 2019 |  |  |  |  |  |  |  |  |  |  |  |  |
| Effect of collecting cash |  |  |  |  |  |  |  |  |  |  |  |  |
|  | - |  |  |  |  |  |  |  |  |  |  | - |
| Ending balances | \$5,000 | + | \$ | 0 | $=$ | \$ | 0 | + | \$ | 0 | + | \$5,000 |
|  |  |  |  |  |  |  |  |  |  |  |  | $\underline{ }$ |

## Demonstration Problem 2-1: Workpaper, part 2. Financial Statements



## Demonstration Problem 2-1B: Workpaper, part 2

| Jackson Legal Services Financial Statements |  |  |
| :---: | :---: | :---: |
| Income Statements |  |  |
| For the Years Ended December 31, | 2018 | 2019 |
| Fees revenue |  |  |
| Expenses |  |  |
| Net income | \$ 3,000 | \$ 9,000 |
| Statements of Retained Earnings |  |  |
| Beginning retained earnings | \$ 0 | \$ 3,000 |
| Plus: Net income |  |  |
| Less: Dividends |  |  |
| Ending retained earnings | \$ 3,000 | \$12,000 |
| Balance Sheets as of December 31 |  |  |
| Assets Cash |  |  |
| Liabilities <br> Unearned revenue |  |  |
| Equity$\quad$ Retained earningsTotal liabilities and equity |  | 12,000 |
|  |  |  |
| Statements of Cash Flows |  |  |
| Cash flows from operating activities |  |  |
| Cash flows from investing activities |  |  |
| Cash flows from financing activities |  |  |
| Net change in cash |  |  |
| Beginning cash balance | 0 |  |
| Ending cash balance | \$12,000 | \$12,000 |

## Demonstration Problem 2-2: Workpaper, parts A \& B. Financial Statements



## Quiz Questions for Chapter 2

1. X Company recognized $\$ 500$ of revenue on account and realized $\$ 400$ of cash collections. The company had accrued salary expense of $\$ 300$ and invested $\$ 200$ in a certificate of deposit. Based on this information alone, the amount of cash flow from operating activities would be
a. $\quad \$ 100$.
b. $\$ 500$.
c. $\$ 200$.
d. $\$ 400$.
2. On January 1, 2018, West Company had accounts receivable of $\$ 500$. During 2018 West earned $\$ 2,500$ of service revenue on account. If the accounts receivable balance as of December 31, 2018, was $\$ 400$, what was the amount of cash flow from operating activities?
a. $\quad \$ 2,000$.
b. $\$ 3,000$.
c. $\$ 2,400$.
d. $\$ 2,600$.
3. The entry to record revenue on account
a. increases liabilities.
b. decreases equity.
c. decreases assets.
d. none of the above.
4. K Company collected $\$ 500$ cash on an account receivable that was due from L Company. Based on this information, which of the following statements is true?
a. K Company's total assets would increase.
b. L Company's total assets would not change.
c. K Company's equity would decrease.
d. None of the above.
5. On April 1, Flavin Co. paid $\$ 12,000$ cash for an insurance policy that provides coverage for one year beginning immediately. On December 31, Flavin adjusted the books to recognize the amount of the insurance policy used during the year. The amount of the adjustment would be:
a. $\$ 8,000$
b. $\$ 9,000$
c. $\$ 12,000$
d. $\$ 0$
6. Which of the following illustrates the recognition of revenue earned on account?

|  | Balance Sheet |  |  | Income Statement |  |  | Statement of Cash Flow |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Assets | Liab | Equity | Rev. | Exp. | Net In |  |
| a. | + | NA | + | NA | NA | NA | NA |
| b. | + | NA | + | + | NA | + | NA |
| c. | - | NA | - | NA | + | - | - OA |
| d. | + | NA | + | + | NA | + | + OA |

Use the following information to answer the next two questions. BBC Company received \$9,900 cash on February 1,2018 , from XYZ Company as advance payment for services BBC promised to perform for XYZ over the next three years on a continuous basis. Assume that BBC Company's year-end is December 31.
7. On its 2018 income statement, BBC would report revenue of
a. $\$ 3,300$

Chapter 02 - Accounting for Accruals and Deferrals
b. $\$ 9,900$
c. $\$ 3,025$
d. $\$ 2,750$
8. On its December 31, 2019 balance sheet BBC would report liabilities of
a. $\$ 3,575$
b. $\$ 3,300$
c. $\$ 9,900$
d. $\$ 6,875$
9. Which of the following illustrates purchasing supplies on account?

|  | Balance Sheet |  |  | Income Statement |  |  | Statement of Cash Flow |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Assets | Liab | Equity | Rev. | Exp. | Net Inc |  |
| a. | + | NA | + | NA | NA | NA | NA |
| b. | + | + | NA | NA | NA | NA | NA |
| c. | + | + | NA | NA | NA | NA | $+\mathrm{OA}$ |
| d. | + | NA | + | + | NA | + | $+\mathrm{OA}$ |

10. Which of the following illustrates receiving cash as an advance payment for future services?

|  | Balance Sheet |  |  | Income Statement |  |  | Statement of Cash Flow |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Assets | Liab. | Equity | Rev. | Exp. | Net In |  |
| a. | + | NA | + | NA | NA | NA | NA |
| b. | + | + | NA | + | NA | + | NA |
| c. | + | + | NA | NA | NA | NA | $+\mathrm{OA}$ |
| d. | + | NA | + | + | NA | + | $+\mathrm{OA}$ |

## Solutions to Quiz Questions

| Question | Answer |
| :---: | :---: |
| 1 | D |
| 2 | D |
| 3 | D |
| 4 | B |
| 5 | B |
| 6 | B |
| 7 | C |
| 8 | A |
| 9 | B |
| 10 | C |

## Summary Outline of a Lesson Plan for Chapter 2

I. Use Demonstration Problem 2-1 to define and illustrate the concept of accrual accounting. This problem includes both an accrual (part A) and a deferral (part B) example.
II. Use separate examples to further illustrate accrual and deferral concepts.
III. Use Demonstration Problem 2-2 as a comprehensive summary problem. Explain the first cycle to the class and use the second cycle as an in-class assignment. Allot one hour for this assignment. Have slower students finish the problem as homework. Use parallel problem 2-38 in the textbook as a homework assignment.
IV. Time considerations and homework assignments. Demonstration Problems 2-1 and 2-2 require approximately one hour of class time. Consider assigning exercises 2-11, 2-15, 218, 2-21, and Problem 2-28 from the textbook as homework.

## V. Use a financial statements model to highlight the differences between accrual and cash basis accounting.

VI. Hand out official answers to the Demonstration Problems worked in class.

## Chapter 2 - Accounting for Accruals and Deferrals

|  |  | Click on links |
| :--- | :--- | :--- |
| Exercise 2-3 | Effect of accruals on the financial statements | $\underline{\text { Exercise 2-3 }}$ |
| Exercise 2-4 | Effect of accounts receivable and accounts payable transactions on | Exercise 2-4 |
| financial statements | Exfect of accruals on the financial statements | $\underline{\text { Exercise 2-6 }}$ |
| Exercise 2-6 | Supplies on financial statements | Exercise 2-11 |
| Exercise 2-9 | Prepaid items on financial statements | $\underline{\text { Exercise 2-13 }}$ |
| Exercise 2-11 | Unearned items on financial statements | Exercise 2-15 |
| Exercise 2-13 | Supplies, unearned revenue, and the financial statements model | Exercise 2-20 |
| Exercise 2-15 | Closing entries | Exercise 2-26 |
| Exercise 2-20 | Relationship of accounts to financial statements | $\underline{\text { Exercise 2-30 }}$ |
| Exercise 2-26 | Identifying source, use, and exchange transactions |  |
| Exercise 2-30 |  |  |

Exercise 2-3

Plasma Inc. experienced the following events in Year 1, in its first year of operations:

1. Received $\$ 40,000$ cash from the issue of common stock.
2. Performed services on account for $\$ 76,000$.
3. Paid the utility expense of $\$ 5,000$.
4. Collected $\$ 42,000$ of the accounts receivable.
5. Recorded $\$ 30,000$ of accrued salaries at the end of the year.
6. Paid a $\$ 4,000$ cash dividend to the shareholders.

## Required:

a. Record the events in general ledger accounts under an accounting equation. In the last column of the table, provide appropriate account titles for the Retained Earnings amounts.
b. Prepare the income statement, statement of changes in stockholders' equity, balance sheet, and statement of cash flows for the Year 1 accounting period.
c. Why is the amount of net income different from the amount of net cash flow from operating activities?

## 5. Reßectivill

| PLASMA INC. <br> General Ledger Accounts |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Event | Assets |  | $=$ | Liabilities | + | Stockholders' Equity |  | Acct. Titles for Ret. Earn |
|  | Cash | Accounts Receivable | = | Salaries Payable | + | Common Stock | Retained Earnings |  |
| 1. | 40,000 | NA | = | NA | + | 40,000 | NA |  |
| 2. | NA | 76,000 | $=$ | NA | + | NA | 76,000 | Revenue |
| 3. | $(5,000)$ | NA | = | NA | + | NA | $(5,000)$ | Utility Expense |
| 4. | 42,000 | $(42,000)$ | = | NA | + | NA | NA |  |
| 5. | NA | NA | $=$ | 30,000 | + | NA | $(30,000)$ | Salaries Expense |
| 6. | $(4,000)$ | NA | = | NA | + | NA | $(4,000)$ | Dividends |
| End. Bal. | 73,000 | 34,000 | $=$ | 30,000 | + | 40,000 | 37,000 |  |


| Mc Graw Hill Education |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Event | Assets |  | = | Liabilities | + | Stockholders' Equity |  | Acct. Titles for Ret. Earn |
|  | Cash | Accounts Receivable | = | Salaries <br> Payable | + | Common Stock | Retained Earnings |  |
| 1. | 40,000 | NA | $=$ | NA | + | 40,000 | NA |  |
| 2. | NA | 76,000 | $=$ | NA | + | NA | 76,000 | Revenue |
| 3. | $(5,000)$ | NA | = | NA | + | NA | $(5,000)$ | Utility Expense |
| 4. | 42,000 | $(42,000)$ | = | NA | + | NA | NA |  |
| 5. | NA | NA | = | 30,000 | + | NA | $(30,000)$ | Salaries Expense |
| 6. | $(4,000)$ | NA | = | NA | + | NA | $(4,000)$ | Dividends |
| End. Bal. | 73,000 | 34,000 | $=$ | 30,000 | + | 40,000 | 37,000 |  |

## PLASMA INC.

## Income Statement

## For the Year Ended December 31, Year 1

| Revenue |  | \$76,000 |
| :---: | :---: | :---: |
| Expenses |  |  |
| Utilities expense | \$ $(5,000)$ |  |
| Salaries expense | $(30,000)$ |  |
| Total expenses |  | $(35,000)$ |
| Net income |  | \$ 41,000 |

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| Event | Assets |  | $=$ | Liabilities | + | Stockholders' Equity |  | Acct. Titles for Ret. <br> Earn |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cash | Accounts <br> Receivable | $=$ | Salaries <br> Payable | + | Common Stock | Retained <br> Earnings |  |
| 1. | 40,000 | NA | $=$ | NA | + | 40,000 | NA |  |
| 2. | NA | 76,000 | $=$ | NA | + | NA | 76,000 |  |
| 3. | $(5,000)$ | NA | $=$ | NA | + | NA | $(5,000)$ | Utility Expense |
| 4. | 42,000 | $(42,000)$ | $=$ | NA | + | NA | NA |  |
| 5. | NA | NA | $=$ | 30,000 | + | NA | $(30,000)$ | Salaries Expense |
| 6. | $(4,000)$ | NA | $=$ | NA | + | NA | $(4,000)$ | Dividends |
| End. Bal. | 73,000 | 34,000 | $=$ | 30,000 | + | 40,000 | 37,000 |  |




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| Event | Assets |  | $=$ | Liabilities | + | Stockholders' Equity |  | Acct. Titles for Ret. <br> Earn |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cash | Accounts <br> Receivable | $=$ | Salaries <br> Payable | + | Common Stock | Retained <br> Earnings |  |
| 1. | 40,000 | NA | $=$ | NA | + | 40,000 | NA |  |
| 2. | NA | 76,000 | $=$ | NA | + | NA | 76,000 |  |
| 3. | $(5,000)$ | NA | $=$ | NA | + | NA | $(5,000)$ | Utility Expense |
| 4. | 42,000 | $(42,000)$ | $=$ | NA | + | NA | NA |  |
| 5. | NA | NA | $=$ | 30,000 | + | NA | $(30,000)$ | Salaries Expense |
| 6. | $(4,000)$ | NA | $=$ | NA | + | NA | $(4,000)$ | Dividends |
| End. Bal. | 73,000 | 34,000 | $=$ | 30,000 | + | 40,000 | 37,000 |  |


| PLASMA INC. <br> Balance Sheet <br> As of December 31, Year 1 |  |  |
| :---: | :---: | :---: |
| Assets As |  |  |
| Cash | \$ 73,000 |  |
| Accounts receivable | 34,000 |  |
| Total assets |  | \$ 107,000 |
| Liabilities |  |  |
| Salaries payable |  | \$ 30,000 |
| Stockholders' equity |  |  |
| Common stock | \$ 40,000 |  |
| Retained earnings | 37,000 |  |
| Total Stockhodlers' equity |  | \$ 77,000 |
| Total liabilities and stockholders' equity |  | \$ 107,000 |

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| Event | Assets |  | $=$ | Liabilities | + | Stockholders' Equity |  | Acct. Titles for Ret. <br> Earn |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cash | Accounts <br> Receivable | $=$ | Salaries <br> Payable | + | Common Stock | Retained <br> Earnings |  |
| 1. | 40,000 | NA | $=$ | NA | + | 40,000 | NA |  |
| 2. | NA | 76,000 | $=$ | NA | + | NA | 76,000 |  |
| 3. | $(5,000)$ | NA | $=$ | NA | + | NA | $(5,000)$ | Utility Expense |
| 4. | 42,000 | $(42,000)$ | $=$ | NA | + | NA | NA |  |
| 5. | NA | NA | $=$ | 30,000 | + | NA | $(30,000)$ | Salaries Expense |
| 6. | $(4,000)$ | NA | $=$ | NA | + | NA | $(4,000)$ | Dividends |
| End. Bal. | 73,000 | 34,000 | $=$ | 30,000 | + | 40,000 | 37,000 |  |

Statement of Cash Flows
For the Year Ended December 31, Year 1
Cash flows from operating activities Cash receipts from customers
Cash paid for expenses
Net cash flow from operating activities
\$ 42,000

Cash flow from investing activities
Cash flow from financing activities
Issue of stock
Paid dividends
Net cash flow from financing activities
Net change in cash
$(5,000)$
37,000
-0-

Plus: Beginning Cash Balance
Ending Cash balance
$\begin{array}{r}-0- \\ \hline \$ 73,000 \\ \hline\end{array}$



## Exercise 2-4

The following events apply to Purple leaf Inc., a public accounting firm, for the Year 1 accounting period.

1. Performed $\$ 48,000$ of services for clients on account.
2. Performed $\$ 32,500$ of services for cash.
3. Incurred $\$ 22,500$ of other operating expenses on account.
4. Paid $\$ 13,000$ cash to an employee for salary.
5. Collected $\$ 35,000$ cash from accounts receivable.
6. Paid $\$ 19,000$ cash on accounts payable.
7. Paid a $\$ 5,000$ cash dividend to the stockholders.
8. Accrued salaries were $\$ 1,500$ at the end of Year 1.

## Required:

a. Show the effects of the events on the financial statements using a horizontal statements model. In the Cash Flow column, use OA to designate operating activity, IA for investment activity, FA for financing activity, and NC for net change in cash. Use NA to indicate the element is not affected by the event.
b. What is the amount of total assets at the end of Year 1?
c. What is the balance of accounts receivable at the end of Year 1?
d. What is the balance of accounts payable at the end of Year 1?
e. What is the difference between accounts receivable and accounts payable?
f. What is net income for Year 1?
g. What is the amount of net cash flow from operating activities for Year 1?

6. Paid $\$ 19,000$ cash on accounts payable.

| Event No. | Purple Leaf Inc. <br> Horizontal Statements Model |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Assets |  |  | = | Liabilities |  |  |  | Stk. Equity |  |  |  |  |  |  |
|  | Cash | + | Accts. Rec. | = | Accts. Pay. | + | Sal. Pay. | + | Ret. Earn. | Rev. | - | Exp. | $=$ | Net Inc. | Cash Flow |
| 1. | NA | + | 48,000 | = | NA | + | NA | + | 48,000 | 48,000 | - | NA | = | 48,000 | NA |
| 2. | 32,500 | + | NA | = | NA | + | NA | + | 32,500 | 32,500 | - | NA | $=$ | 32,500 | 32,500 OA |
| 3. | NA | + | NA | = | 22,500 | + | NA | + | $(22,500)$ | NA | - | 22,500 | $=$ | $(22,500)$ | NA |
| 4. | $(13,000)$ | + | NA | = | NA | + | NA | + | $(13,000)$ | NA | - | 13,000 | $=$ | $(13,000)$ | $(13,000)$ OA |
| 5. | 35,000 | + | $(35,000)$ | = | NA | + | NA | + | NA | NA | - | NA | = | NA | 35,000 OA |
| 6. | $(19,000)$ | + | NA | = | $(19,000)$ | + | NA | + | NA | NA | - | NA | = | NA | $(19,000)$ OA |

## 8. Accrued salaries were $\$ 1,500$ at the end of Year 1.

| Event No. | Purple Leaf Inc. <br> Horizontal Statements Model |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Assets |  |  | = | Liabilities |  |  |  | Stk. Equity |  |  |  |  |  |  |
|  | Cash | + | Accts. Rec. | = | Accts. Pay. | + | Sal. Pay. | + | Ret. Earn. | Rev. | - | Exp. | = | Net Inc. |  |
| 1. | NA | + | 48,000 | = | NA | + | NA | + | 48,000 | 48,000 | - | NA | = | 48,000 | NA |
| 2. | 32,500 | + | NA | = | NA | + | NA | + | 32,500 | 32,500 | - | NA | = | 32,500 | 32,500 OA |
| 3. | NA | + | NA | = | 22,500 | + | NA | + | $(22,500)$ | NA | - | 22,500 | = | $(22,500)$ | NA |
| 4. | $(13,000)$ | + | NA | = | nA | + | NA | + | $(13,000)$ | NA | - | 13,000 | = | $(13,000)$ | $(13,000)$ OA |
| 5. | 35,000 | + | $(35,000)$ | = | NA | + | NA | + | NA | NA | - | NA | = | NA | 35,000 OA |
| 6. | $(19,000)$ | + | NA | = | $(19,000)$ | + | NA | + | NA | NA | - | NA | = | NA | $(19,000)$ OA |
| 7. | $(5,000)$ | + | NA | = | NA | + | NA | + | $(5,000)$ | NA | - | NA | = | NA | $(5,000)$ FA |
| 8. | NA | + | NA | = | NA | + | 1,500 | + | $(1,500)$ | NA | - | 1,500 | = | $(1,500)$ | NA |
| End. Bal. | 30,500 | + | 13,000 | = | 3,500 | + | 1,500 | + | 38,500 | 80,500 | - | 37,000 | = | 43,500 | 30,500 NC |


| Event No. | Purple Leaf Inc. <br> Horizontal Statements Model |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Assets |  |  | = | Liabilities |  |  | ++ | Stk. Equity <br> Ret. Earn. | Rev. | - | Exp. | = | Net Inc. | NA |  |
|  | Cash |  | Accts. Rec. | = | Accts. Pay. |  | Sal. <br> Pay. <br> NA |  |  |  |  |  |  |  |  |  |
| 1. | NA | + | 48,000 | = | NA |  |  | + | 48,000 | 48,000 | - | NA |  | 48,000 |  |  |
| 2. | 32,500 | + | NA | = | NA | + | NA | + | 32,500 | 32,500 | - | NA |  | 32,500 | 32,500 | OA |
| 3. | NA | + | NA | = | 22,500 | + | NA | + | $(22,500)$ | NA | - | 22,500 |  | $(22,500)$ | NA |  |
| 4. | $(13,000)$ | + | NA | = | NA | + | NA | + | $(13,000)$ | NA | - | 13,000 |  | $(13,000)$ | $(13,000)$ | OA |
| 5. | 35,000 |  | $(35,000)$ | = | NA | + | NA | + | NA | NA | - | NA | = | NA | 35,000 | OA |
| 6. | $(19,000)$ | + | NA | = | $(19,000)$ | + | NA | + | NA | NA | - | NA | $=$ | NA | $(19,000)$ |  |
| 7. | $(5,000)$ | + | NA | = | NA | + | NA | + | $(5,000)$ | NA | - | NA | = | NA | $(5,000)$ | FA |
| 8. | NA | + | NA | = | NA | + | 1,500 | + | $(1,500)$ | NA | - | 1,500 |  | $(1,500)$ | NA |  |
| End. Bal. | 30,500 | + | 13,000 | = | 3,500 | + | 1,500 | + | 38,500 | 80,500 | - | 37,000 |  | 43,500 | 30,500 |  |
|  | r |  |  |  |  |  |  |  |  | Net Income |  |  |  | 43,500 |  |  |
|  | Accounts Payable |  |  | \$ | 3,500 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | Cash from operating activities |  |  |  |  | \$ 35,50 |  |

## Exercise 2-6

Supernova Inc. experienced the following events in Year 1, its first year of operation.

1. Received $\$ 25,000$ cash from the issue of common stock.
2. Performed services on account for $\$ 33,500$.
3. Paid a $\$ 2,500$ cash dividend to the stockholders.
4. Collected $\$ 22,500$ of the accounts receivable.
5. Paid $\$ 24,500$ cash for other operating expenses.
6. Performed services for $\$ 5,000$ cash.
7. Recognized $\$ 1,000$ of accrued utilities expense at the end of the year.

## Required:

a. Identify the events that result in revenue or expense recognition.
b. Based on your response to Requirement a, determine the amount of net income reported on the Year 1 income statement.
c. Identify the events that affect the statement of cash flows.
d. Based on your response to Requirement c, determine the amount of cash flow from operating activities reported on the Year 1 statement of cash flows.
e. What is the before- and after-closing balance in the Service Revenue account? What other accounts would be closed at the end of the accounting cycle?
f. What is the balance of the Retained Earnings account that appears on the Year 1 balance sheet?

## 

| Event | Revenue | Expense | Statement of Cash flows |  |
| :---: | :---: | :---: | :---: | :---: |
| 1. | NA | NA | $\mathbf{\$ 2 5 , 0 0 0}$ | FA |
| 2. | $\$ 33,500$ | NA | NA |  |
| 3. | NA | NA | $\mathbf{( \$ 2 , 5 0 0 )}$ | FA |
| 4. | NA | NA | $\mathbf{\$ 2 2 , 5 0 0}$ | OA |
| 5. | NA | $\mathbf{\$ 2 4 , 5 0 0}$ | $\mathbf{( \$ 2 4 , 5 0 0 )}$ | OA |
| 6. | \$5,000 | NA | $\mathbf{\$ 5 , 0 0 0}$ | OA |
| 7. |  |  |  | NA |


| Event | Revenue | Expense | Statement of Cash flows |  |
| :---: | :---: | :---: | :---: | :---: |
| 1. | NA | NA | $\mathbf{\$ 2 5 , 0 0 0}$ | FA |
| 2. | $\$ 33,500$ | NA | NA |  |
| 3. | NA | NA | $\mathbf{( \$ 2 , 5 0 0 )}$ | FA |
| 4. | NA | NA | $\mathbf{\$ 2 2 , 5 0 0}$ | OA |
| 5. | NA | $\mathbf{\$ 2 4 , 5 0 0}$ | $\mathbf{( \$ 2 4 , 5 0 0 )}$ | OA |
| 6. | $\$ 5,000$ | NA | $\mathbf{\$ 5 , 0 0 0}$ | OA |
| 7. | NA | $\$ 1,000$ | NA |  |

## SUPERNOVA INC.

Income Statement
For the Year Ended December 31, Year 1

| Revenue | $\mathbf{\$ 3 8 , 5 0 0}$ |
| :--- | ---: |
| Less: Expenses | $\mathbf{\$ 2 4 , 5 0 0}$ |
| Net Income | $\mathbf{\$ 1 3 , 0 0 0}$ |


| Event | Revenue | Expense | Statement of Cash flows |  |
| :---: | :---: | :---: | :---: | :---: |
| 1. | NA | NA | $\mathbf{\$ 2 5 , 0 0 0}$ | FA |
| 2. | $\$ 33,500$ | NA | NA |  |
| 3. | NA | NA | $\mathbf{( \$ 2 , 5 0 0 )}$ | FA |
| 4. | NA | NA | $\mathbf{\$ 2 2 , 5 0 0}$ | OA |
| 5. | NA | $\mathbf{\$ 2 4 , 5 0 0}$ | $\mathbf{( \$ 2 4 , 5 0 0 )}$ | OA |
| 6. | $\$ 5,000$ | NA | $\mathbf{\$ 5 , 0 0 0}$ | OA |
| 7. | NA | $\mathbf{\$ 1 , 0 0 0}$ | NA |  |


| SUPERNOVA INC. <br> Income Statement |  |
| :--- | :--- |
| For the Year Ended December 31, Year 1 |  |
| Revenue | $\mathbf{\$ 3 8} \mathbf{8 0 0 0}$ |

Ending Retained Earnings = \$13,000-\$2,500=\$10,500

| Event | Revenue | Expense | Statement of Cash flows |  |
| :---: | :---: | :---: | :---: | :---: |
| 1. | NA | NA | $\mathbf{\$ 2 5 , 0 0 0}$ | FA |
| 2. | $\mathbf{\$ 3 3 , 5 0 0}$ | NA | NA |  |
| 3. | NA | NA | $\mathbf{( \$ 2 , 5 0 0 )}$ | FA |
| 4. | NA | NA | $\mathbf{\$ 2 2 , 5 0 0}$ | OA |
| 5. | NA | $\mathbf{\$ 2 4 , 5 0 0}$ | $\mathbf{( \$ 2 4 , 5 0 0 )}$ | OA |
| 6. | $\mathbf{\$ 5 , 0 0 0}$ | NA | $\mathbf{\$ 5 , 0 0 0}$ | OA |
| 7. | NA | $\mathbf{\$ 1 , 0 0 0}$ | NA |  |


| SUPERNOVA INC. |
| :--- |
| Statement of Cash Flows |
| For the Year Ended December 31, 2013 |
| Cash Flows from Operating Activities |
| Cash from Revenue |
| Cash Paid for Expenses |
| Net Cash Flow from Operating Activities |
| $\mathbf{( 2 4 , 5 0 0}$ |
| $\mathbf{\$ 3 , 0 0 0}$ |

## Exercise 2-9

E-Tech Inc. experienced the following events in Year 1, its first year of operation.
1.Performed services for $\$ 40,000$ cash.
2.Purchased $\$ 8,000$ of supplies on account.
3.A physical count on December 31, Year 1, found that there was $\$ 2,000$ of supplies on hand.

## Required:

Based on this information alone:
a.Record the events under an accounting equation.
b. What is the balance in the Supplies account as of January 1, Year 2?
c. What is the balance in the Supplies Expense account as of January 1, Year 2?
d. Prepare an income statement, balance sheet, and statement of cash flows for the Year 1 accounting period.

## 

| Effect of Events on the Accounting Equation |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Event | Assets |  | $=$ | Liabilities | + | Stockholders' equity |  |
|  | Cash | Supplies | $=$ | Accounts <br> Payable | + | Common <br> Stock | Retained <br> Earnings |
| 1. | 40,000 | NA | $=$ | NA | + | NA | 40,000 |
| 2. | NA | 8,000 | $=$ | 8,000 | + | NA | NA |
| 3. | NA | $(6,000)$ | $=$ | NA | + | NA | $(6,000)$ |
| End. Bal. | 40,000 | 2,000 | $=$ | 8,000 | + | NA | 34,000 |


| Beginning supplies balance | $\mathbf{\$}$ |
| :--- | ---: |
| + Supplies purchased | 8,000 |
| - Ending supplies balance | $(2,000)$ |
| S Supplies used | $\$ 6,000$ |


| E-Tech Inc. <br> Effect of Events on the Accounting Equation |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Event | Assets |  | $=$ | Liabilities | + | Stockholders' equity |  |
|  | Cash | Supplies | = | Accounts Payable | + | Common Stock | Retained Earnings |
| 1. | 40,000 | NA | = | NA | + | NA | 40,000 |
| 2. | NA | 8,000 | = | 8,000 | + | NA | NA |
| 3. | NA | $(6,000)$ | = | NA | + | NA | $(6,000)$ |
| End. Bal. | 40,000 | 2,000 | = | 8,000 | + | NA | 34,000 |


| $\begin{array}{c}\text { E-Tech Inc. } \\ \text { Statement of Cash Flows }\end{array}$ |  |
| :--- | :---: |
| For the Year Ended December 31, Year 1 |  |$]$

Exercise 2-11

Aroma Inc. experienced the following events in 2016, its first year of operation:

1. Performed counseling services for $\$ 20,000$ cash.
2. On April 1, 2016, paid $\$ 6,000$ cash to rent office space for the coming year.
3. Adjusted the accounts to reflect the amount of rent used during the year.

## Required

Based on this information alone:
a. Record the events under an accounting equation.
b. Prepare an income statement, balance sheet, and statement of cash flows for the 2016 accounting period.
c. Ignoring all other future events, what is the amount of rent expense that would be recognized in 2017?


| AROMA INC. Accounting Equation-2016 |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Events | Cash | Assets | $=$ | Liabilities | + | Stockholders' Equity |  |
|  | Prepaid Rent |  |  |  | Common Stock | Retained Earnings |  |
| 1$)$ | 20,000 |  |  |  | 20,000 |  |  |
| $2)$ | $(6,000)$ | 6,000 |  |  |  |  |  |
| $3)$ |  | $(4,500)$ |  |  |  |  |  |

$$
\begin{array}{lcc}
\text { Rent } \text { per month }= & \text { Annual rent cost } & \div 12 \text { months } \\
\$ 500 \text { per month }= & \$ 6,000 & \div 12 \text { months }
\end{array}
$$

| Rent per month | $\times$ | Number of months used | $=$ | Rent expense |
| :---: | :---: | :---: | :---: | :---: |
| $\$ 500$ | $\times$ | 9 | months | $=$ |



| AROMA INC. Accounting Equation-2016 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Events | Assets |  |  | $=$ | Liabilities | + | Stockholders' Equity |  |  |
|  | Cash | + | Prepaid Rent |  |  |  | Common Stock | + | Retained Earnings |
| 1) | 20,000 |  |  |  |  |  |  |  | 20,000 |
| 2) | $(6,000)$ |  | 6,000 |  |  |  |  |  |  |
| 3) |  |  | $(4,500)$ |  |  |  |  |  | $(4,500)$ |

## AROMA INC.

Income Statement
For the Year Ended December 31, 2016

| Service revenue | $\$$ | 20,000 |
| :--- | :--- | :---: |
| Rent expense | $(4,500)$ |  |
| Net income | $\$ 15,500$ |  |


| AROMA INC. <br> Statement of Cash Flows <br> For the Year Ended December 31, 2016 |  |  |  |
| :---: | :---: | :---: | :---: |
| Cash flows from operating activities Cash receipt from revenue Cash payment for rent | $\begin{array}{r} \$ 20,000 \\ (6,000) \\ \hline \end{array}$ |  |  |
| Net cash flow from operating activities |  |  | 14,000 |
| Cash flows from investing activities |  |  | -0- |
| Cash flows from financing activities |  |  | -0- |
| Net change in cash |  |  | 14,000 |
| Plus: Beginning cash balance |  |  | -0- |
| Ending cash balance |  | \$ | 14,000 |


| AROMA INC. Accounting Equation-2016 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Events | Assets |  |  | $=$ | Liabilities | + | Stockholders' Equity |  |  |
|  | Cash | + | Prepaid Rent |  |  |  | Common Stock | + | Retained Earnings |
| 1) | 20,000 |  |  |  |  |  |  |  | 20,000 |
| 2) | $(6,000)$ |  | 6,000 |  |  |  |  |  |  |
| 3) |  |  | $(4,500)$ |  |  |  |  |  | $(4,500)$ |
| Bal. | 14,000 |  | 1,500 |  |  |  |  |  | 15,500 |



## Exercise 2-13

Neptune Consultants experienced the following events in 2016, its first year of operation:

1. On October 1, 2016, Neptune collected $\$ 48,000$ for consulting services it agreed to provide during the coming year.
2. Adjusted the accounts to reflect the amount of consulting service revenue recognized in 2016.

## Required

Based on this information alone:
a. Record the events under an accounting equation.
b. Prepare an income statement, balance sheet, and statement of cash flows for the 2016 accounting period.
c. Ignoring all other future events, what is the amount of service revenue that would be recognized in 2017?
2. Adjusted the accounts to reflect the amount of consulting service revenue recognized in 2016. during the coming year.

| Neptune Consultants <br> Effect of Events on the Accounting Equation |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Event | Assets | $=$ | Liabilities | + | Stockholders' <br> equity |  |
| Cash | $=$ | Unearned <br> Revenue | + | Retained <br> Earnings |  |  |
| 1. | 48,000 | $=$ | 48,000 | + | NA |  |
| 2. | NA | $=$ | $(12,000)$ | + | 12,000 |  |
| End. Bal. | 48,000 | $=$ | 36,000 | + | 12,000 |  |


| $\$ 48,000 \div 12$ months $=\$ 4,000$ revenue earned per month |
| :---: |
| $\$ 4,000 \times 3$ months $=\$ 12,000$ revenue to be recognized in 2016 |


| Neptune Consultants <br> Effect of Events on the Accounting Equation |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Event | Assets | $=$ | Liabilities | + | Stockholders' <br> equity |
| Cash | $=$ | Unearned <br> Revenue | + | Retained <br> Earnings |  |
| 1. | 48,000 | $=$ | 48,000 | + | NA |
| 2. | NA | $=$ | $(12,000)$ | + | 12,000 |
| End. Bal. | 48,000 | $=$ | 36,000 | + | 12,000 |

## Neptune Consultants <br> Statement of Cash Flows <br> For the Year Ended December 31, 2016

Cash flows from operating activities:

| Cash Receipt from Revenue | $\$$ |  |
| :--- | ---: | ---: |
| Net cash flow from operating activities | 48,000 | 48,000 |
| Cash flow from investing activities: | $-0-$ |  |
| Cash flow from financing activities: | $-0-$ |  |
| Net change in cash | 48,000 |  |
| Plus: Beginning cash balance | $-0-$ |  |
| Ending cash balance | $\$$ |  |

Ending cash balance

## Exercise 2-15

Daniel, Attorney at Law, experienced the following transactions in 2016, the first year of operations:

1. Accepted $\$ 18,000$ on February 1, 2016, as a retainer for services to be performed evenly over the next 12 months.
2. Performed legal services for cash of $\$ 42,000$.
3. Purchased $\$ 750$ of office supplies on account.
4. Paid $\$ 600$ of the amount due on accounts payable.
5. Paid a cash dividend to the stockholders of $\$ 4,000$.
6. Paid cash for operating expense of $\$ 16,000$.
7. Determined that at the end of the accounting period $\$ 75$ of office supplies remained on hand.
8. On December 31, 2016, recognized the revenue that had been earned for services performed in accordance with Transaction 1.

## Required

Show the effects of the events on the financial statements using a horizontal statements model. In the Cash Flow column, use the initials OA to designate operating activity, IA for investing activity, FA for financing activity, and NC for net change in cash. Use NA to indicate accounts not affected by the event.
5. Paid a cash dividend to the stockholders of $\$ 4,000$.

Daniel Attorney at Law
Effect of Transactions on the Financial Statements for 2016

| Event No. | Assets |  |  | $=\quad$ Liabilities |  |  |  | + | Stk. <br> Equity <br> Ret. <br> Earn. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cash |  | pplies | = | Accts. Pay. | $+$ | Unearn Rev. | + |  | Rev. | - | Exp. | = | Net Inc. | Cash <br> Flow |
| 1. | 18,000 | + | NA | = | NA | $+$ | 18,000 | + | NA | NA | - | NA | = | NA | 18,000 OA |
| 2. | 42,000 | + | NA | = | NA | + | NA | + | 42,000 | 42,000 | - | NA | = | $\begin{gathered} 42,00 \\ 0 \end{gathered}$ | 42,000 OA |
| 3. | NA | + | 750 | = | 750 | + | NA | + | NA | NA | - | NA | = | NA | NA |
| 4. | (600) | + | NA | = | (600) | + | NA | + | NA | NA | - | NA | $=$ | NA | (600) OA |
| 5. | $(4,000)$ |  | NA | $=$ | NA | $+$ | NA | + | $(4,000)$ | NA | - | NA | $=$ | NA | $(4,000)$ FA |

8. On December 31, 2016, recognized the revenue that had been earned for services performed in accordance with Transaction 1.

| Daniel Attorney at Law <br> Effect of Transactions on the Financial Statements for 2016 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Event | Assets |  |  | = | Liabilities |  |  | + |  |  |  |  |  |  |  |
| No. | Cash | + | Supplies | = | Accts. Pay. | + | Unearn. Rev. | + |  | Rev. | - | Exp. | = | Net Inc. | Cash Flow |
| 1. | 18,000 | + | NA | = | NA | + | 18,000 | + | NA | NA | - | NA | = | NA | 18,000 OA |
| 2. | 42,000 | + | NA | = | NA | + | NA | + | 42,000 | 42,000 | - | NA | = | 42,000 | 42,000 OA |
| 3. | NA | + | 750 | = | 750 | + | NA | + | NA | NA | - | NA | = | NA | NA |
| 4. | (600) | + | NA | = | (600) | + | NA | + | NA | NA | - | NA | = | NA | (600) OA |
| 5. | $(4,000)$ | + | NA | = | NA | + | NA | + | $(4,000)$ | NA | - | NA | = | NA | $(4,000)$ FA |
| 6. | $(16,000)$ | + | NA | = | NA | + | NA | + | $(16,000)$ | NA | - | 16,000 | = | $(16,000)$ | $(16,000)$ OA |
| 7. | nA | + | (675) | = | NA | + | NA | + | (675) | NA | - | 675 | = | (675) | NA |
| 8. | NA | + | NA | = | NA | + | $(16,500)$ | + | 16,500 | 16,500 | - | NA | = | 16,500 | NA |
| End. Bal. | 39,400 | + | 75 | = | 150 | + | 1,500 | + | 37,825 | 58,500 | - | 16,675 | = | 41,825 | 39,400 NC |

## Exercise 2-20

Royce Company's accounting records show an after-closing balance of \$9,700 in its Retained Earnings account on December 31, 2016. During the 2016 accounting cycle, Royce earned \$7,550 of revenue, incurred $\$ 4,600$ of expense, and paid $\$ 750$ of dividends. Revenues and expenses were recognized evenly throughout the accounting period.

## Required

a. Determine the balance in the Retained Earnings account as of January 1, 2017.
b. Determine the balance in the temporary accounts as of January 1, 2016.
c. Determine the after-closing balance in the Retained Earnings account as of December 31, 2015.
d. Determine the balance in the Retained Earnings account as of June 30, 2016.

| Ending retained earnings | $\$ 9,700$ |
| :--- | ---: |
| Revenue | 7,550 |
| Expense | 4,600 |
| Dividends | 750 |


| Retained earnings, January 1, 2017 | $\$ 9,700$ |
| :--- | ---: |
| - Net income | $(2,950)$ |
| + Dividends | 750 |
| Retained earnings, June 30, 2016 | $\$ 7,500$ |

## Exercise 2-26

Identify whether each of the following items would appear on the income statement, statement of changes in stockholders' equity, balance sheet, or statement of cash flows. Some items may appear on more than one statement; if so, identify all applicable statements. If an item would not appear on any financial statement, label it NA.

| Supplies Expense | Supplies |
| :--- | :--- |
| Salaries Payable | Beginning Retained Earnings |
| Ending Common Stock | Cash Flow from Financing Activities |
| Beginning Cash Balance | Accounts Receivable |
| Net Change in Cash | Ending Cash Balance |
| Land | Accounts Payable |
| Total Liabilities | Beginning Common Stock |
| "For the Year Ended" Date Notation | Dividends |
| Salaries Expense | Total Assets |
| Net Income | "As of" Date Notation |
| Service Revenue | Prepaid Rent |
| Cash Flow from Operating Activities | Insurance Expense |
| Interest Receivable | Price/Earnings Ratio |
| Interest Revenue | Taxes Payable |
| Rent Expense | Consulting Revenue |
| Notes Payable | Utilities Expense |
| Unearned Revenue | Operating Cycle |
| Cash Flow from Investing Activities | Operating Expenses |
| Ending Retained Earnings | Prepaid Insurance |

$\square$

## Income Statement

For the Year Ended

## Statement of Changes in Stockholders' Equity For the Year Ended

Ending common stock

Net Income

Balance Sheet

## Assets

$$
\begin{aligned}
& \text { Statement of Cash Flows } \\
& \text { For the Year Ended }
\end{aligned}
$$

Land
Interest Receivable
Liabilities
Aatrersfranalabdele
Total Liabilities
Stockholders' equity
Common stock

| Income Statement | Statement of Changes in Stockholders' Equity |
| :---: | :---: |
|  | Beginning Common Stock |
| Revenues |  |
| Consulting Revenue |  |
| Expenses | Beginning Retained Earnings |
|  | Dividends Ending Retained Earnings |
| Balance Sheet <br> As of $\qquad$ | Statement of Cash Flows |
| Assets <br>  |  |
| Total Assets Liabilities | Cash Flow from Investing Activities |
| Anemasitanpatablue | Cash Flow from Financing Activities |
| Stockholders' equity Retained Earnings | Cash dividends <br> Ending Cash Balance |

## Exercise 2-30

Mc

## Required

Indicate whether each of the following transactions is an asset source, asset use, asset exchange, or claims exchange transaction.
a. Acquired cash from the issue of stock.
b. Paid a cash dividend to the stockholders.
c. Paid cash on accounts payable.
d. Incurred other operating expenses on account.
e. Paid cash for rent expense.
f. Performed services for cash.
g. Performed services for clients on account.
h. Collected cash from accounts receivable.
i. Received cash for services to be performed in the future.
j. Purchased land with cash.
Purchased land with cash

| Assets | $=$ | Liabilities | + |
| :---: | :---: | :---: | :---: |
| Stk. Equity |  |  |  |
| + | + |  | + |

Asset Exchange

# SURVEY OF <br> ACCOUNTING <br> Fifth Edition 

## Chapter 2

Accounting for Accruals and Deferrals

## Accrual Accounting

## Accrual

## Deferral



## A revenue or expense event that is recognized before cash is exchanged



> A revenue or expense event that is recognized after cash has been exchanged

LO 1 :

## Show how receivables affect financial statements.

## Event 1

## Cato Consultants was started on January 1, 2018, when it acquired $\$ 5,000$ cash by issuing common stock.

## Asset Source <br> Transaction



## Event 2

## During 2018, Cato Consultants provided \$84,000 of consulting services to its clients but no cash has been collected.

## Asset Source <br> Transaction



## Event 3

## Cato collected \$60,000 cash from customers in partial settlement of its accounts receivable.

## Asset Exchange Transaction

| Assets |  |  | $\begin{aligned} & = \\ & = \end{aligned}$ | Llab. | $+$ | Stockholders' Equity |  |  | Rev. | - | Exp. | $=$ | Net Inc. | Cash Flow |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash | $+$ | Accts. Rec. |  |  |  | Com. Stk. | $+$ | Ret. Earn. |  |  |  |  |  |  |
| 60,000 | $+$ | $(60,000)$ | $=$ | NA | $+$ | NA | $+$ | NA | NA | - | NA | $=$ | NA | 60,000 OA |

## Other 2018 Events

Event 4: Cato paid the instructor $\mathbf{\$ 1 0 , 0 0 0}$ cash for teaching training courses (salary expense).


Event 5: Cato paid $\mathbf{\$ 2 , 0 0 0}$ for advertising costs. The advertisements appeared in 2018.

| Assets |  |  | $=$$=$ | Llab. | $+$ | Stockholders' Equity |  |  | Rev | - | Exp. | $=$ | Net Inc. | Cash Flow |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash | $+$ | Accts. Rec. |  |  |  | Com. Stk. | + | Ret. Earn. |  |  |  |  |  |  |  |
| $(2,000)$ | $+$ | NA | $=$ | NA | $+$ | NA | $+$ | $(2,000)$ | NA | - | 2,000 | $=$ | $(2,000)$ | $(2,000)$ | OA |

Event 6: Cato signed contracts for $\$ 42,000$ of consulting services to be performed in 2019.

| Assets |  |  | $=$ |  | + | Stockholders' Equity |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash | + | Accts. Rec. |  |  |  | Com. Stk. | + | Ret. Earn. | Rev. | - | Exp. | $=$ | Net Inc. | Cash Flow |
| NA | + | NA | $=$ | NA | + | NA | + | NA | NA | - | NA | = | NA | NA |

## LO 2:

## Show how payables affect financial statements.

## Event 7

At the end of 2018, Cato recorded accrued salary expense of $\$ 6,000$ (the salary expense is for courses the instructor taught in 2018 that Cato will pay cash for in 2019).

## Claims Exchange Transaction

| Assets |  |  | $\begin{aligned} & = \\ & = \end{aligned}$ | Llab. <br> Sal. Pay. | ++ | Stockholders' Equity |  |  | Rev. | - | Exp. | $=$ | Net Inc. | Cash Flow |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash | + | Accts. Rec. |  |  |  | Com. Stk. | $+$ | Ret. Earn. |  |  |  |  |  |  |
| NA | + | NA | $=$ | 6,000 | $+$ | NA | + | $(6,000)$ | NA | - | 6,000 | $=$ | $(6,000)$ | NA |

## LO 3:

## Prepare financial statements that include accruals.

## Vertical Statements Model



## Comparing Cash Flow from Operating Activities with Net Income

|  | Accrual Accounting | Cash Flow |
| :--- | :---: | :--- |
| Consulting revenue | $\$ 84,000$ | $\$ 60,000$ |
| Salary expense | $(16,000)$ | $(10,000)$ |
| Advertising expense | $\underline{(2,000)}$ | $\underline{(2,000)}$ |
| Net income | $\underline{\$ 66,000}$ | $\underline{\$ 48,000}$ |

## The Closing Process

## EXHIBIT 2.3

Cato Corporation, 2018 Closing Process
Panel 1 Closing Entries
C1 Transfers the balance from the Consulting Revenue account to the Retained Earnings account.
C2 Transfers the balance from the Salary Expense account to the Retained Earnings account.
C3 Transfers the balance from the Advertising Expense account to the Retained Earnings account.
Panel 2 General Ledger Accounts after Closing


## Temporary and Permanent Accounts



Assets


> Permanent accounts track financial results from year to year.

## LO 4:

## Identify the steps in the accounting cycle.

## Steps in an Accounting Cycle



## Matching Concept

Cash basis accounting can distort the measurement of net income because it sometimes fails to properly match revenues with expenses.

The problem is that cash is not always received or paid in the period when the revenue is earned or when the expense is incurred.


## 2019 Event 1

## Cato pays $\$ 6,000$ to the instructor to settle the salaries payable obligation.

## The Second Accounting Cycle

## Asset Use <br> Transaction

| Balance Sheet |  |  |  |  |  | Income Statement |  |  |  |  | Statement of Cash Flows |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets = | Llab. | $+$ | C. Stk. | + | R. Earn. | Rev. | - | Exp. | $=$ | Net Inc. |  |  |
| $(6,000)=$ | $(6,000)$ | $+$ | NA | $+$ | NA | NA | - | NA | $=$ | NA | $(6,000)$ | OA |

LO 5:

## Show how accounting for supplies affects financial statements.

## 2019 Event 2

## Cato purchases $\$ 800$ of supplies on account.

## Asset Source Transaction

| Balance Sheet |  |  |  |  |  |  | Income Statement |  |  |  |  | Statement of Cash Flows |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets | $=$ | Llab. | + | C. Stk. | $+$ | R. Earn. | Rev. | - | Exp. | $=$ | Net Inc. |  |
| 800 | $=$ | 800 | $+$ | NA | $+$ | NA | NA | - | NA | $=$ | NA | NA |

## 2019 Adj. 1

## After determining through a physical count that it has $\$ 150$ of unused supplies on hand as of December 31, Cato recognizes supplies expense.

| Beginning balance of supplies | 0 |
| :--- | ---: |
| Plus: Supplies purchases | $\underline{800}$ |
| Supplies available for use | 800 |
| Less: Ending balance of supplies | $\underline{(150)}$ |
| Supplies used | $\underline{650}$ |


| Balance Sheet |  |  |  |  |  |  | Income Statement |  |  |  |  | Statement of Cash Flows |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets | $=$ | Llab. | + | C. Stk. | + | R. Earn. | Rev. | - | Exp. | $=$ | Net Inc. |  |
| (650) | $=$ | NA | + | NA | + | (650) | NA | - | 650 | $=$ | (650) | NA |

## LO 6:

## Show how accounting for prepaid items affects financial statements.

## 2019 Event 3

## On March 1, Cato signs a one-year lease agreement and pays $\mathbf{\$ 1 2 , 0 0 0}$ cash in advance to rent office space. The one-year lease term begins March 1.



## 2019 Adj. 2

## Cato recognizes rent expense for the office space used during the accounting period.

| Balance Sheet |  |  |  |  |  | Income Statement |  |  |  |  | Statement of Cash Flows |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets = | Llab. | $+$ | C. Stk. | + | R. Earn. | Rev. | - | Exp. | $=$ | Net Inc. |  |
| $(10,000)=$ | NA | + | NA | $+$ | $(10,000)$ | NA | - | 10,000 | $=$ | $(10,000)$ | NA |

LO 7:

Show how accounting for unearned revenues affects financial statements.

## 2019 Event 4

Cato receives $\mathbf{\$ 1 8 , 0 0 0}$ cash in advance from Westberry Company for consulting services to be performed over a one-year period beginning June 1, 2019.

## Asset Source Transaction

| Balance Sheet |  |  |  |  |  |  | Income Statement |  |  |  |  | Statement of Cash Flows |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Assets | $=$ | Llab. | $+$ | C. Stk. | $+$ | R. Earn. | Rev. | - | Exp. | $=$ | Net Inc. |  |  |
| 18,000 | $=$ | 18,000 | $+$ | NA | + | NA | NA | - | NA | $=$ | NA | 18,000 | OA |

## 2019 Adj. 3

## Cato recognizes the portion of the unearned revenue it earned during the accounting period.



## Other 2019 Events

Event 5: Provided $\$ \mathbf{9 6 , 4 0 0}$ of consulting services on account.
Event 6: Collected $\mathbf{\$ 1 0 5 , 0 0 0}$ cash from customers in partial settlement of its accounts receivable.

Event 7: Paid \$32,000 cash for salary expense.
Event 8: Incurred $\mathbf{\$ 2 1 , 0 0 0}$ of other operating expenses on account.

Event 9: Paid \$18,200 cash in partial settlement of accounts payable.
Event 10: Paid \$79,500 for land it planned to use in the future as a building site for its home office.
Event 11: Paid \$21,000 in cash dividends to its stockholders.
Event 12: Acquired $\$ \mathbf{2 , 0 0 0}$ cash from issuing additional shares of common stock.

Adj. 4: Recognized $\$ 4,000$ of accrued salary expense.

## LO 8:

## Prepare financial statements that include deferrals.

## Preparing Financial Statements - Income Statements

| EXHIBIT 2.7 | Vertical Statements Model <br> CAIO CONSULTANIS <br> Financial Statements <br> Income Statements |
| :--- | :--- | :--- |
|  | For the Years Ended December 31 |

## Preparing Financial Statements - Balance Sheets

|  | Balance Sheets <br> As of December 31 |  |
| :--- | ---: | ---: |
|  | 2018 |  |

## Preparing Financial Statements - Statements of Cash Flows



## LO 9:

## Classify accounting events into one of four categories.

## Recap: Types of Transactions

## The described transactions can be classified into one of four categories:



## End of Chapter 2


[^0]:    *\$36,000 x 9/12 = \$27,000

[^1]:    *\$4,800 x 3/12 = \$1,200

[^2]:    ${ }^{1} 12 / 31$ No entry required for the change in the value of the land.
    ${ }^{2} 12 / 31$ This assumes that part of the cash was invested in an interest-bearing account.
    ${ }^{3} 12 / 31$ a Expired Rent $\$ 6,000 \times 11 / 12=\$ 5,500$.
    ${ }^{4} 12 / 31$ a Unearned Revenue earned $\$ 9,600 \times 6 / 12=\$ 4,800$.

[^3]:    ${ }^{1} \$ 9,000 \times 10 / 12=\$ 7,500$
    ${ }^{2} \$ 6,000 \times 3 / 12=\$ 1,500$
    ${ }^{3} \$ 100+\$ 2,400-\$ 300=\$ 2,200$

