**Chapter One**

**Challenge Exercise 1**

Expands on: E1-7

LO: 4

Wunderkind Photography entered into the following transactions during February 2020.

1. Stockholders invested $5,000 in the business.
2. Bought photography equipment for a cash payment of $1,000.
3. Bought more photography equipment by signing a $500 note payable.
4. Performed photography services for $400 cash.
5. Performed photograph services, and billed the customer $900 on account.
6. Collected $900 from the customer in item 5.
7. Paid for February developing and printing, $150.
8. Advertised the business in the Platteville Journal. The $100 cost will be billed to Wunderkind.
9. Paid the advertising bill from item 8.
10. Paid $200 for photography supplies.
11. Received $300 cash advance payment from a customer for a photography job to be performed in April.
12. Paid $250 dividend to the stockholders.

Instructions:

1. Indicate whether each transaction increases or decreases assets, liabilities, or stockholders’ equity. As an example, item one would be: increase assets and increase stockholders’ equity.
2. Ignoring dollar amounts, explain what transactions 4 and 5 have in common, and how they differ.
3. Ignoring dollar amounts, explain what transactions 7 and 8 have in common, and how they differ.
4. Ignoring dollar amounts, explain what transactions 4 and 11 have in common, and how they differ.

**Challenge Exercise 1 – Solution**

1. 1. Increase assets and increase stockholders’ equity.

2. Increase assets and decrease assets.

3. Increase assets and increase liabilities.

4. Increase assets and increase stockholders’ equity.

5. Increase assets and increase stockholders’ equity.

6. Increase assets and decrease assets.

7. Decrease stockholders’ equity and decrease assets.

8. Decrease stockholders’ equity and increase liabilities.

9. Decrease liabilities and decrease assets.

10. Increase assets and decrease assets.

11. Increase assets and increase liabilities.

12. Decrease stockholders’ equity and decrease assets.

**Challenge Exercise 1 – Solution (Continued)**

B. In both transactions 4 and 5, stockholders’ equity increases because revenue is earned. In addition, in both transactions, assets increase. But cash is the asset increasing in transaction 4, while accounts receivable is the asset increasing in transaction 5.

C. In transactions 7 and 8, stockholders’ equity decreases because an expense is incurred. In item 7, the cash is paid at the time the expense is incurred; in item 8, cash will not be paid until after the expense is incurred.

D. In both transactions 4 and 11, cash is collected from customers for a revenue. In transaction 4, the cash is collected when the work was done for the customer, so the revenue is recorded and stockholders’ equity is increased. In transaction 11, cash is collected before the work is done for the customer, so the firm has an increase in liabilities (they owe the photography work to the customer) instead of an increase in stockholders’ equity.

**Challenge Exercise 2**

Expands on: E1-10

LO: 4

The total assets and liabilities of Robot Company at January 1 and December 31, 2020 are presented below.

**January 1 December 31**

Assets $76,000 $112,000

Liabilities 26,000 28,800

Instructions:

1. Assume dividends of $10,800 were paid and no additional stock was issued during the year. Revenues were $110,000. Compute (a) net income, and (b) expenses.
2. Assume additional stock was issued for $4,800 and no dividends were paid during the year. Expenses were $42,000. Compute (a) net income, and (b) revenues.
3. Assume additional stock was issued for $62,000 and dividends of $15,600 were paid during the year. Compute net income.
4. Assume additional stock was issued for $6,000, and net income was $51,000. Compute dividends paid.

**Challenge Exercise 2 – Solution**

1. a. January 1 stockholders’ equity = $76,000 - $26,000 = $50,000.

December 31 stockholders’ equity = $112,000 - $28,800 = $83,200.

The change in stockholders’ equity = $83,200 - $50,000 = $33,200.

$33,200 = Net income + investments by owners – dividends.

$33,200 = NI + $0 - $10,800.

NI = $44,000.

b. Revenues – expenses = net income.

$110,000 – expenses = $44,000.

Expenses = $66,000.

1. a. January 1 stockholders’ equity = $76,000 - $26,000 = $50,000.

December 31 stockholders’ equity = $112,000 - $28,800 = $83,200.

The change in stockholders’ equity = $83,200 - $50,000 = $33,200.

$33,200 = Net income + investments by owners – dividends.

$33,200 = NI + $4,800 - $0.

NI = $28,400.

b. Revenues – expenses = net income.

Revenues – $42,000 = $28,400.

Revenues = $70,400.

1. January 1 stockholders’ equity = $76,000 - $26,000 = $50,000.

December 31 stockholders’ equity = $112,000 - $28,800 = $83,200.

The change in stockholders’ equity = $83,200 - $50,000 = $33,200.

$33,200 = Net income + investments by owners – dividends.

$33,200 = NI + $62,000 - $15,600.

NI = -$13,200. (a net loss).

1. January 1 stockholders’ equity = $76,000 - $26,000 = $50,000.

December 31 stockholders’ equity = $112,000 - $28,800 = $83,200.

The change in stockholders’ equity = $83,200 - $50,000 = $33,200.

$33,200 = Net income + investments by owners – dividends.

$33,200 = $51,000 + $6,000 - dividends.

Dividends = $23,800.

**Challenge Exercise 3**

Expands on: E1-12, E1-14

LO: 5

Seattle Service had the following financial information at the end of 2020.

**1/1/20** **2020** **12/31/20**

Accounts Payable $15,000

Accounts Receivable 20,000

Advertising Expense $ 1,000

Cash 11,000

Common Stock 15,000

Dividends 9,000

Equipment 33,000

Notes Payable 20,000

Rent Expense 3,500

Retained Earnings $6,000

Salaries and Wages Expense 16,000

Service Revenue 40,000

Utilities Expense 2,500

Instructions:

Prepare a 2020 income statement, 2020 statement of retained earnings, and a 12/31/20 balance sheet for Seattle Service.

**Challenge Exercise 3 – Solution**

**Seattle Service**

**Income Statement**

**For the Year Ended December 31, 2020**

Revenues

Service revenue $40,000

Expenses

Salaries expense $16,000

Rent expense 3,500

Utilities expense 2,500

Advertising expense 1,000 23,000

Net income $17,000

**Seattle Service**

**Retained Earnings Statement**

**For the Year Ended December 31, 2020**

Retained earnings, 1/1/20 $ 6,000

Add: net income 17,000

23,000

Less: dividends 9,000

Retained earnings, 12/31/20 $ 14,000

**Seattle Service**

**Balance Sheet**

**December 31, 2020**

Assets

Cash $11,000

Accounts receivable 20,000

Equipment 33,000

Total assets $64,000

Liabilities

Notes payable $15,000

Accounts payable 20,000

Total liabilities $35,000

Stockholders’ Equity

Common stock 15,000

Retained earnings 14,000

Total stockholders’ equity 29,000

Total liabilities and stockholders’ equity $64,000