# CHAPTER 2 <br> BASIC ACCOUNTING SYSTEMS: CASH BASIS <br> <br> CLASS DISCUSSION QUESTIONS 

 <br> <br> CLASS DISCUSSION QUESTIONS}

1. The basic elements of a financial accounting system include the following: (1) a set of rules for determining what, when, and how much should be recorded;
(2) a framework for preparing financial statements; and (3) one or more controls to determine whether errors may have occurred in the recording process. These elements apply to all businesses, from a local restaurant to Alphabet (Google), Inc. All businesses require a financial reporting system so financial statements can be provided to stakeholders.
2. a. Purchase of land for cash affects only assets.
b. Payment of a liability affects assets and liabilities; receipt of cash for fees earned affects assets and stockholders' equity.
c. Incurring an expense partially paid in cash decreases assets increases liabilities and decreases stockholders' equity (retained earnings). For example, assume a business hires a lawyer for $\$ 10,000$ to draft and file the necessary documents to start and incorporate the business. The business pays the lawyer $\$ 4,000$ and agrees to pay the remaining $\$ 6,000$ over the next several months. This transaction would decrease assets ( $\$ 4,000$ ), increase liabilities $(\$ 6,000)$, and decrease stockholders' equity (retained earnings) $(\$ 10,000)$. The expense is an organizational expense. Likewise, a new business might hire a new chief operating officer by agreeing to pay a nonrefundable, noncancellable signing bonus of $\$ 50,000$, with $\$ 30,000$ due at signing and the remainder due in four installments. This transaction would decrease assets ( $\$ 30,000$ ), increase liabilities ( $\$ 20,000$ ), and decrease stockholders' equity (retained earnings) ( $\$ 50,000$ ). The expense is salary expense or bonus expense.
3. Out of balance. Assets are correct, but retained earnings (utilities expense) should have been decreased by $\$ 1,200$ rather than $\$ 2,100$. Thus, retained earnings is understated by $\$ 900$, and total liabilities plus stockholders' equity would be less than total assets by $\$ 900$.
4. a. Out of balance. Assets are overstated by $\$ 27,000$ ( $\$ 85,000-\$ 58,000$ ), and thus, total assets would exceed total liabilities plus stockholders' equity by $\$ 27,000$.
b. In balance. Even though liabilities and stockholders' equity are incorrect, the accounting equation balances. For this error, liabilities are overstated by $\$ 7,000$, and retained earnings (fees earned) are understated by $\$ 7,000$; thus, the over- and understatements offset each other, and the accounting equation balances.
5. A primary control for determining the accuracy of record keeping is the equality of the accounting equation. The accounting equation must balance.
6. Total assets are increased by $\$ 175,000$ : an increase in cash of \$375,000 and a decrease in land of $\$ 200,000$. Stockholders' equity (retained earnings) is increased by $\$ 175,000$, the gain on the sale of the land.
7. a. The payment of $\$ 15,000$ of dividends decreases total assets (decrease in cash) and decreases stockholders' equity (decrease in retained earnings). Liabilities are not affected.
b. Net income is not affected by the payment of dividends. Dividends are a distribution of income to stockholders and are not an expense.
8. a. The equality of the accounting equation would not be affected. That is, the accounting equation would still balance.
b. On the income statement, total operating expenses (salary expense) would be overstated by $\$ 30,000$, and net income would be understated by $\$ 30,000$. On the statement of stockholders' equity, the beginning and ending retained earnings would be correct. However, net income and dividends would be understated by $\$ 30,000$. These understatements offset one another, and thus, ending retained earnings is correct. The balance sheet is not affected by the error. On the statement of cash flows, net cash flows from
operating activities is understated since cash paid for salary expense is overstated. In addition, net cash flows from financing activities is overstated since cash paid for dividends
is understated. The understatement of net cash flows from operating activities is offset by the overstatement of net cash flows from financing activities, and thus, the net increase or decrease in cash for the period is correct as is the ending cash balance.
9. a. The equality of the accounting equation would not be affected. That is, the accounting equation would still balance.
b. On the income statement, revenues (fees earned) would be overstated by $\$ 75,000$, and net income would be overstated by $\$ 75,000$. On the statement of stockholders' equity, the beginning retained earnings would be correct. However, net income and ending retained earnings would be overstated by $\$ 75,000$. The total assets reported on the balance sheet is correct. However, liabilities (notes payable) are understated by $\$ 75,000$, and stockholders' equity (retained earnings) is overstated by
$\$ 75,000$. The understatement of liabilities is offset by the overstatement of stockholders' equity, and thus, total liabilities and stockholders' equity are correct. On the statement of cash flows, net cash flows from operating activities is overstated since cash received from fees earned is overstated. In addition, net cash flows from financing activities is understated, since cash received from borrowing (notes payable) is understated. The overstatement of net cash flows from operating activities is offset by the understatement of net cash flows from financing activities, and thus, the net increase or decrease in cash for the period is correct, as is the ending cash balance.
10. a. $\$ 350,000(\$ 500,000-\$ 150,000)$
b. Stockholders' equity as of

December 31, 20Y8 ........ \$400,000
Less stockholders' equity as of January 1, 20Y8... 350,000
Net income
\$ 50,000
11. Change in stockholders' equity (see Question 10) ................ \$50,000
Plus dividends ........................... 18,000
Net income ................................ \$68,000

## EXERCISES

E2-1
a. $\$ 950,000(\$ 357,500+\$ 592,500)$
b. $\$ 45,000(\$ 300,000-\$ 255,000)$
c. $\$ 44,325(\$ 56,200-\$ 11,875)$

E2-2
Amounts in millions:
a. $\$ 47,323(\$ 92,033-\$ 44,710)$
b. $\$ 6,075$ increase $(\$ 3,756+\$ 2,319)$
c. Total assets $=\$ 95,789(\$ 92,033+\$ 3,756)$

Total liabilities $=\$ 50,785(\$ 44,710+\$ 6,075)$
Total stockholders' equity $=\$ 45,004$ (\$47,323-\$2,319)
d. Yes. $[\$ 95,789$ (total assets) $=\mathbf{\$ 5 0 , 7 8 5}$ (total liabilities) $\mathbf{+} \mathbf{\$ 4 5 , 0 0 4}$ (total stockholders' equity)]

E2-3
Amounts in millions:
a. $\$ 1,533(\$ 7,837-\$ 6,304)$
b. $\$ 112$ increase $(\$ 223-\$ 111)$
c. Total assets $=\$ 7,726(\$ 7,837-\$ 111)$

Total liabilities = \$6,081 (\$6,304-\$223)
Total stockholders' equity = \$1,645 (\$1,533 + \$112)
d. Yes. $[\$ 7,726$ (total assets) $=\mathbf{\$ 6 , 0 8 1}$ (total liabilities) $\mathbf{+} \mathbf{\$ 1 , 6 4 5}$ (total stockholders' equity)]

## E2-4

(a) $\$ 193,437(\$ 241,272-\$ 47,835)$
(b) $\$ 128,249(\$ 321,686-\$ 193,437)$
(c) $\$ 375,319(\$ 321,686+\$ 53,633)$
(d) $\$ 134,047$ [(\$375,319 - $\$ 241,272)$ or $(\$ 128,249+\$ 5,798)]$
(e) $\$ 244,180$ [ $\$ 221,656+\$ 22,524)$ or $(\$ 257,143-\$ 12,963)]$
(f) $\$ 221,656[(\$ 214,047+\$ 7,609)$ or $(\$ 244,180-\$ 22,524)]$
(g) $\$ 12,963$ [(\$257,143 - \$244,180) or $(\$ 20,572-\$ 7,609)]$
(h) $\$ 20,572(\$ 43,096-\$ 22,524)$
(i) $\$ 214,047(\$ 257,143-\$ 43,096)$

E2-5
a. $\$ 825,000(\$ 1,200,000-\$ 375,000)$
b. $\$ 895,000(\$ 825,000+\$ 150,000-\$ 80,000)$
c. $\$ 525,000(\$ 825,000-\$ 200,000-\$ 100,000)$
d. $\$ 1,300,000(\$ 825,000+\$ 400,000+\$ 75,000)$
e. $\$ 160,000$ net income $(\$ 1,275,000-\$ 290,000-\$ 825,000)$
a. (3) No effect
b. (3) No effect
f. (2) Decrease
c. (1) Increase
g. (2) Decrease
d. (3) No effect
e. (2) Decrease
h. (1) Increase
i. (1) Increase
j. (2) Decrease

E2-7
a. Increases assets and increases stockholders' equity.
b. Decreases assets and decreases stockholders' equity.
c. Increases assets and increases liabilities.
d. Increases assets and increases stockholders' equity.
e. Increases assets and decreases assets.

## E2-8

1. Total assets decreased $\$ 140,000$.
2. Total liabilities decreased $\$ 300,000$.
3. Stockholders' equity increased $\$ 160,000$.

E2-9

1. (a) increase
2. (a) increase
3. (b) decrease
4. (b) decrease
5. (b) decrease
6. (c)
7. (a)
8. (e)
9. (e)
10. (e)
11. (e)
12. (c)
13. (e)
14. (b)

E2-11
a. (1) Provided catering services for cash, $\$ \mathbf{2 8 , 0 0 0}$.
(2) Purchased land for cash, \$20,000.
(3) Paid expenses, $\$ 18,000$.
(4) Paid cash as dividends, $\$ 1,000$.
b. $\$ 11,000(\$ 40,000-\$ 29,000)$
c. $\$ 9,000(\$ 109,000-\$ 100,000)$
d. $\$ 10,000(\$ 28,000-\$ 18,000)$
e. $\$ 9,000(\$ 10,000-\$ 1,000)$
f. $\$ 10,000(\$ 28,000-\$ 18,000)$
g. $\$ 20,000$ used for purchase of land
h. $\$ 1,000$ used for payment of dividends

E2-12
It would be incorrect to say the business incurred a net loss of $\$ 8,000$. The excess of the dividends over the net income for the period is a decrease in the amount of retained earnings in the corporation.
Company Sierra
Stockholders' equity at end of year (\$770,000 - \$294,000) ..... \$ 476,000
Deduct stockholders' equity at beginning of year(\$490,000 - \$175,000)$(315,000)$
Net income (increase in stockholders' equity) ..... \$ 161,000
Company Tango
Increase in stockholders' equity (as determined for Sierra) ..... \$ 161,000
Add dividends ..... 55,000
Net income ..... \$ 216,000
Company Yankee
Increase in stockholders' equity (as determined for Sierra) ..... \$ 161,000
Deduct issuance of additional common stock ..... (75,000)
Net income ..... \$86,000
Company Zulu
Increase in stockholders' equity (as determined for Sierra) ..... \$ 161,000
Deduct issuance of additional common stock ..... $(75,000)$Add dividends\$ 86,00055,000
Net income ..... \$141,000

## E2-14

In each case, solve for a single unknown, using the following equation:
Stockholders' Equity (beginning) + Issuance of Common Stock - Dividends + Revenues - Expenses = Stockholders' Equity (ending)
Carbon: Stockholders' equity at end of year (\$495,000 - \$160,000) ... ..... \$ 335,000
Deduct stockholders' equity at beginning of year (\$333,000-\$118,000) ..... $(215,000)$
Increase in stockholders' equity ..... \$ 120,000
Deduct increase due to net income (\$90,000-\$39,000) ..... $(51,000)$
\$ 69,000
Add dividends
7,500
Additional issuance of common stock (a) $\$ 76,500$
Krypton: Stockholders' equity at end of year (\$350,000 - \$110,000) ..... \$ 240,000
Deduct stockholders' equity at beginning of year(\$250,000-\$130,000)
$\qquad$$(120,000)$
Increase in stockholders' equity ..... \$ 120,000
Add dividends ..... 16,000
Deduct additional issuance of common stock\$ 136,000
Increase due to net income ..... \$ 86,000$(50,000)$
Add expenses
Revenue (b) $\$ 150,000$
Fluorine: Stockholders' equity at end of year (\$90,000 - \$80,000) ..... \$ 10,000
Deduct stockholders' equity at beginning of year (\$100,000-\$76,000) ..... $(24,000)$
Decrease in stockholders' equity ..... \$ $(14,000)$ ..... \$ $(14,000)$
Add decrease due to net loss (\$115,000 - \$122,500) ..... 7,500
$(6,500)$
Deduct additional issuance of common stock ..... $(10,000)$
Dividends (c) $\$(16,500)$
Radium: Stockholders' equity at end of year (\$248,000 - \$136,000) .. ..... \$ 112,000
Add decrease due to net loss (\$112,000 - \$128,000) ..... 16,000Add dividends60,000
\$ 188,000
Deduct additional issuance of common stock ..... $(40,000)$
Stockholders' equity at beginning of year ..... \$ 148,000
Add liabilities at beginning of year. ..... 120,000
Assets at beginning of year (d) \$268,000

## E2-15

## Amounts in millions:

a. $\$(9,186)=\$ 18,412-\$ 27,598$
b. $\$(5,568)=-\$ 164-\$ 15,386+\$ 9,982$

E2-16
a.

## ABBY'S INTERIORS Balance Sheet October 31, 20 Y 6

| Assets |  |  |
| :---: | :---: | :---: |
| Cash. |  | \$ 50,000 |
| Land. |  | 500,000 |
| Total assets.......................................................... |  | \$550,000 |
| Liabilities |  |  |
| Notes payable ........................................................ |  | \$200,000 |
| Stockholders' Equity |  |  |
| Common stock...................................................... | \$ 75,000 |  |
| Retained earnings .................................................. | $\underline{\mathbf{2 7 5 , 0 0 0}}{ }^{*}$ |  |
| Total stockholders' equity ....................................... |  | 350,000 |
| Total liabilities and stockholders' equity.................... |  | \$550,000 |

*\$550,000 - \$200,000 - \$75,000 = \$275,000

## E2-16, Concluded

ABBY'S INTERIORS
Balance Sheet
November 30, 20 Y 6

| Assets |  |  |
| :---: | :---: | :---: |
| Cash |  | \$ 175,000 |
| Land............................................................... |  | 575,000 |
| Total assets ....................................................... |  | \$ 750,000 |
| Liabilities |  |  |
| Notes payable.. |  | \$ 250,000 |
| Stockholders' Equity |  |  |
| Common stock | \$ 90,000 |  |
| Retained earnings. | 410,000* |  |
| Total stockholders' equity. |  | 500,000 |
| Total liabilities and stockholders' equity ..... |  | \$ 750,000 |
| * \$750,000-\$250,000-\$90,000 = \$410,000 |  |  |
| Retained earnings, November 30, 20 Y 6 |  | \$ 410,000 |
| Less retained earnings, October 31, $20 Y 6$... |  | (275,000) |
| Increase in retained earnings................... | ...... | \$ 135,000 |
| Add dividends. |  | 12,000 |
| Net income.. |  | \$147,000 |

c. Net cash flows from operating activities $=\$ 147,000$ (The same as net income using the cash basis.)
d. $\$(75,000)$ used for the increase in the land (Cash flows from investing activities equal the change in the land account.)
e. $\$ 53,000$ (Cash flows from financing activities equal the increase in common stock of $\$ 15,000$ plus the increase in notes payable of $\$ 50,000$ minus the dividends paid of $\$ 12,000$.)
f. $\$ 125,000[(\$ 175,000-\$ 50,000)$ or $(\$ 147,000-\$ 75,000+\$ 53,000)]$

# WEST COAST DREAMS REALTY INC. Income Statement 

## For the Month Ended June 30, 20 Y9

| Revenues: |  |  |  |
| :---: | :---: | :---: | :---: |
| Sales commissions .................................................. |  |  | \$180,000 |
| Expenses: |  |  |  |
| Salaries expense |  | ... \$100,000 |  |
| Utilities expense |  | 20,000 |  |
| Rent expense |  | ... 16,000 |  |
| Interest expense |  | 600 |  |
| Miscellaneous expense. |  | ... 3,400 |  |
| Total expenses |  |  | (140,000) |
| Net income |  |  | \$40,000 |
| E2-18 |  |  |  |
| WEST COAST DREAMS REALTY INC. <br> Statement of Stockholders' Equity For the Month Ended June 30, 20 Y9 |  |  |  |
|  | Common Stock | Retained Earnings | Total |
| Balances, June 1, $20 Y 9$................. | \$ 0 | \$ 0 | \$ 0 |
| Issued common stock .................. | 150,000 |  | 150,000 |
| Net income |  | 40,000 | 40,000 |
| Dividends..................................... |  | $(4,000)$ | $(4,000)$ |
| Balances, June 30, $20 Y 9$............... | \$150,000 | \$36,000 | \$186,000 |


| E2-19 |  |  |
| :---: | :---: | :---: |
| WEST COAST DREAMS REALTY INC. <br> Balance Sheet June 30, 20 Y 9 |  |  |
| Assets |  |  |
| Cash |  | \$ 86,000 |
| Land. |  | 200,000 |
| Total assets |  | \$286,000 |
| Liabilities |  |  |
| Notes payable |  | \$100,000 |
| Stockholders' Equity |  |  |
| Common stock. | \$150,000 |  |
| Retained earnings ......................................................... | 36,000 |  |
| Total stockholders' equity .............................................. |  | 186,000 |
| Total liabilities and stockholders' equity......................... |  | \$286,000 |
| E2-20 |  |  |
| WEST COAST DREAMS REALTY INC. <br> Statement of Cash Flows <br> For the Month Ended June 30, $20 Y 9$ |  |  |
| Cash flows from (used for) operating activities: |  |  |
| Cash received from operating activities ..................... | \$180,000 |  |
| Cash paid for operating activities.............................. | (140,000) |  |
| Net cash flows from operating activities..................... |  | \$ 40,000 |
| Cash flows from (used for) investing activities: |  |  |
| Cash flows from (used for) financing activities: |  |  |
| Cash received from issuing common stock ................ | \$150,000 |  |
| Cash received from issuing notes payable................. | 100,000 |  |
| Cash paid as dividends ............................................. | $(4,000)$ |  |
| Net cash flows from financing activities ..................... |  | 246,000 |
| Net increase in cash during June ................................... |  | \$86,000 |
| Cash as of June 1, 20Y9................................................. |  | 0 |
| Cash as of June 30, 20Y9............................................... |  | \$86,000 |

a. Decrease in assets and decrease in stockholders' equity.
b. Increase in assets and decrease in assets.
c. Increase in assets and increase in stockholders' equity.
d. Increase in assets and increase in liabilities.
e. Increase in assets and increase in stockholders' equity.
f. Decrease in assets and decrease in stockholders' equity.
g. Decrease in assets and decrease in stockholders' equity.
h. Increase in assets, decrease in assets, and increase in stockholders' equity.
i. Decrease in assets and decrease in stockholders' equity.
j. Decrease in assets and decrease in stockholders' equity.
k. Decrease in assets and decrease in liabilities.
I. Decrease in assets and decrease in stockholders' equity.

E2-22
a. operating section
b. investing section
c. financing section
d. financing section
e. operating section
f. operating section
g. operating section
h. investing section
i. operating section
j. operating section
k. financing section
I. financing section

## PROBLEMS

## P2-1

1. 


2. Stockholders' equity is the right of stockholders to the assets of the business. These rights are increased by stockholders' investments and revenues and decreased by dividends and expenses.

## P2-1, Continued

3. 

SMITH INSURANCE INC. Income Statement For the Month Ended July 31, 20 Y5

Revenues:
Fees earned ............................................................... $\$ 15,000$

Expenses:
Salary expense ........................................................... \$3,250
Rent expense ............................................................. 2,500
Auto expense............................................................ 1,250
Interest expense........................................................ 250
Miscellaneous expense .............................................. 500
Total expenses
$(7,750)$
Net income
$\$ 7,250$

SMITH INSURANCE INC. Statement of Stockholders' Equity For the Month Ended July 31, 20Y5

|  | Common Stock | Retained Earnings | Total |
| :---: | :---: | :---: | :---: |
| Balances, July 1, $20 Y 5$.......... | \$ 0 | \$ 0 | \$ |
| Issued common stock. | 30,000 |  | 30,000 |
| Net income |  | 7,250 | 7,250 |
| Dividends |  | $(1,500)$ | $(1,500)$ |
| Balances, July 31, 20 Y5 .......... | \$30,000 | \$ 5,750 | \$35,750 |

4. 

SMITH INSURANCE INC. Balance Sheet July 31, $20 Y 5$

## Assets

Cash............................................................................. \$25,750
Land............................................................................. 60,000
Total assets.................................................................. $\underline{\text { \$85,750 }}$

## Liabilities

Notes payable ............................................................... $\$ 50,000$
Stockholders' Equity
Common stock................................................................ \$30,000
Retained earnings ......................................................... 5 5,750
Total stockholders' equity
Total liabilities and stockholders' equity....................... $\underline{\underline{\$ 85,750}}$

## P2-1, Concluded

5. 

SMITH INSURANCE INC.
Statement of Cash Flows
For the Month Ended July 31, 20 Y5
Cash flows from (used for) operating activities:

Cash received from operating activities
$\qquad$ ..... \$15,000Cash paid for operating activities
$\qquad$Net cash flows from operating activities$(7,750)$
$\qquad$
Cash flows from (used for) investing activities:Cash paid for land
$\qquad$Cash flows from (used for) financing activities:Cash received from issuing common stock.\$30,000
Cash received from issuing note payable ..... 50,000Cash paid as dividends
$\qquad$$(1,500)$
Net cash flows from financing activities
$\qquad$Net increase in cash during July78,500\$25,750
Cash as of July 1, 20 Y 50
Cash as of July 31, 20 Y5\$25,750

# RESTART TECHNOLOGY SERVICES Income Statement 

For the Month Ended August 31, $20 Y 4$
Fees earned ..... \$54,000
Operating expenses:Salaries expense\$9,200
Rent expense ..... 5,000
Automobile expense ..... 2,400
Miscellaneous expense ..... 1,400Total operating expenses$(18,000)$
Net income\$36,000

|  | Common Stock | Retained Earnings | Total |
| :---: | :---: | :---: | :---: |
| Balances, Aug. 1, $20 Y 4$....... | \$ 0 | \$ | \$ 0 |
| Issued common stock. | 50,000 |  | 50,000 |
| Net income |  | 36,000 | 36,000 |
| Dividends |  | $(6,000)$ | (6,000) |
| Balances, Aug. 31, $20 Y 4$.... | \$50,000 | \$30,000 | \$80,000 |

3. 

RESTART TECHNOLOGY SERVICES Balance Sheet August 31, $20 Y 4$

Assets

| Cash. | \$ 20,000 |
| :---: | :---: |
| Land. | 80,000 |
| Total assets. | \$100,000 |
| Liabilities |  |
| Notes payable ........................................................ | \$ 20,000 |

Stockholders' Equity
Common stock................................................................ \$50,000
Retained earnings 30,000
Total stockholders' equity 80,000
Total liabilities and stockholders' equity
\$100,000

## RESTART TECHNOLOGY SERVICES Statement of Cash Flows

For the Month Ended August 31, 20 Y4
Cash flows from (used for) operating activities:Cash received from operating activities\$54,000
Cash paid for operating activities ..... $(18,000)$
Net cash flows from operating activities ..... \$ 36,000
Cash flows from (used for) investing activities:
Cash paid for land ..... $(80,000)$
Cash flows from (used for) financing activities:
Cash received from issuing common stock ..... \$50,000
Cash received from issuing notes payable ..... 20,000
Cash paid as dividends ..... $(6,000)$
Net cash flows from financing activities ..... 64,000
Net increase in cash during August ..... \$20,000
Cash as of August 1, 20 Y4 ..... 0Cash as of August 31, 20 Y4\$20,000

Revenues:
Fees earned ............................................................... $\$ 124,000$

Expenses:
Salaries expense ....................................................... \$54,400
Utilities expense........................................................ 17,000
Rent expense............................................................ 14,000
Taxes expense.......................................................... 8,600
Interest expense......................................................... 960
Miscellaneous expense ............................................ 2,040
Total expenses ......................................................
$(97,000)$
Net income
\$ 27,000
2.

DUST, SWEEP, REPEAT SERVICES, INC.
Statement of Stockholders' Equity
For the Year Ended December 31, 20 Y7

|  | Common Stock | Retained Earnings | Total |
| :---: | :---: | :---: | :---: |
| Balances, Jan. 1, 20 Y7 ............. | \$ 0 | \$ 0 | \$ 0 |
| Issued common stock.............. | 15,000 |  | 15,000 |
| Net income |  | 27,000 | 27,000 |
| Dividends |  | $(3,000)$ | $(3,000)$ |
| Balances, Dec. 31, $20 Y 7$........... | \$15,000 | \$24,000 | \$39,000 |

## P2-3, Concluded

## 3.

DUST, SWEEP, REPEAT SERVICES, INC.
Balance Sheet
December 31, $20 Y 7$

| Assets |  |  |
| :---: | :---: | :---: |
| Cash |  | \$12,000 |
| Land......................................................................... |  | 43,000 |
| Total assets ............................................................. |  | \$55,000 |
| Liabilities |  |  |
| Notes payable.......................................................... |  | \$16,000 |
| Stockholders' Equity |  |  |
| Common stock | \$15,000 |  |
| Retained earnings .................................................... | 24,000 |  |
| Total stockholders' equity ........................................ |  | 39,000 |
| Total liabilities and stockholders' equity .................... |  | \$55,000 |

4. DUST, SWEEP, REPEAT SERVICES, INC.
Statement of Cash Flows For the Year Ended December 31, 20 Y7
Cash flows from (used for) operating activities:
Cash received from operating activities ..... \$124,000
Cash paid for operating activities ..... $(97,000)$
Net cash flows from operating activities ..... \$ 27,000
Cash flows from (used for) investing activities: Cash paid for land ..... $(43,000)$
Cash flows from (used for) financing activities:Cash received from issuing common stock\$ 15,000
Cash received from issuing notes payable ..... 16,000
Cash paid as dividends ..... $(3,000)$
Net cash flows from financing activities ..... 28,000
Net increase in cash during the year ..... \$ 12,000
Cash as of January 1, 20 Y7 ..... 0
Cash as of December 31, 20 Y7\$12,000

Revenues:
Fees earned ............................................................... $\$ 443,000$

Expenses:
Salaries expense ....................................................... \$190,000
Utilities expense........................................................ 60,000
Rent expense............................................................. 50,000
Taxes expense.......................................................... 32,500
Interest expense ......................................................... 3,600
Miscellaneous expense ............................................. 6,900
Total expenses
$(343,000)$
Net income
\$100,000
2.

DUST, SWEEP, REPEAT SERVICES, INC.
Statement of Stockholders' Equity For the Year Ended December 31, 20 Y8

|  | Common Stock | Retained Earnings | Total |
| :---: | :---: | :---: | :---: |
| Balances, Jan. 1, $20 Y 8$............. | \$15,000 | \$ 24,000 | \$ 39,000 |
| Issued common stock............ | 40,000* |  | 40,000 |
| Net income |  | 100,000 | 100,000 |
| Dividends |  | $(25,000)$ | $(25,000)$ |
| Balances, Dec. 31, 20Y8........ | \$55,000 | \$ 99,000 | \$154,000 |

*\$55,000 - \$15,000 = \$40,000

## 3.

DUST, SWEEP, REPEAT SERVICES, INC.
Balance Sheet
December 31, 20 Y8

| Assets |  |  |
| :---: | :---: | :---: |
| Cash |  | \$ 44,000* |
| Land. |  | 170,000 |
| Total assets |  | \$214,000 |
| Liabilities |  |  |
| Notes payable.......................................................... |  | \$ 60,000 |
| Stockholders' Equity |  |  |
| Common stock ......................................................... | \$55,000 |  |
| Retained earnings ..................................................... | 99,000 |  |
| Total stockholders' equity ........................................ |  | 154,000 |
| Total liabilities and stockholders' equity ..................... |  | \$214,000 |
| * $\mathbf{2 1 4 , 0 0 0 - \$ 1 7 0 , 0 0 0 ~ = ~ \$ 4 4 , 0 0 0 ~}$ |  |  |

4. 

DUST, SWEEP, REPEAT SERVICES, INC.
Statement of Cash Flows
For the Year Ended December 31, 20 Y8
Cash flows from (used for) operating activities:
Cash received from operating activities .................. \$443,000
Cash paid for operating activities ........................... (343,000)
Net cash flows from operating activities..
Cash flows from (used for) investing activities:
Cash paid for land.
$(127,000) *$
Cash flows from (used for) financing activities:
Cash received from issuing common stock
\$ 40,000
Cash received from issuing notes payable 44,000**
Cash paid for dividends $(25,000)$
Net cash flows from financing activities
Net increase in cash during the year
59,000
Cash as of Jan. 1, 20 Y8.
\$ 32,000
Cash as of Dec. 31, 20 Y8
12,000
*\$170,000 - \$43,000 = \$127,000
** $\mathbf{6 0 , 0 0 0 - \$ 1 6 , 0 0 0 = \$ 4 4 , 0 0 0}$

## P2-5

a. $\$ 125,000$ (Net income for December of $\$ 57,500$ plus total operating expenses of $\$ 67,500$; also, the amount of cash received from customers on the statement of cash flows.)
b. $\$ 10,620(\$ 67,500-\$ 33,120-\$ 18,000-\$ 1,800-\$ 3,960)$
c. $\$ 57,500(\$ 125,000-\$ 67,500)$; also, see the net income for December on the statement of stockholders' equity.
d. $\$ 0$ (There is no beginning retained earnings since December was the first month of operations.)
e. $\$ 12,000$ (See the cash dividends on the statement of cash flows.)
f. $\$ 45,500(\$ 57,500-\$ 12,000)$
g. $\$ 120,500(\$ 75,000+\$ 45,500)$ or $(\$ 0+\$ 75,000+\$ 57,500-\$ 12,000)$
h. $\$ 50,500(\$ 225,500-\$ 175,000)$
i. $\$ 75,000$ (See the cash received from common stock on the statement of cash flows.)
j. $\quad \$ 45,500$ (the same as f)
k. $\$ 120,500(\$ 75,000+\$ 45,500)$ or $(i+j)$ or the same as $g$
I. $\$ 225,500(\$ 105,000+\$ 120,500)$; also the same as total assets.
m. $\$ 57,500(\$ 125,000-\$ 67,500)$ or the same as $c$
n. $\$ 105,000$ (See notes payable on the balance sheet.)
o. $\$ 168,000(\$ 180,000-\$ 12,000)$
p. $\$ 50,500(\$ 57,500-\$ 175,000+\$ 168,000)$
q. $\$ 0$ (December was the first month of operations.)
r. $\$ 50,500(\$ 50,500+\$ 0)$ or the same as $h$

1. a. All financial statements should contain the name of the business in their heading. The statement of stockholders' equity is incorrectly headed as "Angela Griffin" rather than Alpine Realty, Inc. The heading of the balance sheet needs the name of the business.
b. The income statement, statement of stockholders' equity, and statement of cash flows cover a period of time and should be labeled "For the Month Ended July 31, 20Y8."
c. The year in the heading for the statement of stockholders' equity should be 20 Y 8 rather than 20 Y 7.
d. The balance sheet should be labeled as of "July 31, 20Y8," rather than "For the Month Ended July 31, 20Y7."
e. On the income statement, the dividends should not be listed as an operating expense but should be included in the statement of stockholders' equity.
f. On the income statement, the total operating expenses include dividends of $\$ 2,000$, resulting in an incorrect net income amount. This also affects the statement of stockholders' equity and the amount of retained earnings that appears on the balance sheet.
g. On the statement of stockholders' equity, a column for common stock should be included along with a total column. In addition, dividends should be subtracted from net income to arrive at retained earnings as of July 31, $20 Y 8$.
h. Notes payable should be listed as a liability on the balance sheet.
i. Land should be listed as an asset on the balance sheet.
j. The balance sheet assets should equal the sum of the liabilities and stockholders' equity.
k. The cash payments for operating expenses have been omitted from the operating activities section of the statement of cash flows.
I. The cash flows from financing activities should not include retained earnings. In addition, the financing activities section should include cash received from issuing common stock and notes payable. Also, the cash paid as dividends should be included as a deduction to arrive at net cash flows from financing activities.

## P2-6, Continued

m . Since this is Alpine Realty's first month of operations, the net increase in cash for July on the statement of cash flows should equal \$32,000, the cash balance as of July 31, 20 Y8.
2. Corrected financial statements appear as follows:

ALPINE REALTY, INC.
Income Statement
For the Month Ended July 31, 20 Y8

| Sales commissions |  | \$60,000 |
| :---: | :---: | :---: |
| Operating expenses: |  |  |
| Office salaries expense ........................................ | \$20,000 |  |
| Rent expense. | 6,000 |  |
| Automobile expense | 3,500 |  |
| Miscellaneous expense ........................................ | 1,500 |  |
| Total operating expenses................................. |  | $(31,000)$ |
| Net income . |  | \$29,000 |

ALPINE REALTY, INC.
Statement of Stockholders' Equity For the Month Ended July 31, 20 Y8

|  | Common Stock | Retained Earnings | Total |
| :---: | :---: | :---: | :---: |
| Balances, July 1, 20 Y8 ............. | \$ 0 | \$ 0 | \$ 0 |
| Issued common stock.............. | 15,000 |  | 15,000 |
| Net income |  | 29,000 | 29,000 |
| Dividends |  | $(2,000)$ | (2,000) |
| Balances, July 31, 20 Y8 ........... | \$15,000 | \$27,000 | \$42,000 |

ALPINE REALTY, INC. Balance Sheet July 31, 20Y8

| Assets |  |  |
| :---: | :---: | :---: |
| Cash |  | \$32,000 |
| Land. |  | 30,000 |
| Total assets |  | \$62,000 |
| Liabilities |  |  |
| Notes payable.......................................................... |  | \$20,000 |
| Stockholders' Equity |  |  |
| Common stock | \$15,000 |  |
| Retained earnings .................................................... | 27,000 |  |
| Total stockholders' equity......................................... |  | 42,000 |
| Total liabilities and stockholders' equity .................... |  | \$62,000 |

## ALPINE REALTY, INC. Statement of Cash Flows For the Month Ended July 31, 20 Y8

Cash flows from (used for) operating activities:Cash received from sales commissions\$60,000
Cash paid for operating expenses ..... $(31,000)$
Net cash flows from operating activities ..... \$ 29,000
Cash flows from (used for) investing activities:
Cash paid for land ..... $(30,000)$
Cash flows from (used for) financing activities:\$15,000Cash received from issuing notes payable20,000
Cash paid as dividends ..... $(2,000)$
Net cash flows from financing activities ..... 33,000
Net increase in cash during July ..... \$32,000
Cash as of July 1, 20 Y8 ..... 0
Cash as of July 31, $20 Y 8$
$\qquad$\$32,000

## METRIC-BASED ANALYSIS

MBA 2-1

| Transaction | Transaction Metric Effects |  |  |
| :---: | :---: | :---: | :---: |
|  | Liquidity Cash | Net Incom | ity <br> ash Basis |
| a. Issued stock | \$ 30,000 | No Effect | - |
| b. Issued note pay. | 50,000 | No Effect | - |
| c. Earned fees | 15,000 | Increase | \$15,000 |
| d. Paid rent expense | $(2,500)$ | Decrease | $(2,500)$ |
| e. Paid expenses | $(1,750)$ | Decrease | $(1,750)$ |
| f. Paid salaries | $(3,250)$ | Decrease | $(3,250)$ |
| g. Paid interest | (250) | Decrease | (250) |
| h. Purchased land | $(60,000)$ | No Effect | - |
| i. Paid dividends | $(1,500)$ | No Effect | - |
| Total | \$ 25,750 |  | \$ 7,250 |

MBA 2-2

| Transaction | Transaction Metric Effects |  |  |
| :---: | :---: | :---: | :---: |
|  | Liquidity Cash | Net Incom | ity <br> ash Basis |
| a. Issued stock | \$50,000 | No Effect | - |
| b. Earned fees | 54,000 | Increase | \$54,000 |
| c. Paid rent expense | $(5,000)$ | Decrease | $(5,000)$ |
| d. Issued note pay. | 20,000 | No Effect | - |
| e. Purchased land | $(80,000)$ | No Effect | - |
| f. Paid expenses | $(3,800)$ | Decrease | $(3,800)$ |
| g. Paid salaries | $(9,200)$ | Decrease | $(9,200)$ |
| h. Paid dividends | $(6,000)$ | No Effect | - |
| Total | \$20,000 |  | \$36,000 |

## MBA 2-3

1. 

|  | Year 1 | Year 2 | Increase (Decrease) |
| :---: | :---: | :---: | :---: |
| Revenue. | 100.0\% | 100.0\% | n/a |
| Operating expenses: |  |  |  |
| Fuel. | (12.9)\% | (13.9)\% | 1.0\% |
| Aircraft related | (24.8) | (25.7) | 0.9 |
| Selling and general........................... | (39.8) | (40.1) | 0.3 |
| Other expenses................................ | (5.0) | (5.5) | 0.5 |
| Total operating expenses. | (82.5)\% | (85.2)\% | 2.7\% |
| Operating income | 17.5\% | 14.8\% | (2.7) \% |

2. Delta's operating income as a percent of revenue decreased $2.7 \%$ from $17.5 \%$ in Year 1 to 14.8\% in Year 2. Fuel expenses increased 1.0\% from 12.9\% in Year 1 to $13.9 \%$ in Year 2. Aircraft related expenses such as landing fees, maintenance, and depreciation increased 0.9\% from 24.8\% in Year 1 to 25.7\% in Year 2. Selling and general expenses increased $0.3 \%$ and other expenses increased $0.5 \%$. Overall, it appears that increasing fuel and aircraft related costs were the primary cause of the decrease in operating income.

MBA 2-4
1.

|  | Year 1 | Year 2 | Increase (Decrease) |
| :---: | :---: | :---: | :---: |
| Revenue | 100.0\% | 100.0\% | n/a |
| Operating expenses: |  |  |  |
| Fuel. | (17.9)\% | (18.6)\% | 0.7\% |
| Aircraft related ................................. | (18.1) | (17.5) | (0.6) |
| Selling and general .......................... | (33.3) | (34.6) | 1.3 |
| Other expenses | (12.3) | (12.7) | 0.4 |
| Total operating expenses ............ | (81.6)\% | (83.4)\% | 1.8\% |
| Operating income................................. | 18.4\% | 16.6\% | (1.8)\% |

2. Southwest's operating income decreased $1.8 \%$ as a percent of revenue from $18.4 \%$ in Year 1 to $16.6 \%$ in Year 2. The decrease was caused primarily by an increase of $1.3 \%$ in selling and general expenses and an increase in fuel expenses of $0.7 \%$. These increases were offset by a decrease in aircraft related expenses, such as landing fees and maintenance costs, of $0.6 \%$.

## MBA 2-5

Southwest's operating income as a percent of revenue decreased by $1.8 \%$ compared to Delta's decrease of $2.7 \%$. The difference in operating results does not appear to be attributable to one item in particular. Southwest's increase in selling and general expenses of $1.3 \%$ was the major contributing factor to its percentage decrease in operating income. Delta's increase in fuel and aircraft-related expenses of $\mathbf{2 . 0 \%}$ was the major contributing factor to its decrease in operating income.

## MBA 2-6

1. 

|  | Year 1 | Year 2 | Increase (Decrease) |
| :---: | :---: | :---: | :---: |
| Sales | 100.0\% | 100.0\% | n/a |
| Cost of goods sold ............................... | (63.5) | (61.1) | (2.4)\% |
| Gross profit | 36.5\% | 38.9\% | 2.4\% |
| Selling and administrative expenses ...... | (25.8) | (23.8) | (2.0) |
| Operating income .................................. | 10.7\% | 15.1\% | 4.4\% |

2. Kellogg's operating income as a percent of sales increased by $4.4 \%$ from $10.7 \%$ to $15.1 \%$. This increase was caused by the decrease in cost of goods sold of $2.4 \%$ and the decrease in selling and administrative expenses of $\mathbf{2 . 0 \%}$ as a percentage of sales.

MBA 2-7
1.

|  | Year 1 | Year 2 | Increase (Decrease) |
| :---: | :---: | :---: | :---: |
| Sales | 100.0\% | 100.0\% | n/a |
| Cost of goods sold ............................... | (64.4) | (65.5) | 1.1\% |
| Gross profit .......................................... | 35.6\% | 34.5\% | (1.1)\% |
| Selling and administrative expenses ...... | (17.9) | (17.5) | (0.4) |
| Operating income ................................. | 17.7\% | 17.0\% | (0.7)\% |

2. General Mills' operating income as a percent of sales decreased by $0.7 \%$ from $17.7 \%$ to $17.0 \%$. This decrease was caused by the increase in cost of goods sold of $1.1 \%$, which was only partially offset by the decrease in selling and administrative expenses of $0.4 \%$.

## MBA 2-8

In Year 1, Kellogg's operating income as a percent of sales was $10.7 \%$ compared to General Mills' 17.7\%. In Year 2, Kellogg's operating income as a percentage of sales increased by 4.4\%; however, General Mills' income as a percentage of sales decreased by $0.7 \%$. This difference was caused by Kellogg's decrease of 2.4\% in cost of goods sold compared to General Mills' increase of $1.1 \%$ in cost of goods sold. In Year 2, Kellogg's selling and administrative expenses decreased by 2.0\% compared to General Mills' decrease of $0.4 \%$. Thus, Kellogg's Year 2 operating performance has improved relative to General Mills' operating performance.
1.

|  | Year 1 | Year 2 | Increase (Decrease) |
| :---: | :---: | :---: | :---: |
| Current assets: |  |  |  |
| Cash. | 6.4\% | 5.4\% | (1.0)\% |
| Marketable securities | 14.5 | 14.4 | (0.1) |
| Accounts receivable. | 4.9 | 4.8 | (0.1) |
| Inventory | 0.6 | 1.3 | 0.7 |
| Other | 6.8 | 8.4 | 1.7 |
| Total current assets | 33.2\% | 34.3\% | 1.1\% |
| Long-term assets: |  |  |  |
| Long-term marketable securities | 53.0\% | 51.9\% | (1.1)\% |
| Property, plant, and equipment | 8.4 | 9.0 | 0.6 |
| Other long-term assets ............................ | 5.4 | 4.8 | (0.6) |
| Total long-term assets | 66.8\% | 65.7\% | (1.1)\% |
| Total assets | 100.0\% | 100.0\% |  |
| Current liabilities: |  |  |  |
| Accounts payable and similar liabilities.... | 11.6\% | 13.1\% | 1.5\% |
| Current portion of long-term debt............. | 1.1 | 1.7 | 0.6 |
| Other...................................................... | 11.9 | 12.1 | 0.2 |
| Total current liabilities | 24.6\% | 26.9\% | 2.3\% |
| Long-term liabilities | 35.6 | 37.4 | 1.8 |
| Total liabilities. | 60.2\% | 64.3\% | 4.1\% |
| Stockholders' equity: |  |  |  |
| Common stock. | 9.7\% | 9.5\% | (0.2)\% |
| Retained earnings | 29.9 | 26.2 | (3.7) |
| Other items. | 0.2 | 0.0 | (0.2) |
| Total stockholders' equity | 39.8\% | 35.7\% | (4.1)\% |
| Total liabilities and stockholders' equity ........ | 100.0\% | 100.0 \% |  |

2. Apple's current assets as a percent of total assets increased slightly by $1.1 \%$ from $33.2 \%$ to $34.3 \%$ with other current assets increasing the most by $1.7 \%$. At the same time, long-term assets declined by 1.1\%. Apple's total liabilities increased by $4.1 \%$ from $60.2 \%$ to $64.3 \%$ with long-term liabilities increasing the most by $1.8 \%$. This is explained by Apple issuing over $\$ 21$ billion in longterm notes during Year 2.

## CASES

## Case 2-1

1. From our discussions in Chapter 1, the two possible business emphases that could be used are low-cost emphasis and premium-price emphasis.
2. Real-world examples of each emphasis are as follows:

Low-cost emphasis: SteinMart, Walmart, Kmart, Costco Premium-price emphasis: GAP, The Limited, Talbots
3. The answers will vary among the student groups. Normally, venture capital firms demand a large percentage of ownership, which may be the majority (over 50\%) ownership.

## Case 2-2

Dr. Turner's comment is not correct. The difference in the cash balance of $\$ 55,000(\$ 100,000-\$ 45,000)$ represents the net result of operating, investing, and financing cash activities. To determine the profit, the effects of Dr. Turner's investing and financing activities would also need to be considered. For example, Dr. Turner might have invested in buildings, land, computer equipment, or software programs that would be classified as investing activities. Also, Dr. Turner may have borrowed cash from a bank or withdrawn cash from SickCo as dividends.

|  | Year 1 | Year 2 | Year 3 |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Net cash flows from operating activities | negative | positive | positive |
| Net cash flows from investing activities | negative | negative | negative |  |
| Net cash flows from financing activities | positive | positive | positive |  |

Start-up companies normally experience negative cash flows from operating and investing activities. Also, start-up companies normally have positive cash flows from financing activities from raising capital.

## Case 2-4

Note to Instructors: Answers will vary based upon the date students do their research. The objective of this case is to familiarize students with financial reporting resources available on the Internet. The following solution is based upon the Apple Inc. data as of May 26, 2019, from Yahoo.com's finance Web site.

1. $\$ 178.97$ (See opening page for AAPL)
2. $\$ 142.00$ to $\$ 182.13$ (See opening page for AAPL)
3. $\$ 233.47$ (See Statistics)
4. 178,930 net shares were purchased in the last 6 months ending May 26, 2019. (See Insider Transactions under Holders)
5. Timothy D. Cook; he is $\mathbf{5 8}$ years old. (See Profile)
6. $\$ 15,680,000$ (See Profile)
7. $\$ 2.92$ (See Statistics)
8. Strong Buy $=11$

Buy $=21$
Hold $=6$
Sell $=0$
Strong Sell $=0$
Average broker recommendation is $\mathbf{2 . 2}$ (See Analysis)
9. $\$ 77,434$ million (See Financials: Cash Flows)
10. $\mathbf{2 5 . 3 4 \%}$ (See Statistics)

