

CHAPTER 2

BASIC ACCOUNTING SYSTEMS: CASH BASIS

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).
 - 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 is 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. \$1,900,000 ($\$715,000 + \$1,185,000$)
- b. \$90,000 ($\$600,000 - \$510,000$)
- c. \$88,650 ($\$112,400 - \$23,750$)

E2-2

- a. \$44,958 ($\$84,141 - \$39,183$)
- b. \$4,474 increase ($\$4,041 + \433)
- c. Total assets = \$88,182 ($\$84,141 + \$4,041$)
Total liabilities = \$43,657 ($\$39,183 + \$4,474$)
Total stockholders' equity = \$44,525 ($\$44,958 - \433)
- d. Yes. [$\$88,182$ (total assets) = $\$43,657$ (total liabilities) + $\$44,525$ (total stockholders' equity)]

E2-3

- a. \$1,615 ($\$8,113 - \$6,498$)
- b. \$235 decrease ($\$24 + \211)
- c. Total assets = \$8,089 ($\$8,113 - \24)
Total liabilities = \$6,709 ($\$6,498 + \211)
Total stockholders' equity = \$1,380 ($\$1,615 - \235)
- d. Yes. [$\$8,089$ (total assets) = $\$6,709$ (total liabilities) + $\$1,380$ (total stockholders' equity)]

E2-4

- (a) \$120,292 ($\$171,124 - \$50,832$)
- (b) \$111,547 ($\$231,839 - \$120,292$)
- (c) \$290,479 ($\$231,839 + \$58,640$)
- (d) \$119,355 ($\$290,479 - \$171,124$) or ($\$111,547 + \$7,808$)
- (e) \$274,098 ($\$232,708 + \$41,390$) or ($\$38,836 + \$235,262$)
- (f) \$235,262 ($\$220,410 + \$14,852$) or ($\$274,098 - \$38,836$)
- (g) \$(41,390) ($\$14,852 + \$26,538$)
- (h) \$(26,538) ($\$12,298 - \$38,836$)
- (i) \$220,410 ($\$232,708 - \$12,298$)

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. Net income: \$160,000 ($\$1,275,000 - \$290,000 - \$825,000$)

E2-6

- | | |
|------------------|-----------------|
| a. (3) No effect | f. (2) Decrease |
| b. (3) No effect | g. (2) Decrease |
| c. (1) Increase | h. (1) Increase |
| d. (3) No effect | i. (1) Increase |
| e. (2) Decrease | j. (2) Decrease |

E2-7

- Increases assets and increases stockholders' equity.
- Decreases assets and decreases stockholders' equity.
- Increases assets and increases liabilities.
- Increases assets and increases stockholders' equity.
- Increases assets and decreases assets.

E2-8

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

E2-9

- | | |
|-----------------|-----------------|
| 1. (a) increase | 4. (b) decrease |
| 2. (a) increase | 5. (b) decrease |
| 3. (b) decrease | |

E2-10

- | | |
|--------|--------|
| 1. (c) | 6. (a) |
| 2. (e) | 7. (e) |
| 3. (e) | 8. (e) |
| 4. (c) | 9. (e) |
| 5. (b) | |

E2-11

- a. (1) Provided catering services for cash, \$28,000.
(2) Purchase of land for cash, \$20,000.
(3) Payment of expenses, \$18,000.
(4) Payment of cash 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.

E2-13

Company Sierra

Stockholders' equity at end of year (\$770,000 – \$294,000)	\$476,000
Stockholders' equity at beginning of year (\$490,000 – \$175,000).....	<u>315,000</u>
Net income (increase in stockholders' equity)	<u>\$161,000</u>

Company Tango

Increase in stockholders' equity (as determined for Sierra).....	\$161,000
Add dividends	<u>55,000</u>
Net income	<u>\$216,000</u>

Company Yankee

Increase in stockholders' equity (as determined for Sierra).....	\$161,000
Deduct issuance of additional capital stock.....	<u>75,000</u>
Net income	<u>\$ 86,000</u>

Company Zulu

Increase in stockholders' equity (as determined for Sierra).....	\$161,000
Deduct issuance of additional capital stock.....	<u>75,000</u>
	\$ 86,000
Add dividends	<u>55,000</u>
Net income	<u>\$141,000</u>

E2-14

In each case, solve for a single unknown, using the following equation:

$$\text{Stockholders' equity (beginning)} + \text{Issuance of Capital Stock} - \text{Dividends} + \text{Revenues} - \text{Expenses} = \text{Stockholders' equity (ending)}$$

Carbon	Stockholders' equity at end of year (\$495,000 – \$160,000) ...	\$335,000	
	Stockholders' equity at beginning of year (\$333,000 – \$118,000)..	<u>215,000</u>	
	Increase in stockholders' equity	\$120,000	
	Deduct increase due to net income (\$90,000 – \$39,000)	<u>(51,000)</u>	
		\$ 69,000	
	Add dividends	<u>7,500</u>	
	Additional issuance of capital stock	<u>(a) \$ 76,500</u>	
Krypton	Stockholders' equity at end of year (\$350,000 – \$110,000) ...	\$240,000	
	Stockholders' equity at beginning of year (\$250,000 – \$130,000)..	<u>120,000</u>	
	Increase in stockholders' equity	\$120,000	
	Add dividends	<u>16,000</u>	
		\$136,000	
	Deduct additional issuance of capital stock	<u>(50,000)</u>	
	Increase due to net income.....	\$ 86,000	
	Add expenses	<u>64,000</u>	
	Revenue.....	<u>(b) \$150,000</u>	
Fluorine	Stockholders' equity at end of year (\$90,000 – \$80,000)	\$ 10,000	
	Stockholders' equity at beginning of year (\$100,000 – \$76,000)..	<u>24,000</u>	
	Decrease in stockholders' equity	\$ (14,000)	
	Add decrease due to net loss (\$115,000 – \$122,500).....	<u>7,500</u>	
		\$ (6,500)	
	Deduct additional issuance of capital stock	<u>(10,000)</u>	
	Dividends.....	<u>(c) \$(16,500)</u>	
Radium	Stockholders' equity at end of year (\$248,000 – \$136,000) ...	\$112,000	
	Add decrease due to net loss (\$112,000 – \$128,000).....	<u>16,000</u>	
		\$128,000	
	Add dividends	<u>60,000</u>	
		\$188,000	
	Deduct additional issuance of capital stock	<u>(40,000)</u>	
	Stockholders' equity at beginning of year.....	\$148,000	
	Add liabilities at beginning of year.....	<u>120,000</u>	
	Assets at beginning of year	<u>(d) \$268,000</u>	

E2-15

- a. \$538 (\$26,503 – \$25,503)
- b. The net cash flows used for investing activities is determined by solving the following equation:

Net change in cash = Net cash flows from operating activities + Net cash flows used for investing activities + Net cash from financing activities

\$3,947 = \$14,336 + Net cash flows used for investing activities + \$8,658

Net cash flows used for investing activities = \$3,947 – \$14,336 – \$8,658

Net cash flows used for investing activities = \$(19,047)

E2-16

- a. **ABBY'S INTERIORS**
Balance Sheet
October 31, 20Y6

Assets		
Cash.....		\$ 50,000
Land.....		<u>500,000</u>
Total assets.....		<u>\$550,000</u>
Liabilities		
Notes payable		\$200,000
Stockholders' Equity		
Common stock.....	\$ 75,000	
Retained earnings	<u>275,000*</u>	
Total stockholders' equity.....		<u>350,000</u>
Total liabilities and stockholders' equity.....		<u>\$550,000</u>

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

E2-16, Concluded

**ABBY'S INTERIORS
Balance Sheet
November 30, 20Y6**

Assets		
Cash		\$175,000
Land.....		<u>575,000</u>
Total assets		<u>\$750,000</u>
Liabilities		
Notes payable.....		\$250,000
Stockholders' Equity		
Common stock	\$ 90,000	
Retained earnings	<u>410,000*</u>	
Total stockholders' equity		<u>500,000</u>
Total liabilities and stockholders' equity		<u>\$750,000</u>

*\$750,000 – \$250,000 – \$90,000 = \$410,000

b. Retained earnings, November 30, 20Y6		\$410,000
Retained earnings, October 31, 20Y6		<u>275,000</u>
Increase in retained earnings.....		\$135,000
Add dividends		<u>12,000</u>
Net income.....		<u>\$147,000</u>

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)

E2-17

BIG MOUNTAIN REALTY INC.
Income Statement
For the Month Ending June 30, 20Y9

Revenues:		
Sales commissions		\$ 90,000
Expenses:		
Salaries expense	\$50,000	
Utilities expense	10,000	
Rent expense	8,000	
Interest expense	300	
Miscellaneous expense.....	<u>1,700</u>	
Total expenses		<u>(70,000)</u>
Net income		<u>\$ 20,000</u>

E2-18

BIG MOUNTAIN REALTY INC.
Statement of Stockholders' Equity
For the Month Ending June 30, 20Y9

	<u>Common Stock</u>	<u>Retained Earnings</u>	<u>Total</u>
Balances, June 1, 20Y9	\$ 0	\$ 0	\$ 0
Issued common stock	75,000		75,000
Net income		20,000	20,000
Dividends.....		<u>(2,000)</u>	<u>(2,000)</u>
Balances, June 30, 20Y9	<u>\$75,000</u>	<u>\$18,000</u>	<u>\$93,000</u>

E2-19

BIG MOUNTAIN REALTY INC.
Balance Sheet
June 30, 20Y9

Assets		
Cash.....		\$ 43,000
Land.....		<u>100,000</u>
Total assets.....		<u>\$143,000</u>
Liabilities		
Notes payable		\$ 50,000
Stockholders' Equity		
Common stock.....	\$75,000	
Retained earnings	<u>18,000</u>	
Total stockholders' equity.....		<u>93,000</u>
Total liabilities and stockholders' equity.....		<u>\$143,000</u>

E2-20

BIG MOUNTAIN REALTY INC.
Statement of Cash Flows
For the Month Ending June 30, 20Y9

Cash flows from operating activities:		
Cash receipts from operating activities	\$ 90,000	
Cash payments for operating activities	<u>(70,000)</u>	
Net cash flows from operating activities.....		\$ 20,000
Cash flows used for investing activities:		
Cash payments for land.....		(100,000)
Cash flows from financing activities:		
Cash receipts from issuing capital stock.....	\$ 75,000	
Cash receipts from issuing notes payable	50,000	
Cash payments for dividends	<u>(2,000)</u>	
Net cash flows from financing activities		<u>123,000</u>
Net increase in cash during June		\$ 43,000
Cash as of June 1, 20Y9.....		<u>0</u>
Cash as of June 30, 20Y9.....		<u>\$ 43,000</u>

E2-21

- 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.**
- l. Decrease in assets and decrease in stockholders' equity.**

E2-22

- | | |
|-----------------------------|-----------------------------|
| a. operating section | g. operating section |
| b. investing section | h. investing section |
| c. financing section | i. operating section |
| d. financing section | j. operating section |
| e. operating section | k. financing section |
| f. operating section | l. financing section |

PROBLEMS

P2-1

1.

Statement of Cash Flows	Balance Sheet					Income Statement
	Assets		=	Liabilities + Stockholders' Equity		
	Cash	+ Land	=	Notes Payable	+ Common Stock	
a. Issued common stock	60,000				60,000	
b. Issued note payable	100,000			100,000		
Balances	160,000			100,000	60,000	
c. Fees earned	30,000					30,000
Balances	190,000			100,000	60,000	30,000
d. Rent expense	(5,000)					(5,000)
Balances	185,000			100,000	60,000	25,000
e. Paid expenses	(3,500)					(3,500)
Balances	181,500			100,000	60,000	21,500
f. Paid salary expense	(6,500)					(6,500)
Balances	175,000			100,000	60,000	15,000
g. Paid interest expense	(500)					(500)
Balances	174,500			100,000	60,000	14,500
h. Purchased land	(120,000)	120,000				
Balances	54,500	120,000		100,000	60,000	14,500
i. Paid dividends	(3,000)					(3,000)
Balances, March 31	51,500	120,000		100,000	60,000	11,500

Statement of Cash Flows			Income Statement	
a. Financing	60,000		c. Fees earned	30,000
b. Financing	100,000		d. Rent expense	(5,000)
c. Operating	30,000		e. Auto expense	(2,500)
d. Operating	(5,000)		e. Misc. expense	(1,000)
e. Operating	(3,500)		f. Salary expense	(6,500)
f. Operating	(6,500)		g. Interest expense	(500)
g. Operating	(500)		Net income	<u>14,500</u>
h. Investing	(120,000)			
i. Financing	(3,000)			
Increase in cash	<u>51,500</u>			

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.

STANLEY INSURANCE INC.
Income Statement
For the Month Ending July 31, 20Y5

Revenues:		
Fees earned		\$30,000
Expenses:		
Salary expense	\$6,500	
Rent expense	5,000	
Auto expense	2,500	
Interest expense	500	
Miscellaneous expense	<u>1,000</u>	
Total expenses		<u>(15,500)</u>
Net income		<u>\$14,500</u>

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

	<u>Common Stock</u>	<u>Retained Earnings</u>	<u>Total</u>
Balances, July 1, 20Y5	\$ 0	\$ 0	\$ 0
Issued common stock	60,000		60,000
Net income		14,500	14,500
Dividends		<u>(3,000)</u>	<u>(3,000)</u>
Balances, July 31, 20Y5	<u>\$60,000</u>	<u>\$11,500</u>	<u>\$71,500</u>

4.

STANLEY INSURANCE INC.
Balance Sheet
July 31, 20Y5

Assets		
Cash		\$ 51,500
Land		<u>120,000</u>
Total assets		<u>\$171,500</u>
Liabilities		
Notes payable		\$100,000
Stockholders' Equity		
Common stock	\$60,000	
Retained earnings	<u>11,500</u>	
Total stockholders' equity		<u>71,500</u>
Total liabilities and stockholders' equity		<u>\$171,500</u>

P2–1, Concluded

5.

STANLEY INSURANCE INC.
Statement of Cash Flows
For the Month Ending July 31, 20Y5

Cash flows from operating activities:		
Cash receipts from operating activities.....	\$ 30,000	
Cash payments for operating activities.....	<u>(15,500)</u>	
Net cash flows from operating activities.....		\$ 14,500
Cash flows used for investing activities:		
Cash payment for land.....		(120,000)
Cash flows from financing activities:		
Cash receipts from issuing capital stock.....	\$ 60,000	
Cash receipts from issuing note payable.....	100,000	
Cash payments for dividends.....	<u>(3,000)</u>	
Net cash flows from financing activities.....		<u>157,000</u>
Net increase in cash during March.....		\$ 51,500
Cash as of July 1, 20Y5.....		0
Cash as of July 31, 20Y5.....		<u>\$ 51,500</u>

P2-2

1. **UP-DATE COMPUTER SERVICES**
Income Statement
For the Month Ended August 31, 20Y4

Fees earned.....		\$27,000
Operating expenses:		
Salaries expense	\$4,600	
Rent expense.....	2,500	
Automobile expense	1,200	
Miscellaneous expense	<u>700</u>	
Total operating expenses.....		<u>(9,000)</u>
Net income		<u>\$18,000</u>

2. **UP-DATE COMPUTER SERVICES**
Statement of Stockholders' Equity
For the Month Ended August 31, 20Y4

	<u>Common Stock</u>	<u>Retained Earnings</u>	<u>Total</u>
Balances, Aug. 1, 20Y4	\$ 0	\$ 0	\$ 0
Issued common stock.....	25,000		25,000
Net income		18,000	18,000
Dividends		<u>(3,000)</u>	<u>(3,000)</u>
Balances, Aug. 31, 20Y4	<u>\$25,000</u>	<u>\$15,000</u>	<u>\$40,000</u>

3. **UP-DATE COMPUTER SERVICES**
Balance Sheet
August 31, 20Y4

Assets		
Cash.....		\$10,000
Land.....		<u>40,000</u>
Total assets.....		<u>\$50,000</u>
Liabilities		
Notes payable		\$10,000
Stockholders' Equity		
Common stock.....	\$25,000	
Retained earnings	<u>15,000</u>	
Total stockholders' equity.....		<u>40,000</u>
Total liabilities and stockholders' equity.....		<u>\$50,000</u>

P2-2, Concluded

4. **UP-DATE COMPUTER SERVICES**
Statement of Cash Flows
For the Month Ended August 31, 20Y4

Cash flows from operating activities:		
Cash receipts from operating activities.....	\$27,000	
Cash payments for operating activities.....	<u>(9,000)</u>	
Net cash flows from operating activities		\$ 18,000
Cash flows used for investing activities:		
Cash payments for land		(40,000)
Cash flows from financing activities:		
Cash receipts from issuing capital stock	\$25,000	
Cash receipts from issuing notes payable	10,000	
Cash payments for dividends.....	<u>(3,000)</u>	
Net cash flows from financing activities.....		<u>32,000</u>
Net increase in cash during August		\$ 10,000
Cash as of August 1, 20Y4		<u>0</u>
Cash as of August 31, 20Y4		<u>\$ 10,000</u>

P2-3

1. **PADGET HOME SERVICES, INC.**
Income Statement
For the Year Ending December 31, 20Y7

Revenues:		
Fees earned		\$620,000
Expenses:		
Salaries expense	\$272,000	
Utilities expense	85,000	
Rent expense	70,000	
Taxes expense	43,000	
Interest expense	4,800	
Miscellaneous expense	10,200	
Total expenses		<u>(485,000)</u>
Net income		<u>\$135,000</u>

2. **PADGET HOME SERVICES, INC.**
Statement of Stockholders' Equity
For the Year Ending December 31, 20Y7

	<u>Common Stock</u>	<u>Retained Earnings</u>	<u>Total</u>
Balances, Jan. 1, 20Y7	\$ 0	\$ 0	\$ 0
Issued common stock	75,000		75,000
Net income		135,000	135,000
Dividends		<u>(15,000)</u>	<u>(15,000)</u>
Balances, Dec. 31, 20Y7	<u>\$75,000</u>	<u>\$120,000</u>	<u>\$195,000</u>

P2–3, Concluded

3. **PADGET HOME SERVICES, INC.**
Balance Sheet
December 31, 20Y7

Assets		
Cash		\$ 60,000
Land.....		<u>215,000</u>
Total assets		<u>\$275,000</u>
Liabilities		
Notes payable		\$ 80,000
Stockholders' Equity		
Common stock	\$ 75,000	
Retained earnings	<u>120,000</u>	
Total stockholders' equity		<u>195,000</u>
Total liabilities and stockholders' equity		<u>\$275,000</u>

4. **PADGET HOME SERVICES, INC.**
Statement of Cash Flows
For the Year Ending December 31, 20Y7

Cash flows from operating activities:		
Cash receipts from operating activities.....	\$ 620,000	
Cash payments for operating activities.....	<u>(485,000)</u>	
Net cash flows from operating activities		\$ 135,000
Cash flows used for investing activities:		
Cash payments for land		(215,000)
Cash flows from financing activities:		
Cash receipts from issuing capital stock	\$ 75,000	
Cash receipts from issuing notes payable	80,000	
Cash payments for dividends	<u>(15,000)</u>	
Net cash flows from financing activities.....		<u>140,000</u>
Net increase in cash during the year		\$ 60,000
Cash as of January 1, 20Y7		<u>0</u>
Cash as of December 31, 20Y7		<u>\$ 60,000</u>

P2-4

1. **PADGET HOME SERVICES, INC.**
Income Statement
For the Year Ending December 31, 20Y8

Revenues:		
Fees earned		\$ 886,000
Expenses:		
Salaries expense	\$380,000	
Utilities expense	120,000	
Rent expense	100,000	
Taxes expense	65,000	
Interest expense	7,200	
Miscellaneous expense	<u>13,800</u>	
Total expenses		<u>(686,000)</u>
Net income		<u>\$ 200,000</u>

2. **PADGET HOME SERVICES, INC.**
Statement of Stockholders' Equity
For the Year Ending December 31, 20Y8

	<u>Common Stock</u>	<u>Retained Earnings</u>	<u>Total</u>
Balances, Jan. 1, 20Y8	\$ 75,000	\$120,000	\$195,000
Issued common stock	35,000*		35,000
Net income		200,000	200,000
Dividends		<u>(50,000)</u>	<u>(50,000)</u>
Balances, Dec. 31, 20Y8	<u>\$110,000</u>	<u>\$270,000</u>	<u>\$380,000</u>

*\$110,000 – \$75,000 = \$35,000

P2-4, Concluded

3. **PADGET HOME SERVICES, INC.**
Balance Sheet
December 31, 20Y8

Assets		
Cash		\$160,000*
Land.....		<u>340,000</u>
Total assets		<u>\$500,000</u>
Liabilities		
Notes payable		\$120,000
Stockholders' Equity		
Capital stock.....	\$110,000	
Retained earnings	<u>270,000</u>	
Total stockholders' equity		<u>380,000</u>
Total liabilities and stockholders' equity		<u>\$500,000</u>
*\$500,000 – \$340,000 = \$160,000		

4. **PADGET HOME SERVICES, INC.**
Statement of Cash Flows
For the Year Ending December 31, 20Y8

Cash flows from operating activities:		
Cash receipts from operating activities.....	\$ 886,000	
Cash payments for operating activities	<u>(686,000)</u>	
Net cash flows from operating activities		\$ 200,000
Cash flows used for investing activities:		
Cash payment for land		(125,000)
Cash flows from financing activities:		
Cash receipts from issuing common stock.....	\$ 35,000	
Cash receipts from issuing notes payable	40,000	
Cash payments for dividends	<u>(50,000)</u>	
Net cash flows from financing activities.....		<u>25,000</u>
Net increase in cash during the year		<u>\$ 100,000</u>
Cash as of Jan. 1, 20Y8.....		<u>60,000</u>
Cash as of Dec. 31, 20Y8		<u>\$ 160,000</u>

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 operation.)**
- 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. **\$45,500 (the same as f)**
- k. **\$120,500 ($\$75,000 + \$45,500$) or (i + j) or the same as g**
- l. **\$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 operation.)**
- r. **\$50,500 ($\$50,500 + \0) or the same as h**

P2-6

1. 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.
2. 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."
3. The year in the heading for the statement of stockholders' equity should be 20Y8 rather than 20Y7.
4. The balance sheet should be labeled as of "July 31, 20Y8," rather than "For the Month Ended July 31, 20Y7."
5. On the income statement, the dividends should not be listed as an operating expense but should be included in the statement of stockholders' equity.
6. On the income statement, the total operating expenses that include dividends of \$2,000 are subtracted from the sales commissions, 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.
7. 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, 20Y8.
8. Notes payable should be listed as a liability on the balance sheet.
9. Land should be listed as an asset on the balance sheet.
10. The balance sheet assets should equal the sum of the liabilities and stockholders' equity.
11. The cash payments for operating expenses have been omitted from the operating activities section of the statement of cash flows.
12. The cash flows from financing activities should not include retained earnings. In addition, the financing activities section should include cash received from issuance of common stock and from the issuance of notes payable. Also, the cash paid for dividends should be included as a deduction to arrive at net cash flows from financing activities.

P2–6, Continued

13. Since this is Alpine Realty’s first month of operation, the increase in cash for July should equal \$32,000, the cash balance as of July 31, 20Y8.

Corrected financial statements appear as follows:

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

Sales commissions		\$60,000
Expenses:		
Office salaries expense	\$20,000	
Rent expense.....	6,000	
Automobile expense	3,500	
Miscellaneous expense	<u>1,500</u>	
Total operating expenses.....		<u>(31,000)</u>
Net income		<u>\$29,000</u>

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

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

P2-6, Concluded

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

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

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

ALPINE REALTY, INC.		
Statement of Cash Flows		
For the Month Ended July 31, 20Y8		
Cash flows from operating activities:		
Cash receipts from sales commissions.....	\$ 60,000	
Cash payments for operating expenses	<u>(31,000)</u>	
Net cash flows from operating activities		\$ 29,000
Cash flows used for investing activities:		
Cash payments for land		(30,000)
Cash flows from financing activities:		
Cash receipts from issuing common stock.....	\$ 15,000	
Cash receipts from issuing notes payable	20,000	
Cash payments for dividends	<u>(2,000)</u>	
Net cash from financing activities		<u>33,000</u>
Net increase in cash during July		\$ 32,000
Cash as of July 1, 20Y8.....		<u>0</u>
Cash as of July 31, 20Y8.....		<u>\$ 32,000</u>

METRIC-BASED ANALYSIS

MBA 2-1

		Transaction Metric Effects	
Transaction		Liquidity Cash	Profitability Net Income – Cash Basis
a.	Issued stock	\$ 60,000	No Effect —
b.	Issued note pay.	100,000	No Effect
c.	Earned fees	30,000	\$30,000
d.	Paid rent expense	(5,000)	(5,000)
e.	Paid expenses	(3,500)	(3,500)
f.	Paid salaries	(6,500)	(6,500)
g.	Paid interest	(500)	(500)
h.	Purchased land	(120,000)	No Effect —
i.	Paid dividends	(3,000)	No Effect —
	Total	<u>\$ 51,500</u>	<u>\$14,500</u>

MBA 2-2

		Transaction Metric Effects	
Transaction		Liquidity Cash	Profitability Net Income – Cash Basis
a.	Issued stock	\$25,000	No Effect —
b.	Earned fees	27,000	\$27,000
c.	Paid rent	(2,500)	(2,500)
d.	Issued note pay.	10,000	No Effect —
e.	Purchased land	(40,000)	No Effect —
f.	Paid expenses	(1,900)	(1,900)
g.	Paid salaries	(4,600)	(4,600)
h.	Paid dividends	(3,000)	No Effect —
	Total	<u>\$10,000</u>	<u>\$18,000</u>

MBA 2–3

1.

	<u>Year 1</u>	<u>Year 2</u>	<u>Increase (Decrease)</u>
Revenue	<u>100.0%</u>	<u>100.0%</u>	n/a
Operating expenses:			
Fuel	(24.9)%	(28.9)%	4.0%
Aircraft related	(35.0)	(32.4)	(2.6)
Selling and general.....	(26.0)	(27.0)	1.0
Other expenses.....	<u>(5.1)</u>	<u>(6.2)</u>	<u>1.1</u>
Total operating expenses	<u>(91.0)%</u>	<u>(94.5)%</u>	<u>3.5%</u>
Operating income	<u>9.0%</u>	<u>5.5%</u>	<u>(3.5)%</u>

2. Delta’s operating income as a percent of revenue decreased 3.5% from 9.0% in Year 1 to 5.5% in Year 2. Fuel expenses increased 4.0% from 24.9% in Year 1 to 28.9% in Year 2. In contrast, aircraft-related expenses such as landing fees, maintenance, and depreciation decreased 2.6% from 35.0% in Year 1 to 32.4% in Year 2. Selling, general, and administrative expenses increased 1.0% and other expenses increased 1.1%. Overall, it appears that increasing fuel costs were the primary cause of the decrease in operating income.

MBA 2–4

1.

	<u>Year 1</u>	<u>Year 2</u>	<u>Increase (Decrease)</u>
Revenue	<u>100.0%</u>	<u>100.0%</u>	n/a
Operating expenses:			
Fuel	(32.6)%	(28.4)%	(4.2)%
Aircraft related	(19.3)	(17.9)	(1.4)
Selling and general	(28.4)	(29.2)	0.8
Other expenses	<u>(12.5)</u>	<u>(12.5)</u>	<u>0.0</u>
Total operating expenses	<u>(92.8)%</u>	<u>(88.0)%</u>	<u>(4.8)%</u>
Operating income	<u>7.2%</u>	<u>12.0%</u>	<u>4.8%</u>

2. Southwest's operating income increased as a percent of revenue by 4.8% from 7.2% in Year 1 to 12.0% in Year 2. The increase was caused primarily by a decrease of 4.2% in fuel expenses. In addition, aircraft-related expenses, such as landing fees and maintenance costs, decreased by 1.4%. Selling and general expenses increased by 0.8%.

MBA 2–5

Southwest's operating income as a percent of revenue increased by 4.8% compared to Delta's decrease of 3.5%. The difference in operating results was caused by changes in fuel costs. Southwest's fuel costs decreased by 4.2% as a percent of revenue, and Delta's fuel costs increased by 4.0% as a percentage of revenue. Airlines often enter into contracts, called hedging, to reduce the volatility of changes in fuel costs. It appears that Southwest's management did a better job of hedging its fuel costs as compared to Delta's management.

MBA 2–6

1.

	<u>Year 1</u>	<u>Year 2</u>	<u>Increase (Decrease)</u>
Sales	100.0%	100.0%	n/a
Cost of goods sold	<u>(58.7)</u>	<u>(65.3)</u>	<u>6.6%</u>
Gross profit	41.3%	34.7%	(6.6)%
Selling and administrative expenses	<u>(22.1)</u>	<u>(27.7)</u>	<u>(5.6)</u>
Operating income	<u>19.2%</u>	<u>7.0%</u>	<u>(12.2)%</u>

2. Kellogg’s operating income as a percent of sales decreased by 12.2% from 19.2% to 7.0%. This decrease was caused by the increase in cost of goods sold of 6.6% and the increase in selling and administrative expenses of 5.6% as a percentage of sales. These increases should be investigated as to their underlying causes and whether the increases in costs and expenses could be passed on to customers.

MBA 2–7

1.

	<u>Year 1</u>	<u>Year 2</u>	<u>Increase (Decrease)</u>
Sales	100.0%	100.0%	n/a
Cost of goods sold	<u>(64.4)</u>	<u>(66.3)</u>	<u>1.9%</u>
Gross profit	35.6%	33.7%	(1.9)%
Selling and administrative expenses	<u>(19.4)</u>	<u>(18.9)</u>	<u>(0.5)</u>
Operating income	<u>16.2%</u>	<u>14.8%</u>	<u>(1.4)%</u>

2. General Mills’s operating income as a percent of sales decreased by 1.4% from 16.2% to 14.8%. This decrease was caused by the increase in cost of goods sold of 1.9%, which was offset by the decrease in selling and administrative expenses of 0.5%. The increase in cost of goods sold should be investigated as to its underlying cause and whether the increase could be passed on to customers.

MBA 2–8

In Year 1, Kellogg's operating income as a percent of sales was 19.2% compared to General Mills' 16.2%. In Year 2, both companies' operating income as a percent of sales decreased. However, Kellogg's dropped significantly more than General Mills. As a result, in Year 2 General Mills' operating income as a percent of sales was 14.8% compared to only 7.0% for Kellogg. This difference was caused by Kellogg's increase of 6.6% in cost of goods sold to 65.3% compared to General Mills' increase of 1.9% in cost of goods sold to 66.3%. Kellogg's selling and administrative expenses also increased by 5.6% to 27.7% of sales compared to General Mills' decrease of 0.5% to 18.9%. Thus, Kellogg's Year 2 operating performance has declined relative to General Mills' operating performance.

MBA 2–9

1.

	<u>Year 1</u>	<u>Year 2</u>	<u>Increase (Decrease)</u>
Current assets:			
Cash.....	6.0%	7.3%	1.3%
Marketable securities	4.9	7.1	2.2
Accounts receivable.....	11.7	10.4	(1.3)
Inventory	0.9	0.8	(0.1)
Other	<u>6.1</u>	<u>5.2</u>	<u>(0.9)</u>
Total current assets	<u>29.6%</u>	<u>30.8%</u>	<u>1.2%</u>
Long-term assets:			
Long-term marketable securities	56.1%	56.5%	0.4%
Property, plant and equipment.....	8.9	7.7	(1.2)
Other long-term assets	<u>5.4</u>	<u>5.0</u>	<u>(0.4)</u>
Total long-term assets	<u>70.4%</u>	<u>69.2%</u>	<u>(1.2)%</u>
Total assets	<u>100.0%</u>	<u>100.0%</u>	n/a
Current liabilities:			
Accounts payable and similar liabilities....	21.0%	20.9%	(0.1)%
Current portion of long-term debt.....	0.0	0.8	0.8
Other	<u>6.4</u>	<u>6.0</u>	<u>(0.4)</u>
Total current liabilities	<u>27.4%</u>	<u>27.7%</u>	<u>0.3%</u>
Long-term liabilities.....	<u>24.5</u>	<u>31.2</u>	<u>6.7</u>
Total liabilities.....	<u>51.9%</u>	<u>58.9%</u>	<u>7.0%</u>
Stockholders' equity:			
Common stock.....	10.0%	9.4%	(0.6)%
Retained earnings	37.6	31.8	(5.8)
Other items.....	<u>0.5</u>	<u>(0.1)</u>	<u>(0.6)</u>
Total stockholders' equity	<u>48.1%</u>	<u>41.1%</u>	<u>(7.0)%</u>
Total liabilities and stockholders' equity	<u>100.0%</u>	<u>100.0%</u>	n/a

2. Apple's current assets as a percent of total assets increased slightly by 1.2% from 29.6% to 30.8% with marketable securities increasing the most by 2.2%. At the same time, long-term assets declined by 1.2%. Apple's total liabilities increased by 7.0% from 51.9% to 58.9% with long-term liabilities increasing the most by 6.7%. This is explained by Apple issuing over \$25 billion in long-term 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, Wal-Mart, 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.

Case 2–3

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>
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 June 6, 2016, from Yahoo.com’s finance Web site.

1. \$98.63 (See opening page for AAPL)
2. \$89.47 to \$132.97 (See opening page for AAPL)
3. July 20, 2015, at a price of \$132.97 (See Key Statistics)
4. 392,337 shares (net) were sold in the last 6 months ending June 6, 2016. (See Insider Transactions)
5. Timothy D. Cook; he is 55 years old. (See Profile)
6. \$10,280,000 (See Profile)
7. \$2.28 (See Key Statistics)
8. Strong Buy = 17
Buy = 21
Hold = 9
Sell = 0
Strong Sell = 0
Average broker recommendation is 1.8 (See Analyst Opinion)
9. \$81,266 million (See Financials: Cash Flows)
10. 29.39% (See Key Statistics)