# CHAPTER 13 <br> CORPORATIONS: ORGANIZATION, STOCK TRANSACTIONS, AND DIVIDENDS <br> <br> DISCUSSION QUESTIONS 

 <br> <br> DISCUSSION QUESTIONS}

1. No. Common stock with a higher par is not necessarily a better investment than common stock with a lower par because par is an amount assigned to the shares.
2. The broker is not correct. Corporations are not legally liable to pay dividends until the dividends are declared. If the company that issued the preferred stock has operating losses, it could omit dividends first on its common stock and later on its preferred stock.
3. The company may not have had enough cash on hand to pay a dividend on the common stock, or resources may be needed for plant expansion, replacement of facilities, payment of liabilities, etc.
4. a. There is no change.
b. Total equity is the same.
5. a. Current liability
b. Stockholders' equity
6. The primary purpose of a stock split is to bring about a reduction in the market price per share and thus to encourage more investors to buy the company's shares.
7. a. It has no effect on revenue or expense.
b. It reduces stockholders' equity by $\$ 3,000,000$.
8. a. It has no effect on revenue.
b. It increases stockholders' equity by $\$ 3,750,000$.
9. The three classifications of restrictions on retained earnings are legal, contractual, and discretionary. Restrictions are normally reported in the notes to the financial statements.
10. Such prior period adjustments should be reported as an adjustment to the beginning balance of retained earnings.

## PRACTICE EXERCISES

PE 13-1A

|  | Year 1 | Year 2 | Year 3 |
| :---: | :---: | :---: | :---: |
| Amount distributed. | \$70,000 | \$200,000 | \$320,000 |
| Preferred dividend (40,000 shares) | 70,000 | 170,000* | 120,000 |
| Common dividend (100,000 shares) | \$ 0 | \$ 30,000 | \$200,000 |

* Year 1 dividends in arrears of $\$ 50,000(\$ 120,000-\$ 70,000)$ plus Year 2 dividends of $\$ 120,000$.

Dividends per share:
Preferred stock.
\$1.75
\$4.25
$\$ 3.00$
None
\$0.30
\$2.00

Common stock

PE 13-1B

|  | Year 1 | Year 2 | Year 3 |
| :---: | :---: | :---: | :---: |
| Amount distributed. | \$21,600 | \$4,000 | \$100,800 |
| Preferred dividend (16,000 shares). | 6,400 | 4,000 | 8,800* |
| Common dividend (80,000 shares). | \$15,200 | \$ 0 | \$ 92,000 |

* Year 2 dividends in arrears of $\$ 2,400(\$ 6,400-\$ 4,000)$ plus Year 2 dividends of $\$ 6,400$.

Dividends per share:
Preferred
Common stock.
$\$ 0.40$
\$0.25
\$0.55
\$0.19
None
\$1.15

PE 13-2A

| May | 23 | Cash $(80,000$ shares $\times \$ 12)$ | 960,000 |  |
| :--- | :---: | :---: | ---: | ---: |
|  |  | Common Stock $(80,000$ shares $\times \$ 3)$ |  | 240,000 |
|  |  | Paid-In Capital in Excess of Stated Value- |  |  |
|  |  | Common Stock $[80,000$ shares $\times(\$ 12-\$ 3)]$ |  | 720,000 |


| July | 6 | Cash | 900,000 |  |
| :--- | :--- | :--- | ---: | ---: |
|  |  | Preferred Stock $(18,000$ shares $\times \$ 50)$ |  | $\mathbf{9 0 0 , 0 0 0}$ |


| Sept. | 15 | Cash $(50,000$ shares $\times \$ 15)$ | 750,000 |
| :--- | :--- | ---: | ---: |
|  |  | Common Stock $(50,000$ shares $\times \$ 3)$ |  |
|  |  | Paid-In Capital in Excess of Par- |  |
|  |  | Common Stock $[50,000$ shares $\times(\$ 15-\$ 3)]$ |  |

PE 13-2B

| Jan. | 22 | Cash | 720,000 |
| :--- | :--- | :--- | ---: |
|  |  | Common Stock $(180,000$ shares $\times \$ 4)$ |  |
|  |  |  |  |
| Feb. | 14 | Cash | $2,420,000$ |
|  |  | Preferred Stock $(44,000$ shares $\times \$ 55)$ |  |
|  |  |  | $2,420,000$ |
| Aug. | 30 | Cash $(9,000$ shares $\times \$ 60)$ | 540,000 |
|  |  | Preferred Stock $(9,000$ shares $\times \$ 55)$ |  |
|  |  | Paid-In Capital in Excess of Par- | 495,000 |
|  |  | Preferred Stock $[9,000$ shares $\times(\$ 60-\$ 55)]$ |  |

PE 13-3A

| Feb. | 28 | Cash Dividends | 350,000 |
| :--- | :--- | ---: | ---: |
|  |  | Cash Dividends Payable |  |
|  |  |  |  |
| Apr. | 1 | No entry required. |  |
|  |  |  | 350,000 |
| May | 15 | Cash Dividends Payable | 350,000 |
|  |  | Cash |  |

PE 13-3B

| Feb. | 1 | Cash Dividends | 480,000 |
| :--- | :--- | ---: | ---: |
|  |  | Cash Dividends Payable |  |
|  |  |  |  |
| Mar. | 18 | No entry required. |  |
|  |  |  | 480,000 |
| May | 1 | Cash Dividends Payable | 480,000 |
|  |  | Cash |  |

PE 13-4A

| Sept. | 2 | Stock Dividends (1,500,000 shares $\times 3 \% \times \$ 36)$ | $1,620,000$ |
| :--- | :--- | :--- | ---: |
|  |  | Stock Dividends Distributable |  |
|  |  | $(45,000$ shares $\times \$ 5)$ |  |
|  |  | Paid-In Capital in Excess of Par- |  |
|  |  | Common Stock [\$45,000 shares $\times(\$ 36-\$ 5)]$ |  |
|  |  |  |  |
| Oct. | 3 | No entry required. |  |
|  |  |  |  |
| Nov. | 30 | Stock Dividends Distributable |  |
|  |  | Common Stock |  |

PE 13-4B

| June | 8 | Stock Dividends (820,000 shares $\times 5 \% \times \$ 63$ ) | 2,583,000 |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Stock Dividends Distributable |  |  |
|  |  | (41,000 shares $\times \$ 35$ ) |  | 1,435,000 |
|  |  | Paid-In Capital in Excess of Par- |  |  |
|  |  | Common Stock [41,000 shares $\times$ (\$63-\$35)] |  | 1,148,000 |
|  |  |  |  |  |
| July | 13 | No entry required. |  |  |
|  |  |  |  |  |
| Aug. | 12 | Stock Dividends Distributable | 1,435,000 |  |
|  |  | Common Stock |  | 1,435,000 |

PE 13-5A

| Jan. | 31 | Treasury Stock (22,500 shares $\times \$ 31$ ) | 697,500 |  |
| :--- | :--- | :--- | ---: | ---: |
|  |  | Cash |  | 697,500 |
|  |  |  | 512,000 |  |
| Apr. | 20 | Cash $(12,800$ shares $\times \$ 40)$ |  | 396,800 |
|  |  | Treasury Stock $(12,800$ shares $\times \$ 31)$ |  |  |
|  |  | Paid-In Capital from Sale of |  | 115,200 |
|  |  | Treasury Stock $[12,800$ shares $\times(\$ 40-\$ 31)]$ |  |  |
|  |  |  | 271,600 |  |
| Oct. | 4 | Cash $(9,700$ shares $\times \$ 28)$ |  |  |
|  |  | Paid-In Capital from Sale of | 29,100 |  |
|  | $\quad$ Treasury Stock $[9,700$ shares $\times(\$ 31-\$ 28)]$ | 300,700 |  |  |
|  | Treasury Stock $(9,700$ shares $\times \$ 31)$ |  |  |  |

PE 13-5B

| May | 27 | Treasury Stock $(75,000$ shares $\times \$ 8)$ | 600,000 |  |
| :--- | :--- | :--- | ---: | ---: |
|  |  | Cash |  | 600,000 |
|  |  |  |  |  |
| Aug. | 3 | Cash $(54,000$ shares $\times \$ 11)$ | 594,000 |  |
|  |  | Treasury Stock $(54,000$ shares $\times \$ 8)$ |  | 432,000 |
|  |  | Paid-In Capital from Sale of Treasury |  | 162,000 |
|  |  | Stock $[54,000$ shares $\times(\$ 11-\$ 8)]$ |  |  |
|  |  |  |  |  |
| Nov. | 14 | Cash $(21,000$ shares $\times \$ 7)$ | 147,000 |  |
|  |  | Paid-In Capital from Sale of Treasury |  |  |
|  |  | Stock $[21,000$ shares $\times(\$ 8-\$ 7)]$ | 21,000 |  |
|  |  | Treasury Stock $(21,000$ shares $\times \$ 8)$ |  | 168,000 |

PE 13-6A

| Stockholders' Equity |  |  |
| :--- | ---: | ---: |
| Paid-in capital: |  |  |
| Common stock, $\$ 2$ par $(100,000$ |  |  |
| shares authorized, $\mathbf{7 5 , 0 0 0}$ shares |  |  |
| issued) | $\$ 150,000$ |  |
| Excess over par | $2,250,000$ |  |
| Paid-in capital, common stock |  | $\$ 2,400,000$ |
| From sale of treasury stock |  | 60,000 |
| Total paid-in capital |  |  |
| Retained earnings |  | $\$ 2,460,000$ |
| Total |  | $10,880,000$ |
| Treasury stock (5,000 shares at cost) |  | $\$ 13,340,000$ |
| Total stockholders' equity |  | $(140,000)$ |
|  |  | $\$ 13,200,000$ |

## PE 13-6B

| Stockholders' Equity |  |  |
| :--- | ---: | ---: |
| Paid-in capital: |  |  |
| Common stock, $\$ 120$ par (500,000 |  |  |
| shares authorized, $\mathbf{4 0 0 , 0 0 0}$ shares |  |  |
| issued) | $\$ 48,000,000$ |  |
| Excess over par | $6,400,000$ |  |
| Paid-in capital, common stock |  | $\$ 54,400,000$ |
| From sale of treasury stock |  | $4,500,000$ |
| Total paid-in capital |  |  |
| Retained earnings |  | $\$ 58,900,000$ |
| Total |  | $63,680,000$ |
| Treasury stock (40,000 shares at cost) |  | $\$ 122,580,000$ |
| Total stockholders' equity |  | $(5,200,000)$ |

PE 13-7A

| ROCKWELL INC. <br> Retained Earnings Statement <br> For the Year Ended June 30, 20Y5 |  |  |  |  |  |  |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: |
| Retained earnings, July 1, 20Y4 |  |  |  |  |  |  |
| Net income | $\$ 714,000$ |  |  |  |  |  |
| Dividends declared | $(150,000)$ |  |  |  |  |  |
| Increase in retained earnings |  |  |  |  |  |  |
| Retained earnings, June 30, 20Y5 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

PE 13-7B


PE 13-8A
a. 20Y3: Earnings per Share $=\frac{\text { Net Income }- \text { Preferred Dividends }}{\text { Avg. Number of Common Shares Outstanding }}$

$$
\begin{aligned}
& =\frac{\$ 448,750-\$ 40,000}{75,000 \text { shares }} \\
& =\frac{\$ 408,750}{75,000 \text { shares }}=\$ 5.45
\end{aligned}
$$

20Y2: Earnings per Share $=\frac{\text { Net Income }- \text { Preferred Dividends }}{\text { Avg. Number of Common Shares Outstanding }}$

$$
\begin{aligned}
& =\frac{\$ 376,000-\$ 40,000}{60,000 \text { shares }} \\
& =\frac{\$ 336,000}{60,000 \text { shares }}=\$ 5.60
\end{aligned}
$$

b. The decrease in the earnings per share from $\$ 5.60$ to $\$ 5.45$ indicates an unfavorable trend in the company's profitability.

PE 13-8B
a. 20Y6: Earnings per Share $=\frac{\text { Net Income - Preferred Dividends }}{\text { Avg. Number of Common Shares Outstanding }}$

$$
\begin{aligned}
& =\frac{\$ 2,485,700-\$ 50,000}{115,000 \text { shares }} \\
& =\frac{\$ 2,435,700}{115,000 \text { shares }}=\$ 21.18
\end{aligned}
$$

$$
\begin{aligned}
\text { 20Y5: Earnings per Share } & =\frac{\text { Net Income }- \text { Preferred Dividends }}{\text { Avg. Number of Common Shares Outstanding }} \\
& =\frac{\$ 1,538,000-\$ 50,000}{80,000 \text { shares }} \\
& =\frac{\$ 1,488,000}{80,000 \text { shares }}=\$ 18.60
\end{aligned}
$$

b. The increase in the earnings per share from $\$ 18.60$ to $\$ 21.18$ indicates a favorable trend in the company's profitability.

## EXERCISES

Ex. 13-1

|  | 1st Year | 2nd Year | 3rd Year | 4th Year |
| :---: | :---: | :---: | :---: | :---: |
| a. Total dividend declared. | \$36,000 | \$90,000 | \$115,000 | \$140,000 |
| Preferred dividend (current)...... | \$36,000 | \$60,000 | \$ 60,000 | \$ 60,000 |
| Preferred dividend in arrears.... | - | 24,000 | - | - |
| b. Total preferred dividends........ | \$36,000 | \$84,000 | \$ 60,000 | \$ 60,000 |
| Preferred shares outstanding... | $\div 40,000$ | $\div 40,000$ | $\div 40,000$ | $\div 40,000$ |
| Preferred dividend per share.... | \$ 0.90 | \$ 2.10 | \$ 1.50 | \$ 1.50 |

Dividend for common shares

| (a.-b.).............................. | \$ | - | \$ 6,000 |  | \$ 55,000 |  | \$80,000 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Common shares outstanding.... |  |  |  | 0,000 |  | ,000 |  | ,000 |
| Common dividend per share..... |  |  | \$ | 0.06 | \$ | 0.55 | \$ | 0.80 |

Ex. 13-2

|  | 1st Year | 2nd Year | 3rd Year | 4th Year |
| :---: | :---: | :---: | :---: | :---: |
| a. Total dividend declared.. | \$36,000 | \$58,000 | \$75,000 | \$124,000 |
| Preferred dividend (current)...... | \$36,000 | \$44,000* | \$50,000 | \$ 50,000 |
| Preferred dividend in arrears.... | - | 14,000 | 6,000 |  |
| b. Total preferred dividends........ | \$36,000 | \$58,000 | \$56,000 | \$ 50,000 |
| Preferred shares outstanding... | $\div 40,000$ | $\div 40,000$ | $\div 40,000$ | $\div 40,000$ |
| Preferred dividend per share.... | \$ 0.90 | \$ 1.45 | \$ 1.40 | \$ 1.25 |

* $\$ 44,000=\$ 58,000-\$ 14,000$

Dividend for common shares (a.-b.)............................... \$ - \$ - \$ 19,000 \$74,000

Common shares outstanding.... Common dividend per share.....

| $\div 100,000$ |  |  | $\div 100,000$ |
| :---: | :---: | :---: | :---: |
|  | \$ | 0.19 |  |

Ex. 13-3
a.

| Oct. | 31 | Cash $(400,000$ shares $\times \$ 18)$ | $7,200,000$ |  |
| :--- | :--- | :--- | :---: | :---: |
|  |  | Common Stock $(400,000$ shares $\times \$ 10)$ |  | $4,000,000$ |
|  |  | Paid-In Capital in Excess of Par-Common |  |  |
|  |  | Stock $[400,000$ shares $\times(\$ 18-\$ 10)]$ |  | $3,200,000$ |
|  |  |  |  |  |
| Nov. | 19 | Cash $(50,000$ shares $\times \$ 80)$ | $4,000,000$ |  |
|  |  | Preferred Stock $(50,000$ shares $\times \$ 75)$ |  | $3,750,000$ |
|  |  | Paid-In Capital in Excess of Par-Preferred |  |  |
|  |  | Stock $[50,000$ shares $\times(\$ 80-\$ 75)]$ |  | 250,000 |

b. $\$ 11,200,000(\$ 4,000,000+\$ 3,200,000+\$ 3,750,000+\$ 250,000)$

Ex. 13-4
a.

| Feb. | 12 | Cash $(1,000,000$ shares $\times \$ 1.20)$ | $1,200,000$ |  |
| :--- | :--- | :--- | ---: | ---: |
|  |  | Common Stock $(1,000,000$ shares $\times \$ 0.25)$ |  | 250,000 |
|  |  | Paid-In Capital in Excess of Stated Value- |  |  |
|  |  | Common Stock $[1,000,000$ shares $\times$ |  |  |
|  |  | $(\$ 1.20-\$ 0.25)]$ |  | 950,000 |
|  |  |  | 210,000 |  |
| Aug. | 3 | Cash $(10,000$ shares $\times \$ 21)$ |  | 150,000 |
|  |  | Preferred Stock $(10,000$ shares $\times \$ 15)$ |  |  |
|  |  | Paid-In Capital in Excess of Par-Preferred |  | 60,000 |
|  |  | Stock [10,000 shares $\times(\$ 21-\$ 15)]$ |  |  |

b. $\$ 1,410,000(\$ 250,000+\$ 950,000+\$ 150,000+\$ 60,000)$

Ex. 13-5

| Apr. | 5 | Land $(30,000$ shares $\times \$ 112)$ | $3,360,000$ |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  | Common Stock $(30,000$ shares $\times \$ 80)$ |  | $2,400,000$ |
|  |  | Paid-In Capital in Excess of Par- |  |  |
|  |  | Common Stock $[30,000$ shares $\times(\$ 112-\$ 80)]$ |  | 960,000 |

Ex. 13-6
a.

| Cash | 100,000 |  |
| :--- | ---: | ---: |
| Common Stock $(100,000$ shares $\times \$ 1$ ) |  | 100,000 |

b.

| Organizational Expenses | 3,000 |  |
| :--- | ---: | ---: |
| Common Stock $(3,000$ shares $\times \$ 1)$ |  | 3,000 |
|  |  |  |
| Cash | 45,000 |  |
| Common Stock $(45,000$ shares $\times \$ 1)$ |  | 45,000 |

c.

| Land | 60,000 |  |
| :--- | ---: | ---: |
| Building | 225,000 |  |
| Interest Payable ${ }^{*}$ |  | 5,200 |
| Mortgage Note Payable |  | 180,000 |
| Common Stock $(99,800$ shares $\times \$ 1$ ) |  | 99,800 |

* An acceptable alternative would be to credit Interest Expense.

Ex. 13-7

| Oct. | 1 | Cash $(120,000$ shares $\times \$ 31.50)$ | $3,780,000$ |
| :--- | :--- | :--- | :--- |
|  |  | Common Stock $(120,000$ shares $\times \$ 30.00)$ |  |
|  |  | Paid-In Capital in Excess of Par-Common |  |
|  |  | Stock $[120,000$ shares $\times(\$ 31.50-\$ 30.00)]$ |  |
|  |  |  |  |
| Oct. | 1 | Buildings | $2,380,000$ |
|  |  | Land | 840,000 |
|  |  | Preferred Stock $(35,000$ shares $\times \$ 80)$ |  |
|  |  | Paid-In Capital in Excess of Par-Preferred |  |
|  |  | Stock $[35,000$ shares $\times(\$ 92-\$ 80)]$ |  |
|  |  |  |  |
|  |  |  | $420,800,000$ |

Ex. 13-8

| July | 1 | Cash | 2,800,000 |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Common Stock (400,000 shares $\times$ \$7) |  | 2,800,000 |
|  |  |  |  |  |
|  | 1 | Organizational Expenses | 7,000 |  |
|  |  | Common Stock (1,000 shares $\times$ \$ 7 ) |  | 7,000 |
|  |  |  |  |  |
| Aug. | 7 | Land | 250,000 |  |
|  |  | Buildings | 400,000 |  |
|  |  | Equipment | 70,000 |  |
|  |  | Common Stock ( 80,000 shares $\times$ \$7) |  | 560,000 |
|  |  | Paid-In Capital in Excess of Par-Common |  |  |
|  |  | Stock [80,000 shares $\times$ (\$9-\$7)] |  | 160,000 |
|  |  |  |  |  |
| Sept. | 20 | Cash (25,000 shares $\times$ \$44) | 1,100,000 |  |
|  |  | Preferred Stock ( 25,000 shares $\times \$ 40$ ) |  | 1,000,000 |
|  |  | Paid-In Capital in Excess of Par-Preferred |  |  |
|  |  | Stock [25,000 shares $\times$ (\$44-\$40)] |  | 100,000 |

Ex. 13-9

| Jan. | 12 | Cash Dividends | 135,000 |  |
| :--- | :--- | :--- | ---: | ---: |
|  |  | Cash Dividends Payable |  | 135,000 |
|  |  |  |  |  |
| Mar. | 13 | No entry required. |  |  |
|  |  |  | 135,000 |  |
| Apr. | 12 | Cash Dividends Payable |  | 135,000 |
|  |  | Cash |  |  |

Ex. 13-10
a. (1)

(1) | Stock Dividends $[(500,000$ shares $\times 2 \%) \times \$ 13]$ | 130,000 |  |
| :--- | ---: | ---: |
| Stock Dividends Distributable |  |  |
| $(10,000$ shares $\times \$ 4)$ |  | 40,000 |
| Paid-In Capital in Excess of Par- |  |  |
| Common Stock $[10,000$ shares $\times(\$ 13-\$ 4)]$ |  | 90,000 |
|  |  |  |
|  | Stock Dividends Distributable | 40,000 |
| Common Stock |  | 40,000 |

b. (1) $\$ 3,000,000(\$ 2,000,000+\$ 1,000,000)$
(2) $\$ 33,500,000$
(3) $\$ 36,500,000(\$ 3,000,000+\$ 33,500,000)$
c. (1) $\$ 3,130,000(\$ 2,000,000+\$ 1,000,000+\$ 40,000+\$ 90,000)$
(2) $\$ 33,370,000$ ( $\$ 33,500,000-\$ 130,000)$
(3) $\$ 36,500,000(\$ 3,130,000+\$ 33,370,000)$

Ex. 13-11
a. 150,000 shares $(50,000 \times 3)$
b. $\$ 70$ per share $(\$ 210 \div 3)$

Ex. 13-12

|  | Assets | Liabilities | Stockholders' Equity |
| :---: | :---: | :---: | :---: |
| (1) Authorizing and issuing stock |  |  |  |
| certificates in a stock split | 0 | 0 | 0 |
| (2) Declaring a stock dividend | 0 | 0 | 0 |
| (3) Issuing stock certificates for |  |  |  |
| the stock dividend declared |  |  |  |
| in (2) | 0 | 0 | 0 |
| (4) Declaring a cash dividend | 0 | + | - |
| (5) Paying the cash dividend declared in (4) | - | - | 0 |

Ex. 13-13

| Jan. |  | No entry required. The stockholders' ledger would |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | be revised to record the increased number of |  |  |
|  |  | shares held by each stockholder. |  |  |
| Apr. | 30 | Cash Dividends $\{[(18,000$ shares $\times$ \$0.75) + |  |  |
|  |  | (150,000 shares $\times$ \$0.28)] $=\$ 13,500$ + |  |  |
|  |  | \$42,000 = \$55,500\} | 55,500 |  |
|  |  | Cash Dividends Payable |  | 55,500 |
|  |  |  |  |  |
| July | 1 | Cash Dividends Payable | 55,500 |  |
|  |  | Cash |  | 55,500 |
|  |  |  |  |  |
| Oct. | 31 | Cash Dividends $\{[(18,000$ shares $\times \$ 0.75)+$ |  |  |
|  |  | (150,000 shares $\times$ \$0.14)] $=\$ 13,500+$ |  |  |
|  |  | \$21,000 = \$34,500\} | 34,500 |  |
|  |  | Cash Dividends Payable |  | 34,500 |
|  |  |  |  |  |
|  | 31 | Stock Dividends [(150,000 shares $\times 5 \% \times$ |  |  |
|  |  | \$52) = \$390,000] | 390,000 |  |
|  |  | Stock Dividends Distributable |  |  |
|  |  | (7,500 shares $\times \$ 40$ ) |  | 300,000 |
|  |  | Paid-In Capital in Excess of Par-Common Stock |  |  |
|  |  | [7,500 shares $\times$ (\$52-\$40)] |  | 90,000 |
|  |  |  |  |  |
| Dec. | 31 | Cash Dividends Payable | 34,500 |  |
|  |  | Cash |  | 34,500 |
|  |  |  |  |  |
|  | 31 | Stock Dividends Distributable | 300,000 |  |
|  |  | Common Stock |  | 300,000 |

Ex. 13-14
a.

| Feb. | 11 | Treasury Stock (180,000 shares $\times \mathbf{\$ 1 7})$ | $3,060,000$ |  |
| :--- | :--- | :--- | ---: | ---: |
|  |  | Cash |  | $3,060,000$ |
|  |  |  | $1,800,000$ |  |
| Apr. | 30 | Cash $(90,000$ shares $\times \$ 20)$ |  | $1,530,000$ |
|  |  | Treasury Stock $(90,000$ shares $\times \$ 17)$ |  | 270,000 |
|  |  | Paid-In Capital from Sale of Treasury |  |  |
|  |  | Stock $[90,000$ shares $\times(\$ 20-\$ 17)]$ |  |  |
|  |  |  | 450,000 |  |
| Aug. | 22 | Cash $(30,000$ shares $\times \$ 15)$ |  |  |
|  |  | Paid-In Capital from Sale of Treasury | 60,000 |  |
|  |  | Stock $[30,000$ shares $\times(\$ 17-\$ 15)]$ | 510,000 |  |
|  |  | Treasury Stock $(30,000$ shares $\times \$ 17)$ |  |  |

b. $\$ 210,000(\$ 270,000-\$ 60,000)$ credit
c. Lava Lake may have purchased the stock to support the market price of the stock, to provide shares for resale to employees, or to reissue to employees as a bonus according to stock purchase agreements.

Ex. 13-15
a.

| Jan. | 31 | Treasury Stock $(50,000$ shares $\times \$ 51)$ | $2,550,000$ |
| :--- | :---: | ---: | ---: |
|  |  | Cash |  |
|  |  |  | $2,550,000$ |
| June | 14 | Cash $(24,000$ shares $\times \$ 60)$ | $1,440,000$ |
|  |  | Treasury Stock $(24,000$ shares $\times \$ 51)$ |  |
|  |  | Paid-In Capital from Sale of Treasury |  |
|  |  | Stock $[24,000$ shares $\times(\$ 60-\$ 51)]$ |  |
|  |  |  |  |
| Nov. | 23 | Cash $(18,000$ shares $\times \$ 56)$ | 216,000 |
|  |  | Treasury Stock $(18,000$ shares $\times \$ 51)$ | $1,008,000$ |
|  |  | Paid-In Capital from Sale of Treasury |  |
|  |  | Stock $[18,000$ shares $\times(\$ 56-\$ 51)]$ |  |

b. $\$ 306,000(\$ 216,000+\$ 90,000)$ credit
c. $\$ 408,000(8,000$ shares $\times \$ 51)$ debit
d. The balance in the treasury stock account is reported as a deduction from the total of the paid-in capital and retained earnings.

Ex. 13-16
a.

| May | 14 | Treasury Stock $(23,500$ shares $\times \$ 75)$ | $1,762,500$ |  |
| :--- | :--- | :--- | ---: | ---: |
|  |  | Cash |  | $1,762,500$ |
|  |  |  | $1,134,000$ |  |
| Sept. | 6 | Cash $(14,000$ shares $\times \$ 81)$ |  | $1,050,000$ |
|  |  | Treasury Stock $(14,000$ shares $\times \$ 75)$ |  | 84,000 |
|  |  | Paid-In Capital from Sale of Treasury |  |  |
|  |  | Stock $[14,000$ shares $\times(\$ 81-\$ 75)]$ |  |  |
|  |  |  | 684,000 |  |
| Nov. | 30 | Cash $(9,500$ shares $\times \$ 72)$ |  |  |
|  |  | Paid-In Capital from Sale of Treasury | 28,500 |  |
|  |  | Stock $[9,500$ shares $\times(\$ 75-\$ 72)]$ | 712,500 |  |
|  |  | Treasury Stock $(9,500$ shares $\times \$ 75)$ |  |  |

b. $\$ 55,500(\$ 84,000-\$ 28,500)$ credit
c. Stockholders' equity section
d. Biscayne Bay Water Inc. may have purchased the stock to support the market price of the stock, to provide shares for resale to employees, or to reissue to employees as a bonus according to stock purchase agreements.

Ex. 13-17

| Stockholders' Equity |  |  |
| :--- | ---: | ---: |
| Paid-in capital: |  |  |
| Preferred 2\% stock, $\$ 120$ par |  |  |
| (85,000 shares authorized, | $\$ 8,400,000$ |  |
| 70,000 shares issued) | 210,000 |  |
| Excess over par |  | $\$ 8,610,000$ |
| Paid-in capital, preferred stock |  |  |
| Common stock, no par, $\$ 14$ stated |  |  |
| value (375,000 shares authorized, |  |  |
| 320,000 shares issued) | $\$ 4,480,000$ |  |
| Excess over par | 480,000 |  |
| Paid-in capital, common stock |  | $4,960,000$ |
| From sale of treasury stock |  | 45,000 |
| Total paid-in capital |  |  |

## Ex. 13-18

| Stockholders' Equity |  |  |
| :--- | ---: | ---: |
| Paid-in capital: |  |  |
| Common stock, $\$ 45$ par |  |  |
| $(80,000$ shares authorized, |  |  |
| 68,000 shares issued) | $\$ 3,060,000$ |  |
| Excess over par | 272,000 |  |
| Paid-in capital, common stock |  | $\$ 3,332,000$ |
| From sale of treasury stock |  | 115,000 |
| Total paid-in capital |  |  |
| Retained earnings |  | $\$ 3,447,000$ |
| Total |  |  |
| Treasury stock (9,000 shares at cost) |  |  |
| Total stockholders' equity |  |  |

Ex. 13-19


Ex. 13-20

| SUMTER PUMPS CORPORATION <br> Retained Earnings Statement <br> For the Year Ended January 31, 20Y2 |  |  |
| :--- | ---: | :---: |
| Retained earnings, February 1, 20Y1 |  |  |
| Net income | $\$ 8,160,000$ |  |
| Dividends declared | $(3,600,000)$ |  |
| Increase in retained earnings |  |  |
| Retained earnings, January 31, 20Y2 |  |  |

Ex. 13-21

1. Retained earnings is not part of paid-in capital.
2. The cost of treasury stock should be deducted from the total stockholders' equity.
3. Dividends payable should be included as part of current liabilities and not as part of stockholders' equity.
4. Common stock should be included as part of paid-in capital.
5. The amount of shares of common stock issued of 825,000 times the par value per share of $\$ 20$ should be extended as $\$ 16,500,000$, not $\$ 17,655,000$. The difference, $\$ 1,155,000$, probably represents paid-in capital in excess of par.
6. Organizing costs should be expensed as Organizational Expenses when incurred and not included as a part of stockholders' equity.

One possible corrected Stockholders' Equity section of the balance sheet using Method 1 of Exhibit 8 is as follows:

| Stockholders' Equity |  |  |  |
| :---: | :---: | :---: | :---: |
| Paid-in capital: |  |  |  |
| Preferred 2\% stock, \$80 par |  |  |  |
| (125,000 shares authorized |  |  |  |
| and issued) | \$10,000,000 |  |  |
| Excess over par | 500,000 |  |  |
| Paid-in capital, preferred stock |  | \$10,500,000 |  |
| Common stock, \$20 par (1,000,000 |  |  |  |
| shares authorized, 825,000 |  |  |  |
| shares issued) | \$16,500,000 |  |  |
| Excess over par | 1,155,000 |  |  |
| Paid-in capital, common stock |  | 17,655,000 |  |
| Total paid-in capital |  |  | \$ 28,155,000 |
| Retained earnings* |  |  | 96,400,000 |
| Total |  |  | \$124,555,000 |
| Treasury stock (75,000 shares at cost) |  |  | (1,755,000) |
| Total stockholders' equity |  |  | \$122,800,000 |
|  |  |  |  |

* \$96,700,000 - \$300,000. Since the organizing costs should have been expensed, the retained earnings should be $\$ 300,000$ less.

Ex. 13-22

| I-CARDS INC. <br> Statement of Stockholders' Equity For the Year Ended December 31, $20 Y 9$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Common Stock, $\$ 40$ par | Paid-In <br> Capital <br> in Excess <br> of Par | Treasury Stock | Retained Earnings | Total |
| Balance, Jan. 1, $20 Y 9$ | \$4,800,000 | \$ 960,000 | - | \$11,375,000 | \$17,135,000 |
| Issued 30,000 shares |  |  |  |  |  |
| of common stock | 1,200,000 | 300,000 |  |  | 1,500,000 |
| Purchased 12,000 shares |  |  |  |  |  |
| as treasury stock |  |  | \$(552,000) |  | $(552,000)$ |
| Net income |  |  |  | 3,780,000 | 3,780,000 |
| Dividends |  |  |  | $(276,000)$ | $(276,000)$ |
| Balance, Dec. 31, $20 Y 9$ | \$6,000,000 | \$1,260,000 | \$(552,000) | \$14,879,000 | \$21,587,000 |
|  |  |  |  |  |  |

Ex. 13-23
Earnings per Share
$=\frac{\text { Net Income }- \text { Preferred Dividends }}{\text { Avg. Number of Common Shares Outstanding }}$
$=\frac{\$ 316,000-(\$ 1.60 \times 15,000 \text { shares })}{40,000 \text { shares }}$
$=\$ 7.30$ per share

Ex. 13-24

a. | Earnings per Share | $=\frac{\text { Net Income }- \text { Preferred Dividends }}{\text { Avg. Number of Common Shares Outstanding }}$ |
| ---: | :--- |
| Year 3 Earnings per Share | $=\frac{\$ 888-\$ 14}{484 \text { shares }}$ |
|  | $=\$ 1.81$ per share |
| Year 2 Earnings per Share | $=\frac{\$ 1,450-\$ 14}{468 \text { shares }}$ |
|  | $=\$ 3.07$ per share |
| Year 1 Earnings per Share | $=\frac{\$ 828-\$ 14}{444 \text { shares }}$ |
|  | $=\$ 1.83$ per share |

b.

|  | Year 3 | Year 2 | Year 1 |
| :---: | :---: | :---: | :---: |
| Earnings per share.. | \$1.81 | \$3.07 | \$1.83 |
| Growth as a percent of Year 1 (base year). | -1\% | 68\% | 100\% |
| Net income. | \$888 | \$1,450 | \$828 |
| Growth as a percent of Year 1 (base year). | 7\% | 75\% | 100\% |

Earnings per share and net income varied significantly over the three-year period. Earnings per share grew 68\% in Year 2 from Year 1, but declined in Year 3 by 1\% of Year 1's earnings per share. Net income increased significantly in Year 2 to 75\% of Year 1's net income. However, net income in Year 3 was only 7\% of Year 1 's net income. Thus, the changes in earnings per share and net income were similar.

The variability of earnings per share and net income is partially explained by the unpredictable nature of Pacific Gas and Electric's regulatory environment. For example, Pacific Gas and Electric is regulated by the California Public Utilities Commission (CPUC). The CPUC has jurisdiction over the rates, terms, and conditions of service for the company's electricity and natural gas distribution operations, electricity generation, and natural gas transmission and storage services. The CPUC also has jurisdiction over the company's issuances of securities, dispositions of utility assets and facilities, energy purchases on behalf of the company's electricity and natural gas retail customers, rates of return, rates of depreciation, oversight of nuclear decommissioning, and aspects of the siting of facilities used in providing electric and natural gas service. The CPUC has the right to conduct investigations and issue penalties against the company.

Ex. 13-25
a. Caterpillar Inc.


Year 2: Earnings per Share $=\frac{\$ 2,102}{594 \text { shares }}$
$=\$ 3.54$ per share
Year 1: Earnings per Share $=\frac{\$ 3,695}{599 \text { shares }}$
= \$6.17 per share

## Deere \& Company

$$
\begin{aligned}
\text { Earnings per Share } & =\frac{\text { Net Income }}{\text { Avg. Number of Common Shares Outstanding }} \\
\text { Year 2: Earnings per Share } & =\frac{\$ 1,940}{334 \text { shares }} \\
& =\$ 5.81 \text { per share }
\end{aligned}
$$

Year 1: Earnings per Share $=\frac{\$ 3,162}{363 \text { shares }}$
= \$8.71 per share
b.

| Earnings per Share |  |
| :---: | :---: |
| Year 2 | Year 1 |
| $\$ 3.54$ | $\$ 6.17$ |
| $\$ 5.81$ | $\$ 8.71$ |

c. Deere's earnings per share for Year 1 and Year 2 are higher than Caterpillar's. However, from Year 1 to Year 2, the earnings per share for both companies declined. Caterpillar's earnings per share declined by $43 \%[\$ 6.17-\$ 3.54) \div \$ 6.17]$, while Deer's earnings per share declined by $33 \%$ [ $\$ 8.71$ - \$5.81) $\div \$ 8.71$ ]. The slowing world economy contributed to the declines from Year 1 to Year 2. Overall, Deere appears to be the more profitable company.

## PROBLEMS

Prob. 13-1A
1.

| Year | Total Dividends | Preferred Dividends |  | Common Dividends |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Per Share | Total | Per Share |
| Year 1......... | \$ 80,000 | \$ 80,000 | \$0.32 | \$ 0 | \$0.00 |
| Year 2........ | 90,000 | 90,000 | 0.36 | 0 | 0.00 |
| Year 3......... | 150,000 | 130,000* | 0.52 | 20,000 | 0.04 |
| Year 4......... | 150,000 | 100,000 | 0.40 | 50,000 | 0.10 |
| Year 5......... | 160,000 | 100,000 | 0.40 | 60,000 | 0.12 |
| Year 6....... | 180,000 | 100,000 | 0.40 | 80,000 | 0.16 |
|  |  |  | \$2.40 |  | \$0.42 |

* $\$ 130,000=($ Year 1 dividends in arrears of $\$ 20,000)$ + (Year 2 dividends in arrears of $\$ 10,000$ ) + (Year 3 current dividend of $\$ 100,000$ )

2. Average annual dividend for preferred: $\$ 0.40$ per share $(\$ 2.40 \div 6)$ Average annual dividend for common: $\$ 0.07$ per share ( $\$ 0.42 \div 6$ )
3. a. $1.6 \%(\$ 0.40 \div \$ 25.00)$
b. $0.4 \%(\$ 0.07 \div \$ 17.50)$

Prob. 13-2A

| May | 11 | Building | 3,375,000 |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Land | 1,500,000 |  |
|  |  | Common Stock (125,000 shares $\times \$ 35$ ) |  | 4,375,000 |
|  |  | Paid-In Capital in Excess of Par- |  |  |
|  |  | Common Stock [125,000 shares $\times$ |  |  |
|  |  | (\$39-\$35)] |  | 500,000 |
|  |  |  |  |  |
|  | 20 | Cash (40,000 shares $\times \$ 52$ ) | 2,080,000 |  |
|  |  | Preferred Stock (40,000 shares $\times \mathbf{\$ 5 0}$ ) |  | 2,000,000 |
|  |  | Paid-In Capital in Excess of Par- |  |  |
|  |  | Preferred Stock [40,000 shares $\times$ |  |  |
|  |  | (\$52-\$50)] |  | 80,000 |
|  |  |  |  |  |
|  | 31 | Cash | 4,000,000 |  |
|  |  | Mortgage Note Payable |  | 4,000,000 |

Prob. 13-3A
a.


| * Calculation of cash dividends: | Outstanding Shares of Stock |  |
| :---: | :---: | :---: |
|  | Preferred Stock | Common Stock |
| Beginning of year | 80,000 shares | 3,000,000 shares |
| (a) |  | 400,000 |
| (b) | 5,000 |  |
| (c) |  | $(150,000)$ |
| (d) |  | 80,000 |
| (e) |  | 20,000 |
|  | 85,000 shares | 3,350,000 shares |
| Cash dividends per share | + \$1.50 | + \$0.06 |
| Dividends paid in (f) | \$127,500 | \$201,000 |
| Total dividends paid \$328,500 ( | 27,500 + \$201,000) |  |

Prob. 13-4A

1. and 2.

Common Stock


Prob. 13-4A (Continued)
2.

| Jan. | 22 | Cash Dividends Payable | 28,000 |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | [(375,000 shares - 25,000 shares) $\times$ \$0.08] |  |  |
|  |  | Cash |  | 28,000 |
| Apr. | 10 | Cash | 1,800,000 |  |
|  |  | Common Stock ( 75,000 shares $\times$ \$20) |  | 1,500,000 |
|  |  | Paid-In Capital in Excess of Stated Value- |  |  |
|  |  | Common Stock [75,000 shares $\times$ (\$24-\$20)] |  | 300,000 |
|  |  |  |  |  |
| June | 6 | Cash (25,000 shares $\times \mathbf{\$ 2 6 )}$ | 650,000 |  |
|  |  | Treasury Stock ( 25,000 shares $\times \$ 18$ ) |  | 450,000 |
|  |  | Paid-In Capital from Sale of Treasury Stock |  |  |
|  |  | [25,000 shares $\times(\$ 26-\$ 18)]$ |  | 200,000 |
|  |  |  |  |  |
| July | 5 | Stock Dividends [(375,000 shares + |  |  |
|  |  | 75,000 shares) $\times 4 \% \times \$ 25]$ | 450,000 |  |
|  |  | Stock Dividends Distributable |  |  |
|  |  | (18,000 shares $\times \$ 20)$ |  | 360,000 |
|  |  | Paid-In Capital in Excess of Stated Value- |  |  |
|  |  | Common Stock [18,000 shares $\times(\$ 25-\$ 20)$ ] |  | 90,000 |
|  |  |  |  |  |
| Aug. | 15 | Stock Dividends Distributable | 360,000 |  |
|  |  | Common Stock |  | 360,000 |
|  |  |  |  |  |
| Nov. | 23 | Treasury Stock (30,000 shares $\times$ \$19) | 570,000 |  |
|  |  | Cash |  | 570,000 |
|  |  |  |  |  |
| Dec. | 28 | Cash Dividends [(375,000 shares + 75,000 shares + |  |  |
|  |  | 18,000 shares - 30,000 shares) $\times$ \$0.10] | 43,800 |  |
|  |  | Cash Dividends Payable |  | 43,800 |
|  |  |  |  |  |
|  | 31 | Retained Earnings | 493,800 |  |
|  |  | Stock Dividends |  | 450,000 |
|  |  | Cash Dividends |  | 43,800 |

Prob. 13-4A (Concluded)
3.

| MORROW ENTERPRISES INC. <br> Retained Earnings Statement <br> For the Year Ended December 31, 20Y5 |  |
| :--- | ---: |
| Retained earnings, January 1, 20Y5 |  |
| Net income | $\mathbf{\$ 1 , 1 2 5 , 0 0 0}$ |
| Dividends: | $\mathbf{\$ 3 3 , 6 0 0 , 0 0 0}$ |
| Cash dividends | $(43,800)$ |
| Stock dividends | $(450,000)$ |
| Increase in retained earnings |  |
| Retained earnings, December 31, 20Y5 |  |

4. 

| Stockholders' Equity |  |  |
| :--- | ---: | ---: |
| Paid-in capital: |  |  |
| Common stock, $\$ 20$ stated value |  |  |
| $(500,000$ shares authorized, |  |  |
| 468,000 shares issued) | $\$ 9,360,000$ |  |
| Excess over stated value | $1,215,000$ |  |
| Paid-in capital, common stock |  | $\$ 10,575,000$ |
| From sale of treasury stock |  | 200,000 |
| Total paid-in capital |  |  |
| Retained earnings |  | $\$ 10,775,000$ |
| Total |  | $34,231,200$ |
| Treasury stock (30,000 shares at cost) |  |  |
| Total stockholders' equity |  |  |

Prob. 13-5A

| Jan. |  | No entry required. The stockholders' ledger would |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | be revised to record the increased number of shares |  |  |
|  |  | held by each stockholder and the new par value. |  |  |
|  |  |  |  |  |
| Mar. | 10 | Treasury Stock (100,000 shares $\times$ \$ 30) | 3,000,000 |  |
|  |  | Cash |  | 3,000,000 |
|  |  |  |  |  |
| Apr. | 30 | Cash Dividends $\{(30,000$ shares $\times \$ 0.25)+$ |  |  |
|  |  | [(4,000,000 shares $-100,000$ shares) $\times \mathbf{\$ 0 . 0 8 ]}\}$ | 319,500 |  |
|  |  | Cash Dividends Payable |  | 319,500 |
|  |  |  |  |  |
| June | 15 | Cash Dividends Payable | 319,500 |  |
|  |  | Cash |  | 319,500 |
|  |  |  |  |  |
| Aug. | 20 | Cash (60,000 shares $\times$ \$40) | 2,400,000 |  |
|  |  | Treasury Stock ( 60,000 shares $\times \mathbf{\$ 3 0}$ ) |  | 1,800,000 |
|  |  | Paid-In Capital from Sale of Treasury |  |  |
|  |  | Stock [60,000 shares $\times$ (\$40-\$30)] |  | 600,000 |
|  |  |  |  |  |
| Oct. | 15 | Cash Dividends $\{(30,000$ shares $\times$ \$0.25) - |  |  |
|  |  | [(4,000,000 shares -40,000 shares) $\times$ \$0.08] $\}$ | 324,300 |  |
|  |  | Cash Dividends Payable |  | 324,300 |
|  |  |  |  |  |
|  | 15 | Stock Dividends (39,600 shares $\times$ \$35) | 1,386,000 |  |
|  |  | Stock Dividends Distributable |  |  |
|  |  | (39,600 shares $\times$ \$5) |  | 198,000 |
|  |  | Paid-In Capital in Excess of Par- |  |  |
|  |  | Common Stock (39,600 shares $\times \mathbf{\$ 3 0}$ ) |  | 1,188,000 |
|  |  |  |  |  |
| Dec. | 19 | Cash Dividends Payable | 324,300 |  |
|  |  | Cash |  | 324,300 |
|  |  |  |  |  |
|  | 19 | Stock Dividends Distributable | 198,000 |  |
|  |  | Common Stock |  | 198,000 |

Prob. 13-1B
1.

| Year | Total Dividends | Preferred Dividends |  | Common Dividends |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Per Share | Total | Per Share |
| Year 1......... | \$ 24,000 | \$ 24,000 | \$ 0.96 | \$ 0 | \$0.00 |
| Year 2.......... | 10,000 | 10,000 | 0.40 | 0 | 0.00 |
| Year 3......... | 126,000 | 101,000* | 4.04 | 25,000 | 0.25 |
| Year 4.......... | 100,000 | 45,000 | 1.80 | 55,000 | 0.55 |
| Year 5......... | 125,000 | 45,000 | 1.80 | 80,000 | 0.80 |
| Year 6......... | 125,000 | 45,000 | 1.80 | 80,000 | 0.80 |
|  |  |  | \$10.80 |  | \$2.40 |
| * $\$ 101,000=($ Year 1 dividends in arrears of $\$ 11,000)$ + (Year 2 dividends in arrears of $\$ 45,000$ ) + (Year 3 current dividend of $\$ 45,000$ ) |  |  |  |  |  |

2. Average annual dividend for preferred: $\$ 1.80$ per share $(\$ 10.80 \div 6)$ Average annual dividend for common: $\$ 0.40$ per share ( $\$ 2.40 \div 6$ )
3. a. $1.8 \%(\$ 1.80 \div \$ 100)$
b. $8.0 \%(\$ 0.40 \div \$ 5.00)$

Prob. 13-2B

| Oct. | 9 | Cash | 1,500,000 |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Mortgage Note Payable |  | 1,500,000 |
|  |  |  |  |  |
|  | 17 | Cash (20,000 shares $\times$ \$126) | 2,520,000 |  |
|  |  | Preferred Stock (20,000 shares $\times \mathbf{\$ 1 2 0}$ ) |  | 2,400,000 |
|  |  | Paid-In Capital in Excess of Par- |  |  |
|  |  | Preferred Stock [20,000 shares $\times$ |  |  |
|  |  | (\$126-\$120)] |  | 120,000 |
|  |  |  |  |  |
|  | 28 | Building | 4,150,000 |  |
|  |  | Land | 800,000 |  |
|  |  | Common Stock (300,000 shares $\times$ \$15) |  | 4,500,000 |
|  |  | Paid-In Capital in Excess of Par- |  |  |
|  |  | Preferred Stock [300,000 shares $\times$ |  |  |
|  |  | (\$16.50-\$15.00)] |  | 450,000 |

Prob. 13-3B
b.

| Treasury Stock (87,500 shares $\times \mathbf{\$ 8}$ ) | 700,000 |  |
| :---: | :---: | :---: |
| Cash |  | 700,000 |
| Cash (55,000 shares $\times$ \$11) | 605,000 |  |
| Treasury Stock ( 55,000 shares $\times \$ 8$ ) |  | 440,000 |
| Paid-In Capital from Sale of Treasury Stock |  |  |
| [55,000 shares $\times$ (\$11-\$8)] |  | 165,000 |
|  |  |  |
| Cash (20,000 shares $\times$ \$84) | 1,680,000 |  |
| Preferred Stock (20,000 shares $\times \mathbf{\$ 8 0}$ ) |  | 1,600,000 |
| Paid-In Capital in Excess of Par-Preferred |  |  |
| Stock [20,000 shares $\times$ (\$84-\$80)] |  | 80,000 |
|  |  |  |
| Cash (400,000 shares $\times \$ 13$ ) | 5,200,000 |  |
| Common Stock ( 400,000 shares $\times \$ 9$ ) |  | 3,600,000 |
| Paid-In Capital in Excess of Par-Common |  |  |
| Stock [400,000 shares $\times$ (\$13-\$9)] |  | 1,600,000 |
|  |  |  |
| Cash (18,000 shares $\times \$ 7.50$ ) | 135,000 |  |
| Paid-In Capital from Sale of Treasury Stock |  |  |
| [18,000 shares $\times$ (\$8.00-\$7.50)] | 9,000 |  |
| Treasury Stock (18,000 shares $\times \$ 8$ ) |  | 144,000 |
|  |  |  |
| Cash Dividends | 234,775* |  |
| Cash Dividends Payable |  | 234,775 |
|  |  |  |
| Cash Dividends Payable | 234,775 |  |
| Cash |  | 234,775 |


|  | Outstanding Shares of Stock |  |
| :---: | :---: | :---: |
|  | Preferred Stock | Common Stock |
| Beginning of year | 60,000 shares | 1,750,000 shares |
| (a) |  | $(87,500)$ |
| (b) |  | 55,000 |
| (c) | 20,000 |  |
| (d) |  | 400,000 |
| (e) |  | 18,000 |
|  | 80,000 shares | 2,135,500 shares |
| Cash dividends per share | + $\$ 1.60$ | + \$0.05 |
| Dividends paid in (f) | \$128,000 | \$106,775 |

Total dividends paid \$234,775 (\$128,000 + \$106,775)

Prob. 13-4B

1. and 2.

| Common Stock |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Jan. 1 Bal. <br> Apr. 13  <br> July 16  <br> Dec. 31 Bal. | $\begin{array}{r} \hline 3,100,000 \\ 1,000,000 \\ \hline 123,000 \\ \hline 4,223,000 \end{array}$ |
| Paid-In Capital in Excess of Stated Value-Common Stock |  |  |  |  |
|  |  |  | Jan. 1 Bal. <br> Apr. 13  <br> June. 14  <br> Dec. 31 Bal. | $\begin{array}{r} \hline 1,240,000 \\ 600,000 \\ 61,500 \\ \hline 1,901,500 \end{array}$ |
| Retained Earnings |  |  |  |  |
| Dec. | 31 | 248,068 | Jan. 1 Bal. <br> Dec. 31  <br> Dec. 31 Bal. | $\begin{array}{r} \hline 4,875,000 \\ \hline 775,000 \\ \hline 5,401,932 \end{array}$ |
| Treasury Stock |  |  |  |  |
| Jan. | 1 Bal. | 288,000 | Mar. 15 | 288,000 |
| Oct. | 30 | 300,000 |  |  |
| Dec. | 31 Bal. | 300,000 |  |  |
| Paid-In Capital from Sale of Treasury Stock |  |  |  |  |
|  |  |  | Mar. 15 | 36,000 |
| Stock Dividends Distributable |  |  |  |  |
| July | 16 | 123,000 | June 14 | 123,000 |
| Stock Dividends |  |  |  |  |
| June | 14 | 184,500 | Dec. 31 | 184,500 |
| Cash Dividends |  |  |  |  |
| Dec. | 30 | 63,568 | Dec. 31 | 63,568 |

Prob. 13-4B (Continued)
2.

| Jan. | 15 | Cash Dividends Payable |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | [(620,000 shares - 48,000 shares) $\times$ \$0.06] | 34,320 |  |
|  |  | Cash |  | 34,320 |
| Mar. | 15 | Cash (48,000 shares $\times \$ 6.75$ ) | 324,000 |  |
|  |  | Treasury Stock (48,000 shares $\times \mathbf{\$ 6 . 0 0}$ ) |  | 288,000 |
|  |  | Paid-In Capital from Sale of Treasury Stock |  |  |
|  |  | [48,000 shares $\times$ (\$6.75-\$6.00)] |  | 36,000 |
| Apr. | 13 | Cash (200,000 shares $\times$ \$8) | 1,600,000 |  |
|  |  | Common Stock ( 200,000 shares $\times \$ 5$ ) |  | 1,000,000 |
|  |  | Paid-In Capital in Excess of Stated Value- |  |  |
|  |  | Common Stock [200,000 shares $\times(\$ 8-\$ 5)$ ] |  | 600,000 |
|  |  |  |  |  |
| June | 14 | Stock Dividends |  |  |
|  |  | [(620,000 shares + 200,000 shares) $\times 3 \% \times \$ 7.50]$ | 184,500 |  |
|  |  | Stock Dividends Distributable |  |  |
|  |  | (24,600 shares $\times \$ 5$ ) |  | 123,000 |
|  |  | Paid-In Capital in Excess of Stated Value- |  |  |
|  |  | Common Stock [24,600 shares $\times$ |  |  |
|  |  | (\$7.50-\$5.00)] |  | 61,500 |
|  |  |  |  |  |
| July | 16 | Stock Dividends Distributable | 123,000 |  |
|  |  | Common Stock |  | 123,000 |
|  |  |  |  |  |
| Oct. | 30 | Treasury Stock (50,000 shares $\times$ \$6) | 300,000 |  |
|  |  | Cash |  | 300,000 |
|  |  |  |  |  |
| Dec. | 30 | Cash Dividends [(620,000 shares + |  |  |
|  |  | 200,000 shares + 24,600 shares - |  |  |
|  |  | 50,000 shares) $\times$ \$0.08] | 63,568 |  |
|  |  | Cash Dividends Payable |  | 63,568 |
|  |  |  |  |  |
|  | 31 | Retained Earnings | 248,068 |  |
|  |  | Stock Dividends |  | 184,500 |
|  |  | Cash Dividends |  | 63,568 |

Prob. 13-4B (Concluded)
3.

| NAV-GO ENTERPRISES INC. <br> Retained Earnings Statement <br> For the Year Ended December 31, 20Y3 |  |  |
| :--- | ---: | ---: |
| Retained earnings, January 1, 20Y3 |  | $\$ 4,875,000$ |
| Net income | $\$ 775,000$ |  |
| Dividends: | $(63,568)$ |  |
| Cash dividends | $(184,500)$ |  |
| Stock dividends |  | 526,932 |
| Increase in retained earnings |  | $\$ 5,401,932$ |
| Retained earnings, December 31, 20Y3 |  |  |

4. 

| Stockholders' Equity |  |  |
| :--- | ---: | ---: |
| Paid-in capital: |  |  |
| Common stock, $\$ 5$ stated value |  |  |
| (900,000 shares authorized, 844,600 |  |  |
| shares issued) | $\$ 4,223,000$ |  |
| Excess over stated value | $1,901,500$ |  |
| Paid-in capital, common stock |  | $\$ 6,124,500$ |
| From sale of treasury stock |  | 36,000 |
| Total paid-in capital |  |  |
| Retained earnings |  | $\$ 6,160,500$ |
| Total |  | $5,401,932$ |
| Treasury stock (50,000 shares at cost) |  | $\$ 1,562,432$ |
| Total stockholders' equity |  | $(300,000)$ |
|  |  | $\$ 11,262,432$ |

Prob. 13-5B

| Jan. | 15 | No entry required. The stockholders' ledger would |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | be revised to record the increased number of |  |  |
|  |  | shares held by each stockholder and the new par |  |  |
|  |  | value. |  |  |
| Mar. | 1 | Cash Dividends [(100,000 shares $\times$ \$0.25) + |  |  |
|  |  | (800,000 shares $\times \$ 0.07$ )] | 81,000 |  |
|  |  | Cash Dividends Payable |  | 81,000 |
|  |  |  |  |  |
| Apr. | 30 | Cash Dividends Payable | 81,000 |  |
|  |  | Cash |  | 81,000 |
|  |  |  |  |  |
| May | 31 | Treasury Stock (60,000 shares $\times$ \$32) | 1,920,000 |  |
|  |  | Cash |  | 1,920,000 |
|  |  |  |  |  |
| Aug. | 17 | Cash (40,000 shares $\times$ \$38) | 1,520,000 |  |
|  |  | Treasury Stock ( 40,000 shares $\times \$ 32$ ) |  | 1,280,000 |
|  |  | Paid-In Capital from Sale of Treasury |  |  |
|  |  | Stock [40,000 shares $\times$ (\$38-\$32)] |  | 240,000 |
|  |  |  |  |  |
| Sept. | 1 | Cash Dividends $\{(100,000$ shares $\times$ \$ 0.25$)+$ |  |  |
|  |  | [(800,000 shares -60,000 shares + |  |  |
|  |  | 40,000 shares) $\times$ \$0.09]\} | 95,200 |  |
|  |  | Cash Dividends Payable |  | 95,200 |
|  |  |  |  |  |
|  | 1 | Stock Dividends [(800,000 shares - 60,000 shares + |  |  |
|  |  | 40,000 shares) $\times 1 \% \times \$ 40$ ] | 312,000 |  |
|  |  | Stock Dividends Distributable |  |  |
|  |  | (7,800 shares $\times \$ 30$ ) |  | 234,000 |
|  |  | Paid-In Capital in Excess of Par- |  |  |
|  |  | Common Stock [7,800 shares $\times$ (\$40-\$30)] |  | 78,000 |
|  |  |  |  |  |
| Oct. | 31 | Cash Dividends Payable | 95,200 |  |
|  |  | Cash |  | 95,200 |
|  |  |  |  |  |
|  | 31 | Stock Dividends Distributable | 234,000 |  |
|  |  | Common Stock |  | 234,000 |

## CASES \& PROJECTS

## CP 13-1

Tommy is clearly acting unethically for several reasons. First, he is violating the company's policy on stock purchases. This policy was established to ensure the fair and timely dissemination of information that gives all potential investors the same chance to participate in the stock price increases. The fact that he is purchasing the stock in partnership with his father does not get around the company policy. Second, Tommy has "inside information" that is not available to other potential investors. Purchasing the stock with knowledge of information that is not available to other investors is unethical. Ethical managers and accountants are honest and fair, which means that they do not attempt to profit from "inside information" that is not available publicly. Doing so would give them an unfair advantage to benefit from stock price increases. Trading on "inside information" is also a violation of federal securities laws, which is a crime punishable by fine and/or imprisonment.

CP 13-2
Lou and Shirley are behaving in a professional manner as long as full and complete information is provided to potential investors in accordance with federal regulations for the sale of securities to the public. If such information is provided, the marketplace will determine the fair value of the company's stock.

CP 13-3
A sample solution based on Nike Inc.'s Form 10-K for the fiscal year ended May 31, 2015, follows:

1. Nike, Inc.
2. Oregon
3. Our principal business activity is the design, development, and worldwide marketing and selling of athletic footwear, apparel, equipment, accessories, and services.
4. $\$ 21,600$ million
5. $\$ 12,707$ million
6. $\$ 8,893$ million ( $\$ 21,600$ million total assets $\mathbf{-} \$ 12,707$ million total liabilities)
7. $\$ 30,601$ million
8. $\$ 3,273$ million
9. Class A Common, 200 million authorized; Class $B, 1,200$ million authorized. Class $A$ issued and outstanding, 178 million; Class $B$ issued and outstanding, 679 million
10. Class A and Class B: No par
11. Consult current market price
12. Consult stock market historical data
13. Consult stock market historical data

CP 13-4
Memo

To: Matt Cengage
From: A+ Student
Re: Fourth Quarter 20Y8 Cash Dividend
In order to declare a dividend prudently for the fourth quarter, the company must have a sufficient Retained Earnings balance from which to declare the dividend. On December 31, 20Y8, Motion Designs has a $\$ 4,630,000$ balance in Retained Earnings. This balance is more than enough to cover the $\$ 90,000$ declaration of the normal quarterly cash dividend of $\$ 0.50$ per share. In addition, the company must have enough cash on hand to pay the dividend while meeting the remaining cash needs of the business. The company has a December 31, 20Y8, cash balance of $\$ 250,000$, of which $\$ 100,000$ is committed as the compensating balance under the loan agreement. This leaves only $\$ 150,000$ to pay the dividend of $\$ 90,000$ and finance normal operations. Unless the cash balance can be expected to increase significantly in early 20Y9, it is questionable whether the company's cash balance is large enough to both pay the cash dividend and provide for the company's near-term operating needs.

Before declaring a dividend, the company should also consider its working capital and the effect of plant expansion on the current ratio requirement of the loan. On December 31, 20Y8, the company has working capital of \$5,000,000 (\$7,000,000 $\$ 2,000,000$ ), resulting in a current ratio of 3.5 . However, after deducting the $\$ 3,000,000$ committed to store modernization and product-line expansion, the ratio drops to 2 $(\$ 4,000,000 \div \$ 2,000,000)$. If a cash dividend is declared and paid, the current ratio will further drop to $1.955(\$ 3,910,000 \div \$ 2,000,000)$, which would violate the loan agreement. In addition, working capital commitments and potential near-term capital expenditures could further deplete the company's working capital. As a result, I advise the company to forgo the declaration of a cash dividend in the fourth quarter of 20 Y 8 , as this would likely result in the company violating the terms of the Ioan.

CP 13-5
At the time of this decision, the WorldCom board had come under intense scrutiny. This was the largest loan by a company to its CEO in history. The SEC began an investigation into this loan, and Bernie Ebbers was eventually terminated as the CEO, with this loan being cited as part of the reason. The board indicated that the decision to lend Ebbers this money was to keep him from selling his stock and depressing the share price. Thus, it claimed that it was actually helping shareholders by keeping these shares from being sold. However, this argument wasn't well received, given that the share price dropped from around $\$ 15$ per share at the time of the loan to about $\$ 2.50$ per share when Ebbers was terminated. In addition, critics were scornful of the low "sweetheart" interest rate given to Ebbers for this loan. In addition, many critics viewed the loan as risky, given that it was not supported by any personal assets. WorldCom later entered bankruptcy, Ebbers went to prison, and the Ebbers loan went uncollected.

Some press comments:

1. When he borrowed money personally, he used his WorldCom stock as collateral. As these loans came due, he was unwilling to sell at "depressed prices" of \$10 to \$15 (it's now around \$2.50). So WorldCom lent him the money to consolidate his loans, to the tune of $\$ 366$ million. How a board of directors, representing you and me at the table, allowed this to happen is beyond comprehension. They should resign with Bernie. (Source: Andy Kessler, "Bernie Bites the Dust," Wall Street Journal, May 1, 2002, p. A18.)
2. It was astonishing to read the other day that the board of directors of the United States' second-largest telecommunications company claims to have had its shareholders' interests in mind when it agreed to grant more than \$430 million in low-interest loans to the company's CEO, mainly to meet margin calls on his stock.

Yet that's the level to which fiduciary responsibility seems to have sunk on the board of Clinton, Mississippi-based WorldCom, the deeply troubled telecom giant, as it sought to bail Bernard Ebbers out of the folly of speculating in shares of WorldCom itself. Sadly, WorldCom is hardly alone.
"The very essence of why Mr. Ebbers was granted a loan was to protect shareholder value," said a WorldCom spokesman in mid-March, just as the U.S. Securities \& Exchange Commission was unfurling a probe of the loan and 23 other matters related to WorldCom's finances.

Yes, folks, you read that right. On March 14, 2002, a spokesman for a publicly traded, $\$ 20$ billion company actually stood up and declared that of all the uses to which the company could have put almost half-a-billion dollars, the

CP 13-5 (Concluded)
best one by far—at least from the point of view of the shareholders—was to spend it on some sort of stock-parking scheme in order to keep the CEO out of bankruptcy court . (Source: Christopher Byron, "Bernie's Bad Idea," Red Herring, April 16, 2002.)

Note to Instructors: Bernie Ebbers is currently serving a 25-year prison sentence for conspiracy and securities fraud and for making false statements to securities regulators.

CP 13-6

1. This case involves a transaction in which a security has been issued that has characteristics of both stock and debt. The primary argument for classifying the issuance of the common stock as debt is that the investors have a legal right to an amount equal to the purchase price (face value) of the security. This is similar to a note payable or a bond payable. The additional \$120 payment could be argued to be equivalent to an interest payment, whose payment has been deferred until a later date.

Arguments against classifying the security as debt include the fact that the investors will not receive fixed "annual" interest payments. In fact, if Epstein Engineering Inc. does not generate any sales, the investors do not have a right to receive any payments. One could argue that the payments of $5 \%$ of sales are, in substance, a method of redeeming the stock. As indicated in the the case, the stockholders must surrender their stock for $\$ 120$ per share after the $\$ 25$ million payment has been made. Overall, the arguments would seem to favor classifying the security as common stock.
2. In practice, the $\mathbf{\$ 2 5}$ million stock issuance would probably be classified as common stock. However, full disclosure should be made of the $5 \%$ of sales and $\$ 120$ per share payment obligations in the notes to the financial statements. In addition, as Epstein Engineering Inc. generates sales, a current liability should be recorded for the payment to stockholders. Such payments would be classified as dividend payments rather than interest payments. Dan Fisher should also investigate whether such payments might violate any loan agreements with the banks. Banks often restrict dividend payments in loan agreements. If such an agreement has been violated, Epstein Engineering Inc. should notify the bank immediately and request a waiver of the violation.

