## SOLUTIONS

## Learning Goal 31

## Multiple Choice

1. c Proprietorships and partnerships are not separate legal entities, so they do not pay income tax as an entity, like a corporation does.
2. a
3. b Comprehensive income is not a special item. "Comprehensive income" is the combination of net income and "other comprehensive income" and is presented on the income statement under net income or in footnotes in a separate statement.
4. d If restructuring costs are part of a discontinued operation, they are included as part of the discontinued operations amount on the income statement. Otherwise, restructuring costs are reported in other revenues and expenses, which is part of operating income.
5. a The loss would be reported as separate line item that is part of income from continuing operations before tax.
6. d
7. a Without discontinued operations, the name would change to "net income".
8. b
9. a
10. C
11. d $[\$ 850,000-(50,000 \cdot \$ 100 \cdot .08)] / 400,000=\$ 1.125$
12. d $\$ 3,250,000 / 175,000=\$ 18.57$. Book value per share is calculated by using the outstanding shares. The retained earnings balance is included as part of the $\$ 3,250,000$ total stockholders' equity. (In this example, there is no preferred stock to subtract.)
13. a Total stockholders' equity (book value) that the common shareholders can claim is:

| Par value of common stock: 200,000 $\$ \mathbf{\$ . 0 5 :}$ | $\$ 10,000$ |
| :--- | ---: |
| Paid-in capital in excess of par: | $3,590,000$ |
| Retained earnings: | 800,000 |
| esss: Treasury stock: | $(00,000)$ |
| Total | $\$ 4,350,000$ |

Per share: $\$ 4,350,000 / 200,000$ outstanding shares $=\$ 21.75$
14. a Total stockholders' equity (book value) is:

| Preferred stock: $3,000 \cdot \$ 101$ | $\$ 303,000$ |
| :--- | ---: |
| Common stock: | 775,000 |
| Retained earnings: | 500,000 |
| Total stockholders' equity | $1,578,000$ |
| Less: preferred stockholders' claim | $(315,000)$ |
| Call price 3,000 $\$ 105=$ | $(18,000)$ |
| Dividends in arrears: $3,000 \cdot \$ 100 \cdot .06$ | $\$ 1,245,000$ |

Per share: $\$ 1,245,000 / 50,000$ outstanding shares $=\$ 24.90$
15. b
16. d
17. d
18. c $(\$ 630,000 / 200,000)=\$ 3.15$. Earnings per share is calculated only for outstanding shares.

## SOLUTIONS Learning Goal 31, continued

19. a The weighted average number of shares is:

| Period | Shares | Months | Weighted Total |
| :--- | :---: | :---: | :---: |
| Jan. 1-April 1 | 500,000 | 3 | $1,500,000$ |
| April 2-Oct. 30 | 800,000 | 7 | $5,600,000$ |
| Oct. 31-Dec. 31 | 650,000 | 2 | $1,300,000$ |
| Total |  | 12 | $8,400,000$ |

$(8,400,000 / 12)=700,000$ weighted average shares
Earnings available to common stockholders: \$2,750,000-(100,000 • \$100 • .08) = \$1,950,000 $(\$ 1,950,000 / 700,000)=\$ 2.786$ earnings per share
20. b Comprehensive income is a separate number that includes net income. Prior period adjustments and changes in accounting principle are direct adjustments to the beginning balance of retained earnings. Note: An accumulated prior effect of a change in accounting principle was recorded as part of net income for many years (as a special item). For all fiscal years beginning in 2015 and thereafter, this practice was eliminated.
21. c

## Discussion Questions and Brief Exercises

1. The statement of retained earnings shows the balance of retained earnings at the beginning of the accounting period, summarizes all current period changes in retained earnings, and shows the final balance of retained earnings as of the end of the accounting period. The statement of stockholders' equity also shows beginning and ending balances and current period changes; however, it is a more comprehensive statement. The statement of stockholders' equity shows total stockholders' equity and all items that are part of stockholders' equity, including retained earnings. M any companies prepare a statement of stockholders' equity instead of a statement of retained earnings.
2.     - Operating income: Operating revenues minus cost of goods sold and operating expenses. "Other" revenue and expense and gain and loss items are not included in this number.

- Incomefrom continuing operations: This income number combines operating income with "other" items, minus income tax expense on the combined amount.
- Net income: This is the final earnings amount from business activities. It does not include any "other comprehensive income" items.

3. Discontinued operations. This refers to the discontinued activity of a major component of a business. The results of discontinuing the activity must be disclosed as two parts: (1) The net income or net loss, net of tax, of the discontinued segment and (2) the gain or loss, net of tax, resulting from the disposal of the segment. The combined effect of thesetwo parts is reported as "discontinued operations."

## SOLUTIONS Learning Goal 31, continued

4. Incometax expense appears in three places on a corporate income statement:

- On the line under income beforetax (or from continuing operations before tax)
- In the reporting of discontinued operations
- In the reporting of other comprehensive income.

5.     - 880,000 shares are outstanding: 440,000 $2=880,000$

- 20,000 shares are in treasury: 10,000 • 2 = 20,000
- 900,000 shares are issued: $880,000+20,000=900,000$
- The total cost of the treasury stock is unchanged at \$300,000.
- The cost per share is now $\$ 300,000 / 20,000=\$ 15$ per share.

6. $[\$ 3,850,000-(150,000 \cdot \$ 100 \cdot .09)] / 700,000$ weighted average shares $=\$ 3.57$

| Period | Shares | Months | Weighted Total |
| :--- | :---: | :---: | :---: |
| Jan. 1-April 30 | 450,000 | 4 | $1,800,000$ |
| May 1-M ay 31 | 440,000 | 1 | 440,000 |
| June 1-Dec. 31 | 880,000 | 7 | $6,160,000$ |
| Total |  | 12 | $8,400,000$ |

$(8,400,000 / 12)=700,000$ weighted average shares
7. An increasing earnings per share(EPS) is favorable, and a decreasing earnings per share is unfavorable. An increasing EPS means that each stockholder is sharing in more income. This can happen because the company is earning more income and/or because there are fewer shares outstanding. M ost investors consider the EPS calculated for income from continuing operations to be the most significant number on the income statement. This is because income from continuing operations represents the results of the essential recurring activities of a business and al so because the trend in this amount serves as guide for probable future results.
8. Preferred dividends are subtracted from income when calculating earnings per share because the calculation is intended to show the amount of income available to common stockholders.
9. The preferred stockholders' claim is subtracted from total stockholders' equity because the book value calculation is intended to show the common stockholders' claim.
10.

```
Earnings per share of common stock:
    Income from continuing operations . . . . . . . . . . . . . . . . . . . . $2.24
    Discontinued operations. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . % 
    Net income. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $2.99 
```


## Calculations:

- $(\$ 2,475,000-\$ 680,000) / 800,000=\$ 2.244$
- $\$ 600,000 / 800,000=\$ .75$
- $(\$ 3,075,000-\$ 680,000) / 800,000=\$ 2.994$

11.     - Other comprehensive income: This is the amount of the after-tax unrealized loss on the investments $\$ 120,000$.

- Comprehensive income: This is net income combined with other comprehensive income: $\$ 340,000-\$ 120,000=\$ 220,000$.
Individual other comprehensive income items are presented on the statement of owner's equity, as part of the accumulated other comprehensive income.
Comprehensive incomemust be presented either on theincome statement under net income or in a separate statement directly under net income.


## SOLUTIONS Learning Goal 31, continued

12. 

| Period | Shares | Months | Weighted Total |
| :--- | :---: | :---: | :---: |
| Jan. 1-April 30 | 400,000 | 4 | $1,600,000$ |
| May 1-Aug. 30 | 675,000 | 4 | $2,700,000$ |
| Aug. 31-Nov. 30 | 575,000 | 3 | $1,725,000$ |
| Dec. 1-Dec. 31 | 650,000 | 1 | 650,000 |
| Total |  | 12 | $6,675,000$ |

$(6,675,000 / 12)=556,250$ weighted average shares
13. The discontinued operations and the gain on the sale of the discontinued operations are shown together as a special item on the income statement, below income from continuing operations.

- Illustration:

> Sparks, Inc.
> Income Statement (partial) For the Year Ended December 31, 20XX

Incomefrom continuing operations . . . . . . . . . . . . . . . . . . . . . 11,300,000

## Discontinued operations

Loss from mining division operations of $\$ 1,250,000$ less tax savings of $\$ 500,000 \ldots \ldots . . . . . . .$.
Gain on disposal of mining division operations of $\$ 200,000$ less income tax of $\$ 80,000$. . . . . . . . . . . . . . . 120,000
Net income . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

Discontinued operations must be shown as a separate item because including them as part of operating income would be very misleading. Including discontinued operations as part of operating income would hide the segment of the operations that are discontinued and will not be a part of future revenues and expenses. Operating income represents recurring businesses activities that are expected to continue into future periods.
14. Because of their very unusual and infrequent nature, the probable extraordinary loss items are tsunami, expropriation, and condemnation. Extraordinary items are reported as part of income from continuing operations.
15. Net incomemeasures the results of operating and managing a business. Comprehensive income includes the financial effects of valuation changes that are often beyond the control of management decisions. For example, when a company is involved in international transactions, gains and losses on the fluctuations of foreign currency values do affect the wealth and stockholders' equity of the business. To generalize, we can say that net income is more a measure of management performance, whereas comprehensive income includes net income plus designated assets and liability value changes. Together, they identify all the effects on stockholders' equity except for owner investments and distributions.
16. Designated other comprehensive income items:

- Unrealized gains and loss on certain short-term investments
- Foreign currency valuation changes
- M inimum pension liability adjustments
- Results of certain derivative hedging transactions


## SOLUTIONS Learning Goal 31, continued

17. A company can use non-GAAP calculations and non-GAAP income designations. Although the company discloses that these calculations and names do not comply with GAAP, people often ignore this or do not fully understand the implications. The misleading information includes names such as pro forma earnings ("pro forma" means "as if" and is properly used only for projections when assumptions are made clear), core earnings, and operating earnings. The calculations for these amounts often have little or nothing to do with GAAP. Also, unfavorable extraordinary events and discontinued operations may be omitted and favorable extraordinary events and discontinued items may beincluded as part of operations.
18. Deferred income occurs when tax payable is not the same amount as tax expense. This can happen when a business has transactions that are treated differently by tax rules for calculating the taxable income than the GAAP rules for calculating income before tax.
19. The D eferred Income Tax account is an asset that is created when taxes payable for the current period exceed tax expense for the current period. The D eferred Income Tax account is a liability that is created when taxes payable are less than tax expense for the current period.
20. 

|  | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ |
| :--- | :---: | :---: |
| Pre-tax accounting income | $\$ 2,000,000$ | $\$ 3,000,000$ |
| Warranty expense | $\frac{200,000}{\$ 2,200,000}$ | $\frac{(200,000)}{\$ 2,800,000}$ <br> Taxable income |
| Incometax payable @ 40\% | $\$ 880,000$ | $\$ 1,120,000$ |

2017: The income tax expense is: $\$ 2,000,000 \cdot .4=\$ 800,000$
The income tax payable is: $\$ 2,200,000 \cdot .4=\$ 880,000$

| Account | Dr. | Cr. |
| :---: | ---: | ---: |
| IncomeTax Expense | 800,000 |  |
| Deferred IncomeTax | 80,000 |  |
| IncomeTax Payable |  | 880,000 |

2018: The income tax expense is: $\$ 3,000,000 \cdot .4=\$ 1,200,000$
The income tax payable is: $\$ 2,800,000 \cdot .4=\$ 1,120,000$

| Account | Dr. | Cr. |
| :---: | :---: | ---: |
| Income Tax Expense | $1,200,000$ |  |
| Deferred IncomeTax |  | 80,000 |
| Income Tax Payable |  | $1,120,000$ |

The temporary difference caused by the warranty expenses reverses in 2019. Notice that when the temporary item finally reverses, the totals of the income tax expense and the taxes payable for both periods are the same.
21.

| Item | Income Statement | Statement of Stockholders' Equity | Balance Sheet |
| :---: | :---: | :---: | :---: |
| a. Net income | -_ | $\checkmark$ | ------ |
| b. Sale of treasury stock | ------ | $\checkmark$ |  |
| c. Balance of treasury stock | ------ | $\checkmark$ | $\checkmark$ |
| d. Comprehensive income | $\checkmark$ | ----- | ----- |
| e. Accumulated other comprehensive income | -- | $\checkmark$ | $\checkmark$ |
| f. Prior period adjustment | --- | $\checkmark$ | -- |
| g. Cash and stock dividends | --- | $\checkmark$ |  |
| h. Total stockholders' equity | -- | $\checkmark$ | $\checkmark$ |
| i. New shares of stock issued | ---- | $\checkmark$ | ------ |

## Reinforcement Problems

LG 31-1.

## Cumberland Enterprises, Inc. <br> Balance Sheet (partial) December 31, 2017

## Stockholders' Equity

Paid-in capital
Preferred stock, $\$ 50$ par, 7\%, 75,000 shares issued and outstanding . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 3,750,000$
Paid-in capital in excess of par, preferred .................... 220,000 \$ 3,970,000
Common stock, $\$ 1$ par, 500,000 shares issued,
450,000 shares outstanding
450,000
Paid-in capital in excess of par, common. . . . . . . . . . . . . . . . $4,100,000$
Paid-in capital from treasury stock transactions. . . . . . . . . . 180,000 4,730,000 Total paid-in capital 8,700,000
Retained earnings (see note)
Total paid in capital and retained earnings
2,820,000
11,520,000
Less: Treasury stock, common (50,000 shares at cost) . . . . . . . $\quad(550,000)$
Accumulated other comprehensive income ............... . $\quad(410,000)$ Total stockholders' equity
$(960,000)$
\$10,560,000

In footnotes to financial statements: " $\$ 1,000,000$ of retained earnings is restricted by the terms of the loan agreement with XXX Bank. Therefore, the maximum amount of retained earnings available for dividends is $\$ 1,820,000 .{ }^{\prime \prime}$

## SOLUTIONS Learning Goal 31, continued

## LG 31-2.

| Alexandria Corporation Income Statement For the Year Ended June 30, 2017 |  |  |
| :---: | :---: | :---: |
| Net sales revenue. |  | \$3,520,000 |
| Cost of goods sold. |  | 1,600,000 |
| Gross profit |  | 1,920,000 |
| O perating expenses (see separate detail) |  | 1,150,000 |
| Operating income |  | 770,000 |
| Other revenues, expense, gain or loss |  |  |
| Interest revenue | \$ 23,000 |  |
| Gain on sale of equipment. | 84,000 |  |
| Interest expense | $(42,000)$ |  |
| Gain on land condemnation | 270,000 | 335,000 |
| Income from continuing operations beforetax |  | 1,105,000 |
| Incometax expense |  | 442,000 |
| Income from continuing operations |  | 663,000 |
| Discontinued operations |  |  |
| Loss from discontinued operations of $\$ 125,000$ less tax savings of $\$ 50,000$. | $(75,000)$ |  |
| Loss on sale of discontinued operations of $\$ 450,000$ less tax savings of $\$ 180,000$ | $(270,000)$ | $(345,000)$ |
| Net income |  | \$318,000 |

## SOLUTIONS Learning Goal 31, continued

## LG 31-3.

a. Multiplestep income statement

## Pasadena Corporation Income Statement For the Year Ended December 31, 2017

| Net sales revenue. |  | \$5,800,000 |
| :---: | :---: | :---: |
| Cost of goods sold |  | 2,700,000 |
| Gross profit . |  | 3,100,000 |
| Operating expenses |  |  |
| Sales and marketing | \$310,000 |  |
| Administrative | 520,000 |  |
| Other | 540,000 |  |
| Restructuring charges. | 1,120,000 | 2,490,000 |
| Operating income. |  | 610,000 |
| Other revenues, expense, gain or loss |  |  |
| Interest revenue | 10,000 |  |
| Gain on sale of equipment. | 125,000 |  |
| Interest expense | $(75,000)$ |  |
| Earthquake loss. | $(150,000)$ | $(90,000)$ |
| Income from continuing operations before tax. |  | 520,000 |
| Income tax expense |  | 208,000 |
| Income from continuing operations. |  | 312,000 |
| Discontinued operations |  |  |
| Loss from discontinued operations of $\$ 210,000$ less tax savings of $\$ 84,000$. | $(126,000)$ |  |
| Gain on sale of discontinued operations of $\$ 130,000$ less incometax of $\$ 52,000$. | 78,000 | $(48,000)$ |
| Net income |  | \$264,000 |

## SOLUTIONS <br> Learning Goal 31, continued

LG 31-3, continued
b. Single-step income statement

| $\begin{gathered} \text { Pasadena Corporation } \\ \text { Income Statement } \\ \text { For the Year Ended December 31, } 2017 \end{gathered}$ |  |  |
| :---: | :---: | :---: |
| Revenues and gains |  |  |
| Net sales revenue . |  | \$5,800,000 |
| Gain on sale of equipment |  | 125,000 |
| Interest revenue. |  | 10,000 |
|  |  | 5,935,000 |
| Expenses and losses |  |  |
| Cost of goods sold | \$2,700,000 |  |
| Sales and marketing | 310,000 |  |
| Administrative. | 520,000 |  |
| Other operating expenses. | 540,000 |  |
| Restructuring charges | 1,120,000 |  |
| Earthquake loss | 150,000 |  |
| Interest expense . | 75,000 |  |
| Income tax expense. | 208,000 |  |
| Total expenses |  | 5,623,000 |
| Income from continuing operations |  | 312,000 |
| Discontinued operations |  |  |
| Loss from discontinued operations of $\$ 210,000$ |  |  |
| Gain on sale of discontinued operations of |  |  |
| \$130,000 less income tax of \$52,000 | 78,000 | $(48,000)$ |
|  |  | \$264,000 |

Comment: Income tax expense is calculated by subtracting all expenses and losses (except income tax) from total revenues and gaains and multiplying the result by the tax rate. $(\$ 5,935,000-\$ 5,415,000) \cdot .4=\$ 208,000$

## SOLUTIONS Learning Goal 31, continued

LG 31-4.

| Irvine Valley Corporation Statement of Stockholders' Equity For the Year Ended December 31, 2017 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Accum. Other |  |
|  | Common Stock \$.10Par | Additional Paid-in Capital | Retained Earnings | Treasury Stock | Compre hensive Income | Total |
| January 1:510,000 shares issued; 490,000 outstanding Net income |  |  |  |  |  |  |
|  | \$49,000 | \$7,056,000 | \$5,380,000 | $(\$ 220,000)$ | \$150,000 | \$12,415,000 |
|  |  |  | 850,000 |  |  | 850,000 |
| Other comprehensive income: |  |  |  |  |  |  |
| Foreign currency translation adjustment. |  |  |  |  | $(120,000)$ | $(120,000)$ |
| Comprehensive income. . . . . . |  |  |  |  |  | 730,000 |
| Common stock issued . . . . . . . | 10,000 | 1,520,000 |  |  |  | 1,530,000 |
| Sale of treasury stock |  |  |  |  |  |  |
| 10,000 of 20,000 shares held |  | 70,000 |  | 110,000 |  | 180,000 |
| Cash dividends. |  |  | $(1,000,000)$ |  |  | $(1,000,000)$ |
| $5 \%$ stock dividend | 3,000 | 507,000 | $(510,000)$ |  |  | - |
| Balance, December 31. | \$62,000 | \$9,153,000 | \$4,720,000 | (\$110,000) | \$30,000 | \$13,855,000 |

## Calculations:

- Treasury stock: The cost is $\$ 11$ per share $(\$ 220,000 / 20,000$ shares $=\$ 11)$. If the stock is sold for \$18 per share, additional paid-in capital from treasury stock transactions is (\$18-\$11). 10,000 shares sold $=\$ 70,000$.
- Stock dividend: At thetime of the stock dividend, 600,000 shares are outstanding (490,000 shares beginning of the year balance $+100,000$ additional shares issued $+10,000$ shares of treasury stock sold). Therefore, $600,000 \cdot .05=30,000$ shares sold $\cdot \$ 17=\$ 510,000$ value.


## LG 31-5.

a. What is the par value of the company's common stock? $\$ 1$ per share.
b. As of January 1 , what was the average selling price per share for common stock? $(\$ 550,000 / \$ 1)=550,000$ shares. $(\$ 550,000+\$ 13,200,000) / 550,000$ shares $=\$ 25$ per share.
c. What was the amount of comprehensive income in the current period? What does it consist of? $\$ 851,000$ consisting of $\$ 891,000$ net income and $\$ 40,000$ unrealized loss on certain securities.
d. What was the cost of the treasury stock sold? What was the selling price per share? $\$ 85,000$ total cost. $(\$ 85,000 / 5,000)=\$ 17$ per share cost. $(\$ 155,000 / 5,000)=\$ 31$ per share sales price.
e. What was the increase in stockholders' equity from the sale of the treasury stock? $\$ 155,000$.
f. How many new shares of common stock were issued? $(\$ 50,000 / \$ 1$ par value) $=50,000$ new shares.
g. What percentage was the stock dividend (large or small dividend)? How many shares were issued? At the time of the stock dividend, 600,000 common shares were outstanding $(550,000+50,000) .72,000$ new shares were issued $(\$ 72,000 / \$ 1) .(72,000 / 600,000)=.12$, which is a $12 \%$ stock dividend (small).

## SOLUTIONS Learning Goal 31, continued

LG 31-5, continued
h. What was the market price of the stock at the time of the stock dividend? (\$2,160,000/72,000 shares) $=\$ 30$ per share.
i. What was the effect of the stock dividend on total stockholders' equity? There was no change in total stockholders' equity.
j. What total amount of stockholders' equity should appear on the balance sheet? $\$ 28,085,000$.

## LG 31-6.

$\left.\begin{array}{llllllll|}\hline & \begin{array}{c}\text { Great Falls Corporation } \\ \text { Statement of Stockholders' Equity }\end{array} \\ \text { For the Year Ended December 31, 2017 }\end{array}\right)$

- Preferred cash dividend: (16,000 • $\$ 100$. .08)/4 $=\$ 32,000$
- Common stock dividend: A 40,000 -share dividend is $5 \%$ of outstanding shares, 50 it is a small stock dividend. Therefore, market value is used: ( 40,000 shares $\boldsymbol{\$ 8 . 5 )}=\$ 340,000$


## SOLUTIONS Learning Goal 31, continued

LG 31-6, continued

## Great FallsCorporation <br> Balance Sheet (partial) <br> December 31, 2017

Stockholders' Equity
Paid-in capital
Preferred stock, $\$ 100$ par, $8 \%, 16,000$ shares
issued and outstanding . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$1,600,000
Paid-in capital in excess of par, preferred. . . . . . . . . . . . . . . . . . $\quad 15,000$ \$1,615,000
Common stock, \$. 10 par, 810,000 shares issued,
805,000 shares outstanding
81,000
Common stock distributable (40,000 shares) . . . . . . . . . . . 4, 4,000
Paid-in capital in excess of par, common . . . . . . . . . . . . . . . . . . . 6,942,000
Paid-in capital from treasury stock transactions.............. . 44,000
7,071,000
Total paid-in capital .
8,686,000
Retained earnings
138,000
Total paid in capital and retained earnings . . . . . . . . . . . . . . 8,824,000
Less: Treasury stock, common ( 5,000 shares at cost)
$(40,000)$
Total stockholders' equity
\$8,784,000

## SOLUTIONS

## LG 31-7.

a.

## Missoula Corporation <br> Income Statement For the Year Ended October 31, 2017

## Revenues

| Net sales revenue |  | \$3,440,000 |
| :---: | :---: | :---: |
| Interest revenue |  | 7,000 |
| Rental revenue. |  | 36,000 |
| Total revenue and gains . |  | 3,483,000 |
| Expenses and losses |  |  |
| Cost of goods sold | \$1,510,000 |  |
| Operating expenses .. | 748,000 |  |
| Loss on sale of equipment | 35,000 |  |
| Interest expense | 69,000 |  |
| Flood loss | 130,000 |  |
| Incometax expense | 484,000 |  |
| Total expenses. |  | 2,976,000 |
| ncome from continuing operations |  | 507,000 |
| Discontinued operations |  |  |
| Loss from discontinued operations of \$97,000 less tax savings of \$39,000 | $(58,000)$ |  |
| Gain on sale of discontinued operations of $\$ 185,000$ less income tax of $\$ 74,000$. | 111,000 | 53,000 |
| Net income |  | \$560,000 |
| Earnings per share of common stock: |  |  |
| Incomefrom continuing operations |  | \$1.69 |
| Discontinued operations . . |  | . 18 |
| Net income . . . . . . . . . . |  | \$1.87 |

Comments: Thetax savings from the extraordinary loss (flood loss) is not calculated or shown separately, and the extraordinary loss is not shown separately as a special item, but instead is disclosed as a separate item that is part of income from continuing operations. (If not shown as a separate item, then the extraordinary item may be disclosed and explained in footnotes.) This is a change from prior GAAP, effective December, 2015.
b. - The October 31, 2016 P/E ratio is: $\$ 36.75 / \$ 1.40=$ approximately 26 times earnings.

- The October 31, 2017 P/E ratio is: \$45.50/\$2.04 = approximately 22 times earnings.

The net income (earnings) has increased from 2016 to 2017. H owever, the price of the stock has increased by a smaller proportion, so the P/E ratio has decreased from about 26 times earnings to 22 times earnings, making the stock more attractive per dollar of reported net income. This indicates that although the price of the stock has increased $24 \%$ from last year, it is actually a more attractive purchase because the P/E ratio is lower. (Assuming that no other strange or negative things are happening with this company!)
One other additional point to keep in mind is the effect of special items. Thesetend to be non-recurring and not good predictors of future results. For these reasons, many analysts tend to focus on the P/E ratio for income from continuing operations.

## SOLUTIONS

## Learning Goal 31, continued

## LG 31-8.

a.

|  | 2017 | 2018 |
| :--- | :---: | :---: |
| Pretax accounting income | $\$ 700,000$ | $\$ 900,000$ |
| Charitable contribution | $\underline{20,000}$ | $\frac{(20,000)}{\$ 720,000}$ |
| Taxable income | $\xlongequal[\$ 880,000]{\$ 288,000}$ | $\$ 352,000$ |
| Incometax payable @ $40 \%$ |  |  |

2017: The income tax expense is: $\$ 700,000 \cdot .4=\$ 280,000$
The income tax payable is: $\$ 720,000 \cdot .4=\$ 288,000$
2018: The income tax expense is: $\$ 900,000 \cdot .4=\$ 360,000$
The income tax payable is: $\$ 880,000 \cdot .4=\$ 352,000$

| Date | Account | Ref. | Dr. | Cr. |
| :---: | :---: | :---: | ---: | ---: |
| 2017 | IncomeTax Expense |  | 280,000 |  |
|  | Deferred Income Tax |  | 8,000 |  |
|  | Income Tax Payable |  |  | 288,000 |
|  |  |  |  |  |
| 2018 | IncomeTax Expense |  | 360,000 |  |
|  | Deferred Income Tax |  |  | 8,000 |
|  | Income Tax Payable |  |  | 352,000 |

b.

|  | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ |
| :--- | :---: | :---: |
| Pre-tax accounting income | $\$ 5,000,000$ | $\$ 4,700,000$ |
| Depreciation difference | $(300,000)$ | 300,000 |
| Taxable income | $\underline{\$ 4,700,000}$ | $\$ 5,000,000$ <br> Incometax payable @ 40\% |
| $\$ 1,880,000$ | $\$ 2,000,000$ |  |

2017: The income tax expense is: $\$ 5,000,000 \cdot .4=\$ 2,000,000$
The income tax payable is: $\$ 4,700,000 \cdot .4=\$ 1,880,000$
2018: The income tax expense is: $\$ 4,700,000 . .4=\$ 1,880,000$ The income tax payable is: $\$ 5,000,000 \cdot .4=\$ 2,000,000$

| Date | Account | Ref. | Dr. | Cr. |
| :---: | :---: | :---: | :---: | :---: |
| 2017 | Income Tax Expense |  | $2,000,000$ |  |
|  | Deferred IncomeTax |  |  | 120,000 |
|  | Income Tax Payable |  |  | $1,880,000$ |
|  |  |  |  |  |
| 2018 | Income Tax Expense |  | $1,880,000$ |  |
|  | Deferred Income Tax |  | 120,000 |  |
|  | IncomeTax Payable |  |  | $2,000,000$ |

## SOLUTIONS

LG 31-8, continued
C.

|  | 2015 | 2016 | 2017 | 2018 |
| :---: | :---: | :---: | :---: | :---: |
| Pre-tax accounting income | \$1,000,000 | \$1,500,000 | \$2,000,000 | \$3,000,000 |
| Depreciation difference | $(25,000)$ | -0- | 12,500 | 12,500 |
| Taxable income | \$975,000 | \$1,500,000 | \$2,012,500 | \$3,012,500 |
| Income tax payable @ 40\% | \$390,000 | \$600,000 | \$805,000 | \$1,205,000 |

2015: The income tax expense is: $\$ 1,000,000 \cdot .4=\$ 400,000$
The income tax payable is: $\$ 975,000 \cdot .4=\$ 390,000$
2016: The income tax expense is: $\$ 1,500,000 \cdot .4=\$ 600,000$ The income tax payable is: $\$ 1,500,000 \cdot .4=\$ 600,000$
2017: The income tax expense is: $\$ 2,000,000 \cdot .4=\$ 800,000$ The income tax payable is: $\$ 2,012,500 \cdot .4=\$ 805,000$
2018: The income tax expense is: $\$ 3,000,000 \cdot .4=\$ 1,200,000$ The income tax payable is: $\$ 3,012,500 \cdot .4=\$ 1,205,000$

| Date | Account | Ref. | Dr. | Cr. |
| :---: | :---: | :---: | :---: | :---: |
| 2015 | Income Tax Expense |  | 400,000 |  |
|  | Deferred Income Tax |  |  | 10,000 |
|  | Income Tax Payable |  |  | 390,000 |
|  |  |  | 600,000 |  |
| 2016 | Income Tax Expense |  |  | 600,000 |
|  | Income Tax Payable |  | 800,000 |  |
| 2017 |  |  | 5,000 |  |
|  | Income Tax Expense |  |  | 805,000 |
|  | Income Tax Payable |  | $1,200,000$ |  |
| 2018 | Income Tax Expense |  | 5,000 |  |
|  | Deferred Income Tax |  |  | $1,205,000$ |

N ote: Notice that at the end of the 4 years, the deferred tax is eliminated.
d.

| Date | Account | Ref. | Dr. | Cr. |
| :---: | :---: | :---: | :---: | :---: |
| 2017 | IncomeTax Expense |  | 212,000 |  |
|  | Income Tax Payable |  |  | 212,000 |
|  |  |  |  |  |

Calculation: $(\$ 500,000+\$ 30,000) \cdot .4=\$ 212,000$. This is a permanent difference. The tax expense is determined by using the same rules as for calculating taxable income.

## SOLUTIONS <br> Learning Goal 31, continued

LG 31-9.
a.

| Date | Account | Ref. | Dr. | Cr. |
| :---: | :---: | :---: | :---: | :---: |
| Jan. 3 | M emo: shares issued in 4 for 3 common split |  |  |  |
|  |  |  |  |  |
| Mar. 8 | Retained Earnings |  | 200,000 |  |
|  | Dividends Payable, Preferred |  |  | 51,200 |
|  | Dividends Payable, Common |  |  | 148,800 |
|  |  |  |  |  |
| April 12 | Dividends Payable, Preferred |  | 51,200 |  |
|  | Dividends Payable, Common |  | 148,800 |  |
|  | Cash |  |  | 200,000 |
|  |  |  |  |  |
| M ay 2 | Land |  | 340,000 |  |
|  | Preferred Stock |  |  | 320,000 |
|  | Paid-in Capital in Excess of Par, Preferred |  |  | 20,000 |
|  |  |  |  |  |
| June 1 | Preferred Stock |  | 400,000 |  |
|  | Paid-in Capital in Excess of Par, Preferred |  | 5,000 |  |
|  | Common Stock |  |  | 15,000 |
|  | Paid-in Capital in Excess of Par, Common |  |  | 390,000 |
|  |  |  |  |  |
| Aug. 30 | Treasury Stock |  | 690,000 |  |
|  | Cash |  |  | 690,000 |
|  |  |  |  |  |
| Sept. 7 | Retained Earnings |  | 250,000 |  |
|  | Dividends Payable, Preferred |  |  | 48,000 |
|  | Dividends Payable, Common |  |  | 202,000 |
|  |  |  |  |  |
| Oct. 12 | Dividends Payable, Preferred |  | 48,000 |  |
|  | Dividends Payable, Common |  | 202,000 |  |
|  | Cash |  |  | 250,000 |
|  |  |  |  |  |
| Dec. 1 | Cash |  | 485,000 |  |
|  | Paid-in Capital from Treasury Stock Transactions |  | 90,000 |  |
|  | Treasury Stock |  |  | 575,000 |
|  |  |  |  |  |
| 1 | Cash |  | 768,000 |  |
|  | Common Stock |  |  | 30,000 |
|  | Paid-in Capital in Excess of Par, Common |  |  | 738,000 |
|  |  |  |  |  |
| 31 | Retained Earnings |  | 150,000 |  |
|  | Inventory |  |  | 150,000 |
|  |  |  |  |  |
| 31 | Accumulated Other Comp. Income |  | 65,000 |  |
|  | Short-Term Investments |  |  | 65,000 |
|  |  |  |  |  |

## SOLUTIONS Learning Goal 31, continued

LG 31-9, continued
b. Account Balances as of December 31, 2017:

| Preferred Stock |  | Paid-in Capital in Excess of Par, Preferred Stock |  | Common Stock | Paid-in Capital in Excess of Par, Common Stock |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 400,000 | 1,280,000 | 5,000 | 20,000 | 450,000 | 7,100,000 |
|  | 320,000 |  | 15,000 | 15,000 | 390,000 |
|  | 1,200,000 |  |  | 30,000 | 738,000 |
|  |  |  |  | 495,000 | 8,228,000 |


| Paid-in Capital from Treasury Stock Transactions |  | Retained Earnings |  | Treasury Stock |  | Accumulated Other Comprehensive Income |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 90,000 | 188,000 | 200,000 | 8,290,000 | 690,000 | 575,000 | 65,000 | 115,000 |
|  | 98,000 | $\begin{aligned} & 250,000 \\ & 150 \end{aligned}$ | 291,000 | 115,000 |  |  | 50,000 |
|  |  |  | 7,981,000 |  |  |  |  |

C.

Preferred Shares Outstanding:

| Date | Event | Shares | Total Shares |
| :---: | :--- | :---: | :---: |
| Jan. 1 | Beginning balance |  | 16,000 |
| May 2 | Issued for land | 4,000 | 20,000 |
| June1 | Conversion to common shares | $(5,000)$ | 15,000 |
|  |  |  |  |

Common Shares Outstanding:

| Date | Event | Shares | Total Shares |
| ---: | :--- | :---: | :---: |
| Jan. 1 | Beginning balance |  | 450,000 |
| 3 | 4 for 3 split |  | 600,000 |
| June1 | Preferred converted to common | 20,000 | 620,000 |
| Aug. 30 | Treasury stock purchased | $(30,000)$ | 590,000 |
| Dec. 1 | Sold treasury shares | 25,000 | 615,000 |
| 1 | Sold new shares | 40,000 | 655,000 |
|  |  |  |  |

## SOLUTIONS

## LG 31-9, continued

Treasury Shares:

| Date | Event | Shares | Total Shares |
| :---: | :---: | :---: | :---: |
| Aug. 30 | Treasury stock purchased | 30,000 | 30,000 |
| Dec. 1 | Sold treasury shares | $(25,000)$ | 5,000 |
|  |  |  |  |

d.

## Coeur d'Alene Enterprises, Inc. Income Statement For the Year Ended December 31, 2017

Net sales revenue ..... \$7,450,000
Cost of goods sold ..... 4,110,000
Gross profit ..... 3,340,000
Operating expenses
Sales and marketing ..... \$ 488,000
General and administrative ..... 1,167,000
Restructuring charges ..... 250,000
Total operating expenses ..... 1,905,000
Operating income ..... 1,435,000
Other revenue, expense, gain or loss
Rental revenue ..... 70,000
Interest expense ..... $(134,000)$
Loss on sale of land ..... $(86,000)$
Earthquake loss ..... $(450,000)$
Income from continuing operations before tax600,000
Income tax expense ..... 334,000
Income from continuing operations ..... 501,000
Discontinued operationsLoss from discontinued operations of $\$ 80,000$less tax savings of $\$ 32,000$.$(48,000)$
Loss on sale of discontinued division of $\$ 270,000$ less tax savings of $\$ 108,000$ ..... $(162,000)$ ..... $(210,000)$
Net income ..... 291,000
Earnings per share of common stock:
Income from continuing operations ..... \$. 67
Discontinued operations ..... (.35)
Net income ..... \$. 32
Other comprehensive incomeUnrealized loss in certain investment securities netof tax saving of \$xxx$(65,000)$
Comprehensive income ..... $\$ 226.000$

## SOLUTIONS Learning Goal 31, continued

LG 31-9, continued
f.

## Coeur d'Alene Enterprises, Inc. Balance Sheet December 31, 2017

Stockholders' Equity
Paid-in capital
Preferred stock, convertible, $\$ 80$ par, $8 \%$, call able at $\$ 85$, 15,000 shares issued and outstanding. ..................... $\$ 1,200,000$
Paid-in capital in excess of par, preferred .................... $\quad 15,000 \quad \$ 1,215,000$
Common stock, $\$ .75$ par, 660,000 shares issued,
655,000 shares outstanding ......................... . .
Paid-in capital in excess of par, common ................... 8,228,000
Paid-in capital from treasury stock transactions .............. 98,000 Total paid-in capital

8,821,000
10,036,000
Retained earnings
7,981,000 Total paid in capital and retained earnings . . . . . . . . . . . . . . $\quad 18,017,000$
Less: Treasury stock, common ( 5,000 shares at cost)
$(115,000)$
Accumulated other comprehensive income .................... 50,000
Total stockholders' equity
g. Book value per share:

Total stockholders' equity (book value) is: $\$ 17,952,000$
Less: Preferred stockholders' claim
Call price $15,000 \cdot \$ 85=$
Book value for common stockholders $\$ 16,677,000$
Per share: $\$ 16,677,000 / 655,000$ outstanding shares $=\$ 25.46$

## Other calculations:

- January 3: Stock split, ( 450,000 shares. $4 / 3$ ) $=600,000$ shares. $(\$ 1 \cdot 3 / 4)=\$ .75$ par value
- March 8: Preferred dividends (semi-annual), [(16,000 • \$80 . .08)/2] = \$51,200
- M ay 2: Stock is regularly traded, so share price is the best indicator of value.
- June 1: $25 \%$ (5,000 of the 20,000 preferred shares) is being converted, so $25 \%$ of the preferred equity is removed and becomes common stock equity. ( $\$ 1,600,000 \cdot .25$ ) = $\$ 400,000$ and ( $\$ 20,000 \cdot .25$ ) $=\$ 5,000$. Of the total, $\$ 405,000$ the common stock account is credited ( 20,000 shares • $\$ .75$ ) $=\$ 15,000$.
- Sept. 7: Preferred dividends (semi-annual), [(15,000 • \$80 . .08)/2] $=\$ 48,000$
- Dec. 1: Treasury stock sale, ( $\$ 23$ cost $\$ 19.40$ sales price) $\cdot 25,000$ shares $=\$ 90,000$ decrease in paid-in capital.


## SOLUTIONS

## Learning Goal 31, continued

LG 31-9, continued
Other calculations, continued:
Earnings per share:
Weighted Average Shares:

| Period | Shares | Months | Weighted Total |
| :--- | :---: | :---: | :---: |
| Jan. 1-M ay 31 | 600,000 | 5 | $3,000,000$ |
| June 1-Aug. 29 | 620,000 | 3 | $1,860,000$ |
| Aug. 30-Nov. 30 | 590,000 | 3 | $1,770,000$ |
| Dec. 1-Dec. 31 | 655,000 | 1 | 655,000 |
| Total |  | 12 | $7,285,000$ |

$(7,285,000 / 12)=607,083$ weighted average shares
Enrichment note (for your information): For EPS purposes, when a company has a stock split or stock dividend, GAAP requires that the number of additional shares be considered as outstanding from the first day of the period. This problem was designed so that the split occurred at the beginning of the period, and that the answer would automatically conform to GAAP requirements. In other cases, when a split occurs later in a period, you would have be sure to add the additional shares from the first day of the period.

