

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 can appear on an income statement but is not a special item.
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. c
6. d
7. a If there were no discontinued operations, the name would be “income before extraordinary item” or “net income” if there were no extraordinary items.
8. b
9. a
10. c
11. d $[\$850,000 - (50,000 \times \$100 \times .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: $200,000 \times \$0.05$:	\$ 10,000
Paid-in capital in excess of par:	3,590,000
Retained earnings:	800,000
Less: Treasury stock:	<u>(50,000)</u>
Total	<u>\$4,350,000</u>

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

Preferred stock: $3,000 \times \$101$	\$303,000
Common stock:	775,000
Retained earnings:	<u>500,000</u>
Total stockholders' equity	1,578,000
Less: preferred stockholders' claim	
Call price $3,000 \times \$105 =$	(315,000)
Dividends in arrears: $3,000 \times \$100 \times .06$	<u>(18,000)</u>
Book value for common stockholders	<u>\$1,245,000</u>

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

$$(8,400,000/12) = 700,000 \text{ weighted average shares}$$

$$\text{Earnings available to common stockholders: } \$2,750,000 - (100,000 \times \$100 \times .08) = \$1,950,000$$

$$(\$1,950,000/700,000) = \$2.786 \text{ earnings per share}$$

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 2006 and thereafter, this practice was eliminated.
21. c

Discussion Questions and Brief Exercises

- 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. Many companies prepare a statement of stockholders' equity instead of a statement of retained earnings.
 - 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.
 - Income from continuing operations: This income number combines operating income with "other" items, minus income tax expense on the combined amount.
 - Income before extraordinary item: This income number combines income from continuing operations with the net of tax amount from discontinued operations. It is the amount of income before any extraordinary items are added or subtracted.
 - Net income: This is the final earnings amount from business activities. It does not include any "other comprehensive income" items.
 - Special item 1:* Discontinued operations. This refers to the discontinued activity of a significant segment 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 these two parts is reported as "discontinued operations."
- Special item 2:* Extraordinary gain or loss: These are gains or losses that result from events that are both unusual and infrequent. Even if infrequent, items cannot be considered extraordinary if they are not unusual as a part of business activities or given the particular circumstances of a business. For example, a flood loss would be considered extraordinary unless a business is located in a place where floods have occurred in the past. Business events such as strikes, lawsuits, and asset write-offs are not extraordinary.

SOLUTIONS

Learning Goal 31, continued

4. Income tax expense appears in three places on a corporate income statement. It is calculated on:
 - Income from continuing operations before tax
 - Discontinued operations (net of tax)
 - Extraordinary items (net of tax)
5.
 - 880,000 shares are outstanding: $440,000 \times 2 = 880,000$
 - 20,000 shares are in treasury: $10,000 \times 2 = 20,000$
 - 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. $[\$3,850,000 - (150,000 \times \$100 \times .09)]/700,000$ weighted average shares = \$3.57

Period	Shares	Months	Weighted Total
Jan. 1–April 30	450,000	4	1,800,000
May 1–May 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. Most 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 also 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 operations75
Income before extraordinary item	2.99
Extraordinary loss	(.48)
Net income	\$2.51

11.
 - Other comprehensive income: This is the amount of the unrealized loss on the investments: \$120,000.
 - Comprehensive income: This is net income combined with other comprehensive income: $\$340,000 - \$120,000 = \$220,000$.
 - These two items usually are shown on a statement of stockholders' equity (see example in this section), but they can also be shown on the income statement below net income. (It is also permissible to show them in a separate statement of comprehensive income, but this is not usually done.)

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		
Income from continuing operations		11,300,000
Discontinued operations		
Loss from mining division operations of \$1,250,000 less tax savings of \$500,000.	(\$750,000)	
Gain on disposal of mining division operations of \$200,000 less income tax of \$80,000	<u>120,000</u>	<u>(630,000)</u>
Net income		<u><u>\$10,670,000</u></u>

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.
15. Net income measures the results of operating and managing a business (except for extraordinary items). 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
 - Minimum 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 be included 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 Deferred Income Tax account is an asset that is created when taxes payable for the current period exceed tax expense for the current period. The Deferred Income Tax account is a liability that is created when taxes payable are less than tax expense for the current period.
- 20.

	2008	2009
Pre-tax accounting income	\$2,000,000	\$3,000,000
Warranty expense	<u>200,000</u>	<u>(200,000)</u>
Taxable income	<u>\$2,200,000</u>	<u>\$2,800,000</u>
Income tax payable @ 40%	\$880,000	\$1,120,000

2008: The income tax expense is: $\$2,000,000 \times .4 = \$800,000$
 The income tax payable is: $\$2,200,000 \times .4 = \$880,000$

Account	Dr.	Cr.
Income Tax Expense	800,000	
Deferred Income Tax	80,000	
Income Tax Payable		880,000

2009: The income tax expense is: $\$3,000,000 \times .4 = \$1,200,000$
 The income tax payable is: $\$2,800,000 \times .4 = \$1,120,000$

Account	Dr.	Cr.
Income Tax Expense	1,200,000	
Deferred Income Tax		80,000
Income Tax Payable		1,120,000

The temporary difference caused by the warranty expenses reverses in 2009. 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.

SOLUTIONS

Learning Goal 31, continued

21.

Item	Income Statement	Statement of Stockholders' Equity	Balance Sheet
a. Net income	✓	✓	_____
b. Sale of treasury stock	_____	✓	_____
c. Balance of treasury stock	_____	✓	✓
d. Comprehensive income	*	✓	_____
e. Accum. other comprehensive income	_____	✓	✓
f. Prior period adjustment	_____	✓	_____
g. Cash and stock dividends	_____	✓	_____
h. Total stockholders' equity	_____	✓	✓
i. New shares of stock issued	_____	✓	_____

* Note: comprehensive income can also be shown on the income statement, below net income:

Net income:	\$\$
Other comprehensive income:	\$\$
Comprehensive income:	<u>\$\$</u>

Reinforcement Problems

LG 31-1.

Cumberland Enterprises, Inc.		
Balance Sheet (partial)		
December 31, 2008		
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		<u>8,700,000</u>
Retained earnings (see note)		2,820,000
Total paid in capital and retained earnings		<u>11,520,000</u>
Less: Treasury stock, common (50,000 shares at cost)	(550,000)	
Accumulated other comprehensive income	(410,000)	(960,000)
Total stockholders' equity		<u>\$10,560,000</u>

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."

SOLUTIONS

Learning Goal 31, continued

LG 31-2.

Alexandria Corporation		
Income Statement		
For the Year Ended June 30, 2009		
Net sales revenue		\$3,520,000
Cost of goods sold		<u>1,600,000</u>
Gross profit		1,920,000
Operating expenses (<i>detailed separately</i>)		<u>1,150,000</u>
Operating income		770,000
Other revenues and gains and expenses:		
Interest revenue	\$ 23,000	
Gain on sale of equipment	84,000	
Interest expense	<u>(42,000)</u>	65,000
Income from continuing operations before tax		835,000
Income tax expense		<u>334,000</u>
Income from continuing operations		501,000
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	<u>(270,000)</u>	<u>(345,000)</u>
Income before extraordinary item		156,000
Extraordinary gain of \$270,000 from condemnation		
of land less income tax of \$108,000		<u>162,000</u>
Net income		<u><u>\$318,000</u></u>

SOLUTIONS

Learning Goal 31, continued

LG 31-3.

a. Multiple-step income statement

Pasadena Corporation		
Income Statement		
For the Year Ended December 31, 2008		
Net sales revenue		\$5,800,000
Cost of goods sold		<u>2,700,000</u>
Gross profit		3,100,000
Operating expenses		
Sales and marketing expenses	\$ 310,000	
Administrative expenses	520,000	
Other operating expenses	540,000	
Restructuring charges	<u>1,120,000</u>	<u>2,490,000</u>
Operating income		610,000
Other revenues and gains and expenses:		
Interest revenue	10,000	
Gain on sale of equipment	125,000	
Interest expense	<u>(75,000)</u>	<u>60,000</u>
Income from continuing operations before tax		670,000
Income tax expense		<u>268,000</u>
Income from continuing operations		402,000
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 income tax of \$52,000	<u>78,000</u>	<u>(48,000)</u>
Income before extraordinary item		354,000
Extraordinary loss of \$150,000 from earthquake		
less tax savings of \$60,000		<u>(90,000)</u>
Net income		<u>\$ 264,000</u>

SOLUTIONS

Learning Goal 31, continued

LG 31-3, *continued*

b. Single-step income statement

Pasadena Corporation		
Income Statement		
For the Year Ended December 31, 2008		
Revenues		
Net sales		\$5,800,000
Interest revenue		10,000
Gain on sale of equipment		125,000
Total revenues		<u>5,935,000</u>
Expenses		
Cost of goods sold	\$2,700,000	
Sales and marketing expenses	310,000	
Administrative expenses	520,000	
Other operating expenses	540,000	
Restructuring charges	1,120,000	
Interest expense	75,000	
Income tax expense	<u>268,000</u>	
Total expenses		<u>5,533,000</u>
Income from continuing operations		402,000
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 income tax of \$52,000	<u>78,000</u>	<u>(48,000)</u>
Income before extraordinary item		354,000
Extraordinary loss of \$150,000 from earthquake		
less tax savings of \$60,000		<u>(90,000)</u>
Net income		<u><u>\$ 264,000</u></u>

Comment: Income tax expense is calculated by subtracting all operating expenses (except income tax expense) from total revenues and multiplying the result by the tax rate.
 $(\$5,935,000 - \$5,265,000) \times .4 = \$268,000$

Sales and marketing expense, administrative expenses, and other operating expenses could also be condensed into a single line item of \$1,370,000 labeled as “operating expenses.”

SOLUTIONS

Learning Goal 31, continued

LG 31-4.

Irvine Valley Corporation
Statement of Stockholders' Equity
For the Year Ended December 31, 2008

	Common Stock \$.10 Par	Additional Paid-in Capital	Retained Earnings	Treasury Stock	Accum. Other Compre- hensive Income	Total
January 1: 510,000 shares issued; 490,000 outstanding	\$49,000	\$7,056,000	\$5,380,000	(\$220,000)	\$150,000	\$12,415,000
Net income			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	<u>\$62,000</u>	<u>\$9,153,000</u>	<u>\$4,720,000</u>	<u>(\$110,000)</u>	<u>\$30,000</u>	<u>\$13,855,000</u>

Calculations:

- Treasury stock: The cost is \$11 per share ($\$220,000/20,000 \text{ shares} = \11). If the stock is sold for \$18 per share, additional paid-in capital from treasury stock transactions is $(\$18 - \$11) \times 10,000 \text{ shares sold} = \$70,000$.
- Stock dividend: At the time 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, $600,000 \times .05 = 30,000 \text{ shares sold} \times \$17 = \$510,000 \text{ value}$.

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?
 $(\$550,000/\$1) = 550,000 \text{ shares}$. $(\$550,000 + \$13,200,000)/550,000 \text{ 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. $(\$85,000/5,000) = \$17 \text{ per share cost}$. $(\$155,000/5,000) = \$31 \text{ per share sales price}$.
- 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? $(\$50,000/\$1 \text{ par value}) = 50,000 \text{ new shares}$.
- 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.

Great Falls Corporation
Statement of Stockholders' Equity
For the Year Ended December 31, 2008

(Amounts in \$000's)

	Preferred Stock \$100 Par <u>Value</u>	Common Stock \$.10 Par <u>Value</u>	Common Stock Distrib- utable	Additional Paid-in Capital	Retained Earnings	Treasury Stock	<u>Total</u>
January 1: 11,000 shares preferred; 770,000 common shares issued and 755,000 shares outstanding	\$1,100	\$77		\$6,300	\$150	(\$120)	\$7,507
Prior period adjustment					120		120
Balance, January 1, corrected	1,100	77		6,300	270	(120)	7,627
Net income					240		240
Issued 5,000 shares of preferred stock	515						515
Issued 40,000 shares of common stock		4		356			360
Sale of treasury stock (10,000 of 15,000 shares held) . . .				(6)		80	74
Preferred cash dividend					(32)		(32)
Common stock dividend declared			4	336	(340)		—
Balance, December 31	<u>\$1,615</u>	<u>\$81</u>	<u>\$4</u>	<u>\$6,986</u>	<u>\$138</u>	<u>(\$40)</u>	<u>\$8,784</u>

- Preferred cash dividend: $(16,000 \times \$100 \times .08)/4 = \$32,000$
- Common stock dividend: A 40,000-share dividend is 5% of outstanding shares, so it is a small stock dividend. Therefore, market value is used: $(40,000 \text{ shares} \times \$8.5) = \$340,000$

SOLUTIONS**Learning Goal 31, continued****LG 31-6, continued**

Great Falls Corporation		
Balance Sheet (partial)		
December 31, 2008		
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	<u>15,000</u>	\$1,615,000
Common stock, \$.10 par, 810,000 shares issued, 805,000 shares outstanding	81,000	
Common stock distributable (40,000 shares)	4,000	
Paid-in capital in excess of par, common	6,942,000	
Paid-in capital from treasury stock transactions	<u>44,000</u>	<u>7,071,000</u>
Total paid-in capital		8,686,000
Retained earnings		<u>138,000</u>
Total paid in capital and retained earnings		8,824,000
Less: Treasury stock, common (5,000 shares at cost)		<u>(40,000)</u>
Total stockholders' equity		<u><u>\$8,784,000</u></u>

SOLUTIONS

Learning Goal 31, continued

LG 31-7.

a.

Missoula Corporation		
Income Statement		
For the Year Ended October 31, 2008		
Revenues		
Net sales		\$3,440,000
Interest revenue		7,000
Rental revenue		<u>36,000</u>
Total revenue		3,483,000
Expenses		
Cost of goods sold	\$1,510,000	
Operating expenses	748,000	
Interest expense	69,000	
Loss on sale of equipment	35,000	
Income tax expense	<u>484,000</u>	
Total expenses		<u>2,846,000</u>
Income from continuing operations		637,000
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	<u>111,000</u>	<u>53,000</u>
Income before extraordinary item		690,000
Extraordinary flood loss of \$130,000 less tax		
savings of \$52,000		<u>(78,000)</u>
Net income		<u><u>\$612,000</u></u>
Earnings per share of common stock:		
Income from continuing operations		\$2.12
Discontinued operations		<u>.18</u>
Income before extraordinary item		2.30
Extraordinary loss		<u>(.26)</u>
Net income		<u><u>\$2.04</u></u>

- b. ■ The October 31, 2007 P/E ratio is: $\$36.75/\$1.40 =$ approximately 26 times earnings.
 ■ The October 31, 2008 P/E ratio is: $\$45.50/\$2.04 =$ approximately 22 times earnings.

The net income (earnings) has increased from 2007 to 2008. However, 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. These tend 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.

	2008	2009
Pre-tax accounting income	\$700,000	\$900,000
Charitable contribution	<u>20,000</u>	<u>(20,000)</u>
Taxable income	<u>\$720,000</u>	<u>\$880,000</u>
Income tax payable @ 40%	\$288,000	\$352,000

2008: The income tax expense is: $\$700,000 \times .4 = \$280,000$

The income tax payable is: $\$720,000 \times .4 = \$288,000$

2009: The income tax expense is: $\$900,000 \times .4 = \$360,000$

The income tax payable is: $\$880,000 \times .4 = \$352,000$

Date	Account	Ref.	Dr.	Cr.
2008	Income Tax Expense		280,000	
	Deferred Income Tax		8,000	
	Income Tax Payable			288,000
2009	Income Tax Expense		360,000	
	Deferred Income Tax			8,000
	Income Tax Payable			352,000

b.

	2008	2009
Pre-tax accounting income	\$5,000,000	\$4,700,000
Depreciation difference	<u>(300,000)</u>	<u>300,000</u>
Taxable income	<u>\$4,700,000</u>	<u>\$5,000,000</u>
Income tax payable @ 40%	\$1,880,000	\$2,000,000

2008: The income tax expense is: $\$5,000,000 \times .4 = \$2,000,000$

The income tax payable is: $\$4,700,000 \times .4 = \$1,880,000$

2009: The income tax expense is: $\$4,700,000 \times .4 = \$1,880,000$

The income tax payable is: $\$5,000,000 \times .4 = \$2,000,000$

Date	Account	Ref.	Dr.	Cr.
2008	Income Tax Expense		2,000,000	
	Deferred Income Tax			120,000
	Income Tax Payable			1,880,000
2009	Income Tax Expense		1,880,000	
	Deferred Income Tax		120,000	
	Income Tax Payable			2,000,000

SOLUTIONS

Learning Goal 31, continued

LG 31-8, *continued*

c.

	2006	2007	2008	2009
Pre-tax accounting income	\$1,000,000	\$1,500,000	\$2,000,000	\$3,000,000
Depreciation difference	<u>(25,000)</u>	<u>-0-</u>	<u>12,500</u>	<u>12,500</u>
Taxable income	<u>\$975,000</u>	<u>\$1,500,000</u>	<u>\$2,012,500</u>	<u>\$3,012,500</u>
Income tax payable @ 40%	\$390,000	\$600,000	\$805,000	\$1,205,000

2006: The income tax expense is: $\$1,000,000 \times .4 = \$400,000$

The income tax payable is: $\$975,000 \times .4 = \$390,000$

2007: The income tax expense is: $\$1,500,000 \times .4 = \$600,000$

The income tax payable is: $\$1,500,000 \times .4 = \$600,000$

2008: The income tax expense is: $\$2,000,000 \times .4 = \$800,000$

The income tax payable is: $\$2,012,500 \times .4 = \$805,000$

2009: The income tax expense is: $\$3,000,000 \times .4 = \$1,200,000$

The income tax payable is: $\$3,012,500 \times .4 = \$1,205,000$

Date	Account	Ref.	Dr.	Cr.
2006	Income Tax Expense		400,000	
	Deferred Income Tax			10,000
	Income Tax Payable			390,000
2007	Income Tax Expense		600,000	
	Income Tax Payable			600,000
2008	Income Tax Expense		800,000	
	Deferred Income Tax		5,000	
	Income Tax Payable			805,000
2009	Income Tax Expense		1,200,000	
	Deferred Income Tax		5,000	
	Income Tax Payable			1,205,000

Note: Notice that at the end of the 4 years, the deferred tax is eliminated.

d.

Date	Account	Ref.	Dr.	Cr.
2008	Income Tax Expense		212,000	
	Income Tax Payable			212,000

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

SOLUTIONS

Learning Goal 31, continued

LG 31-9.

a.

Date	Account	Ref.	Dr.	Cr.
Jan. 3	Memo: 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
May 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, 2008:

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
	<u>1,200,000</u>				30,000		738,000
					<u>495,000</u>		<u>8,228,000</u>

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	250,000	291,000	115,000			50,000
		150,000					
			<u>7,981,000</u>				

c.

Preferred Shares Outstanding:

Date	Event	Shares	Total Shares
Jan. 1	Beginning balance		16,000
May 2	Issued for land	4,000	20,000
June 1	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
June 1	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**Learning Goal 31, continued****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, 2008		
Revenues		
Net sales		\$7,450,000
Cost of goods sold		<u>4,110,000</u>
Total revenues		3,340,000
Operating expenses		
Sales and marketing	488,000	
General and administrative expense	1,167,000	
Restructuring charges	<u>250,000</u>	
Total operating expenses		<u>1,905,000</u>
Operating income		1,435,000
Other revenue, expense, and loss		
Rental revenue	70,000	
Interest expense	(134,000)	
Loss on sale of land	<u>(86,000)</u>	<u>(150,000)</u>
Income from continuing operations before tax		1,285,000
Income tax expense		<u>514,000</u>
Income from continuing operations		771,000
Discontinued operations		
Loss from discontinued operations of \$80,000		
less tax savings of \$32,000	(48,000)	
Loss on sale of discontinued division of \$270,000		
less income tax savings of \$108,000	<u>(162,000)</u>	<u>(210,000)</u>
Income before extraordinary item		561,000
Extraordinary loss of \$450,000 from earthquake		
damage less income tax savings of \$180,000		<u>(270,000)</u>
Net income		<u>\$ 291,000</u>
Earnings per share of common stock:		
Income from continuing operations		\$1.11
Discontinued operations		<u>(.35)</u>
Income before extraordinary item76
Extraordinary loss		<u>(.44)</u>
Net income		<u>\$.32</u>

SOLUTIONS

Learning Goal 31, continued

LG 31-9, continued

Earnings per share:

- Income from continuing operations: $(\$771,000 - \$96,000)/607,083 = \$1.11$
- Discontinued operations: $-\$210,000/607,083 = (\$.35)$
- Income before extraordinary item: $(\$561,000 - \$96,000)/607,083 = \$.76$
- Extraordinary loss: $-\$270,000/607,083 = (\$.44)$
- Net income, operations: $(\$291,000 - \$96,000)/607,083 = \$.32$

Preferred dividends:

$$15,000 \text{ shares} \times \$80 \times .08 = \$96,000$$

e.

Coeur d' Alene Enterprises, Inc.
Statement of Stockholders' Equity
For the Year Ended December 31, 2008

(Amounts in \$000's)

	Preferred Stock \$80 Par <u>Value</u>	Common Stock \$.75 Par <u>Value</u> *	Additional Paid-in Capital	Retained Earnings	Treasury Stock	Accum. Other Compre- hensive Income	<u>Total</u>
Balance, January 1: 20,000 shares preferred and 600,000 * shares of common stock issued and outstanding.	\$1,280	\$450	\$7,288	\$8,290	—	\$115	\$17,423
Change in inventory valuation method from xxx to xxx.				(150)			(150)
Balance, January 1, as revised	1,280	450	7,288	8,140	—	115	17,273
Net income.				291			291
Other comprehensive income: Unrealized loss in certain investment securities.						(65)	(65)
Comprehensive income							226
Issued 4,000 shares preferred.	340						340
Preferred stock converted to 20,000 shares of common	(405)	15	390				—
Issued 40,000 shares of common stock		30	738				768
Treasury stock purchase (30,000 shares)					(690)		(690)
Sale of treasury stock (25,000 shares of 30,000 shares)			(90)		575		485
Cash dividends				(450)			(450)
Balance, December 31.	<u>\$1,215</u>	<u>\$495</u>	<u>\$8,326</u>	<u>\$7,981</u>	<u>(\$115)</u>	<u>\$50</u>	<u>\$17,952</u>

* Adjusted for split: 450,000 beginning common share balance is adjusted to equivalent shares for 4 for 3 stock split, $(450,000 \times 4/3) = 600,000$. Par value is also adjusted from \$1 to \$.75 $(\$1 \times 3/4) = \$.75$

SOLUTIONS

Learning Goal 31, continued

LG 31-9, continued

f.

Coeur d' Alene Enterprises, Inc.		
Balance Sheet		
December 31, 2008		
Stockholders' Equity		
Paid-in capital		
Preferred stock, convertible, \$80 par, 8%, callable at \$85, 15,000 shares issued and outstanding.....	\$1,200,000	
Paid-in capital in excess of par, preferred	<u>15,000</u>	\$ 1,215,000
Common stock, \$.75 par, 660,000 shares issued, 655,000 shares outstanding	495,000	
Paid-in capital in excess of par, common	8,228,000	
Paid-in capital from treasury stock transactions	<u>98,000</u>	<u>8,821,000</u>
Total paid-in capital		10,036,000
Retained earnings		<u>7,981,000</u>
Total paid in capital and retained earnings		18,017,000
Less: Treasury stock, common (5,000 shares at cost).....		(115,000)
Accumulated other comprehensive income		<u>50,000</u>
Total stockholders' equity		<u><u>\$17,952,000</u></u>

g. *Book value per share:*

Total stockholders' equity (book value) is:	\$17,952,000
Less: Preferred stockholders' claim	
Call price 15,000 × \$85 =	<u>(1,275,000)</u>
Book value for common stockholders	<u>\$16,677,000</u>

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. ($\$1 \times 3/4$) = \$.75 par value
- March 8: Preferred dividends (semi-annual), $[(16,000 \times \$80 \times .08)/2] = \$51,200$
- May 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. $(\$1,600,000 \times .25) = \$400,000$ and $(\$20,000 \times .25) = \$5,000$. Of the total, \$405,000 the common stock account is credited (20,000 shares × \$.75) = \$15,000.
- Sept. 7: Preferred dividends (semi-annual), $[(15,000 \times \$80 \times .08)/2] = \$48,000$
- Dec. 1: Treasury stock sale, $(\$23 \text{ cost} - \$19.40 \text{ sales price}) \times 25,000 \text{ shares} = \$90,000$ 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–May 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 to be sure to add the additional shares from the first day of the period.

LG 31-10.

a.

Date	Account	Ref.	Dr.	Cr.
Jan. 3	Retained Earnings		400,000	
	Dividends Payable, Preferred			225,000
	Dividends Payable, Common			175,000
30	Dividends Payable, Preferred		225,000	
	Dividends Payable, Common		175,000	
	Cash			400,000
Feb. 1	Cash		1,767,000	
	Organization Expense		133,000	
	Common Stock			100,000
	Paid-in Capital in Excess of Par, Common			1,800,000
April 12	Retained Earnings		540,000	
	Common Stock Distributable			30,000
	Paid-in Capital in Excess of Par, Common			510,000

SOLUTIONS

Learning Goal 31, continued

LG 31-10, *continued*

Date	Account	Ref.	Dr.	Cr.
May 1	Common Stock Distributable		30,000	
	Common Stock			30,000
July 3	Retained Earnings		400,000	
	Dividends Payable, Preferred			75,000
	Dividends Payable, Common			325,000
Aug. 1	Treasury Stock		360,000	
	Cash			360,000
5	Dividends Payable, Preferred		75,000	
	Dividends Payable, Common		325,000	
	Cash			400,000
Sept. 23	Equipment		204,000	
	Preferred Stock			200,000
	Paid-in Capital in Excess of Par, Preferred			4,000
Oct. 19	Retained Earnings		90,000	
	Accounts Receivable			90,000
Nov. 1	Cash		175,000	
	Treasury Stock			120,000
	Paid-in Capital from Treasury Stock Trans.			55,000
Dec. 1	Memo: 412,500 common shares issued in 5 for 4 split to replace 330,000 shares			
31	Short-Term Investments		75,000	
	Accumulated Other Comp. Income			75,000

SOLUTIONS

Learning Goal 31, continued

LG 31-10, *continued*

b.

Account Balances as of December 31, 2008:

Preferred Stock	Paid-in Capital in Excess of Par, Preferred Stock	Common Stock	Common Stock Distributable
2,500,000	4,000	200,000	30,000
200,000		100,000	30,000
<u>2,700,000</u>		30,000	<u>-0-</u>
		<u>330,000</u>	

Paid-in Capital in Excess of Par, Common Stock	Paid-in Capital from Treasury Stock Transactions	Retained Earnings	Treasury Stock
3,900,000	55,000	400,000	360,000
1,800,000		5,200,000	120,000
		540,000	745,000
510,000		400,000	<u>240,000</u>
<u>6,210,000</u>		90,000	
		<u>4,515,000</u>	

Accumulated Other Comprehensive Income
75,000

SOLUTIONS**Learning Goal 31, continued****LG 31-10, continued**

c.

Preferred Shares Outstanding:

Date	Event	Shares	Total Shares
Jan. 1	Beginning balance		25,000
Sept. 23	Issued shares for equipment	2,000	27,000

Common Shares Outstanding:

Date	Event	Shares	Total Shares
Jan. 1	Beginning balance		200,000
Feb. 1	Sold new shares	100,000	300,000
May 1	Stock dividend	30,000	330,000
Aug. 1	Purchased treasury stock	(30,000)	300,000
Nov. 1	Sold treasury stock	10,000	310,000
Dec. 1	5 for 4 stock split		387,500

Treasury Shares:

Date	Event	Shares	Total Shares
Aug. 1	Purchased treasury stock	30,000	30,000
Nov. 1	Sold treasury stock	(10,000)	20,000
Dec. 1	5 for 4 stock split		25,000

SOLUTIONS

Learning Goal 31, continued

LG 31-10, *continued*

d.

Twin Falls Corporation		
Income Statement		
For the Year Ended December 31, 2008		
Revenues		
Net sales		\$4,850,000
Interest revenue		<u>40,000</u>
Total revenues		4,890,000
Expenses		
Cost of goods sold	\$1,720,000	
Sales and marketing expenses	773,000	
General and administrative expense	545,000	
Restructuring charges	524,000	
Organization expense	133,000	
Loss on sale of land	90,000	
Interest expense	55,000	
Income tax expense	<u>404,000</u>	
Total expenses		<u>4,244,000</u>
Income from continuing operations		646,000
Discontinued operations		
Loss from discontinued operations of \$150,000		
less tax savings of \$60,000		<u>(90,000)</u>
Income before extraordinary item		556,000
Extraordinary gain of \$315,000 from land		
condemnation less income tax of \$126,000		<u>189,000</u>
Net income		745,000
Other comprehensive income: unrealized gains		
on certain securities held for investment		<u>75,000</u>
Comprehensive income		<u>\$ 820,000</u>

e.

Twin Falls Corporation		
Statement of Retained Earnings		
For the Year Ended December 31, 2008		
Balance, January 1, 2008 as reported		\$5,200,000
Correction for prior year overstated revenue		<u>(90,000)</u>
Balance, January 1, 2008 as corrected		5,110,000
Net income		745,000
Less: dividends		
Cash dividends	(\$800,000)	
Stock dividend	<u>(540,000)</u>	<u>(1,340,000)</u>
Balance, December 31		<u>\$4,515,000</u>

SOLUTIONS

Learning Goal 31, continued

LG 31-10, continued

f.

Twin Falls Corporation		
Balance Sheet (partial)		
December 31, 2008		
Stockholders' Equity		
Paid-in capital		
Preferred stock, \$100 par, 6%, cumulative, 27,000 shares issued and outstanding	\$2,700,000	
Paid-in capital in excess of par, preferred	<u>4,000</u>	\$ 2,704,000
Common stock, \$.80 par, 412,500 shares issued, 387,500 shares outstanding	330,000	
Paid-in capital in excess of par, common	6,210,000	
Paid-in capital from treasury stock transactions	<u>55,000</u>	<u>6,595,000</u>
Total paid-in capital		9,299,000
Retained earnings		<u>4,515,000</u>
Total paid in capital and retained earnings		13,814,000
Less: Treasury stock, common (25,000 shares at cost)		(240,000)
Accumulated other comprehensive income		<u>75,000</u>
Total stockholders' equity		<u>\$13,649,000</u>

Book value per share:

Total stockholders' equity	\$13,649,000
Less: preferred stockholders' claim (no call value and no dividends in arrears)	<u>2,704,000</u>
Book value for common stockholders	<u>\$10,945,000</u>

Book value per share: $\$10,945,000 / 387,500$ outstanding shares = \$28.25

Other calculations:

- January 3: Preferred dividends (semi-annual): $(25,000 \times \$100 \times .06) + [(25,000 \times \$100 \times .06) / 2]$
= \$225,000
- May 1: Common stock dividends are: $(300,000 \times .10 \times \$18) = \$540,000$
- November 1: Paid-in Capital from treasury stock is: $(\$17.50 - \$12.00) \times 10,000 = \$55,000$
- Stock split:
 - Outstanding common shares: $310,000 \times 5/4 = 387,500$
 - New par value: $\$1 \times 4/5 = \$.80$
 - Total shares in treasury: $20,000 \times 5/4 = 25,000$
- Income tax expense:

Total revenue	\$4,890,000
Less: Total expense before tax	<u>3,840,000</u>
Income before tax	1,050,000
Less: Non-taxable revenue (permanent difference)	<u>(40,000)</u>
Taxable income	<u>\$1,010,000</u>

Tax expense and tax payable: $\$1,010,000 \times .4 = \$404,000$