

SOLUTIONS**Learning Goal 30****Multiple Choice**

1. c A corporation wants to reissue treasury stock at a higher price than it paid. In this way, a greater amount of capital can be obtained than was returned to the stockholders when the treasury stock was purchased.
2. b
3. a A stock split increases all issued shares. This means both outstanding shares and shares held by the company as treasury stock. (*Note:* Total authorized shares do not change.)
4. d Issued shares means both outstanding shares and shares held in treasury, so this total will not change because as outstanding shares decrease, treasury shares increase. Legal capital is a fixed amount determined at the time stock is issued. Total stockholders' equity is reduced because cash is paid out to some of the stockholders who decide to sell their shares back to the company.
5. d Choice (b) is an example of selling treasury stock at a price greater than the purchase price. Choice (a) can happen if treasury stock is sold below cost.
6. b
7. a A stock dividend has no effect on total stockholders' equity and no effect on the par value per share.
8. d
9. d Two effects are occurring. First, 500 shares at a cost of \$20 per share are being removed from a contra account that reduces stockholders' equity. This is an increase in stockholders' equity of $500 \times \$20 = \$10,000$. Second, the stock is being sold for \$4 above the purchase price. This is an additional increase in stockholders' equity of $500 \times \$4 = \$2,000$. A faster calculation is $500 \times \$24 = \$12,000$.
10. c
11. d
12. b
13. a
14. d A stock split reduces the par value per share, but the total par value is unchanged because the number of shares increases.
15. b Par value per share: $(\$15 \times 2/3) = \10 . Total shares: $(90,000 \times 3/2) = 135,000$.
16. c
17. c A stock split reduces the par value per share. A cash dividend reduces stockholders' equity. A liquidating dividend is a cash dividend that decreases both retained earnings and paid-in capital.
18. d Because this is a small stock dividend (less than 20–25% of outstanding shares) GAAP requires that market value be used to value the transaction. Therefore, retained earnings decreases by $(100,000 \times .10 \times \$20) = \$200,000$. Paid-in Capital in Excess of Par will increase by the excess of market value above the par value which is $(\$20 - \$1) \times 10,000 = \$190,000$. (The Common Stock account also increases by \$10,000.)
19. b
20. a This is a large stock dividend, so the entire amount is recorded at par value.
21. c
22. c A split has no effect on the total dollar amount of any stockholders' equity accounts.
23. d

SOLUTIONS

Learning Goal 30, continued

Discussion Questions and Brief Exercises

- A corporation would purchase its own stock and hold it as treasury stock for several possible reasons. These reasons include:

 - If the stock can be purchased at a lower price and resold at a higher price, the business can increase the amount of invested capital.
 - Reducing the shares of outstanding stock tends to keep the stock price higher or reduce the rate of decrease. This makes most investors happy.
 - Reducing the outstanding shares makes it more difficult for another company or large investor to obtain enough shares to acquire control of a company.
 - The company may need additional shares for other purposes such as employee stock plans or using company stock to acquire another company.

Gain or loss is never recorded with treasury stock sales. When treasury stock is sold above or below its acquisition cost, it is simply an expansion or contraction of stockholders' equity. When a company is buying and reissuing shares of its own stock, it is just dealing with its own capital.
- Authorized stock is the total amount of shares that a corporation is authorized to issue at the time it receives a charter from the state of incorporation. Issued stock is the total number of shares that have ever been issued to investors and other parties and that have not been cancelled or retired. Outstanding stock is the number of shares that are currently held that are not treasury stock.
- Effect on total assets: Total assets increase because cash is received.
 - Effect on total stockholders' equity: Stockholders' equity increases because the Treasury Stock contra account is reduced. This amount is increased if the stock is sold above its purchase price and decreased if the stock was sold below its purchase price.
 - Effect on net income: Net income is not affected by a treasury stock purchase or sale.
 - Effect on paid-in capital: Paid-in capital will increase if the treasury stock is sold for more than its cost. Paid-in capital will decrease if treasury stock is sold for less than its cost. (An alternative is to decrease retained earnings if there is not sufficient paid-in capital from treasury stock transactions.)
 - Although treasury stock has a debit balance, it is not an asset. It is a contra equity account.

Example of increase: 1,000 shares of treasury stock were purchased for \$20 and sold for \$23.

Increase →	Cash	23,000	
	Treasury Stock		20,000
	Paid-in Capital in Excess of Par, Treasury Stock		3,000

Example of decrease: 1,000 shares of treasury stock were purchased for \$20 and sold for \$18

Decrease →	Cash	18,000	
	Paid-in Capital in Excess of Par, Treasury Stock	2,000	
	Treasury Stock		20,000

SOLUTIONS**Learning Goal 30, continued**

4. Par value per share decreases. Total par value is unchanged. Total shares outstanding increases. Total shares issued increases. Total shares authorized is unchanged.
5. A stock dividend removes an amount from retained earnings and transfers that same amount into paid-in capital. Therefore, the total stockholders' equity is unchanged. More shares are outstanding, but the value of the business itself has not changed. A stock split has no effect on total stockholders' equity because the total dollar value of stockholders' equity is unaffected and remains unchanged. The same amount of stockholders' equity is simply being divided among more shares of issued stock.
- 6.

Date	Account	Post. Ref.	Dr.	Cr.
March	Treasury Stock		70,000	
	Cash			70,000
May 3	Cash		54,000	
	Treasury Stock			42,000
	Paid-in Capital in Excess of Par, Treasury Stock			12,000
June 28	Cash		26,000	
	Paid-in Capital in Excess of Par, Treasury Stock		2,000	
	Treasury Stock			28,000

Analysis:

- On March 1, 5,000 shares \times \$14 = \$70,000 cash paid.
 - On May 3, 3,000 shares \times \$18 = \$54,000 cash received. The cost of the treasury shares was 3,000 \times \$14 = \$42,000. The additional \$4 per share = \$12,000 of additional paid in capital obtained.
 - On June 28, 2,000 shares \times \$13 = \$26,000 of cash received. The cost of the treasury shares was 2,000 \times \$14 = \$28,000. The difference of \$1 less per share is a decrease in paid-in capital of \$2,000.
7. Items that decrease retained earnings:
 - Net loss (from the income statement)
 - Cash and stock dividends (All dividends are reductions in retained earnings.)
 - Prior period adjustment (from an accounting error in a prior period that overstated net income)
 - Accumulated prior effect of a change in accounting principle (cumulative decrease in net income)
 - Sale of treasury stock at a price below cost (Retained earnings is debited, or reduced, when there is insufficient paid-in capital from treasury stock to absorb the full difference for the decrease in stockholders' equity.)
 - Increase in appropriations of retained earnings (when retained earnings available for dividends is reduced by a journal entry)

SOLUTIONS**Learning Goal 30, continued****7, continued**

Items that increase retained earnings:

- Net income (from the income statement)
 - Prior period adjustment (from an accounting error in a prior period that understated net income)
 - Accumulated prior effect of a change in accounting principle (cumulative increase in net income)
 - Reduction in appropriations of retained earnings (when retained earnings available for dividends is increased by a journal entry that reduces or eliminates the appropriation)
- 8.** A prior period adjustment is an entry to retained earnings (and to some other balance sheet account) to correct a revenue or expense error of a prior period. If the error caused the prior period net income to be overstated, retained earnings will be reduced by the adjustment in the current period. If the error caused the prior period net income to be understated, retained earnings will be increased by the adjustment in the current period. Prior period adjustments are shown as a decrease or increase in retained earnings on the statement of retained earnings (or statement of stockholders' equity, which is discussed in Learning Goal 31). Prior period adjustments also require that the prior financial statements affected by the error be restated.
- 9.** A change in accounting principle is a change from a currently used and generally accepted accounting principle to a different generally accepted accounting principle. The accumulated effect of the change on the net income of all prior accounting periods that are affected is shown as an adjustment to the beginning balance of retained earnings on the statement of retained earnings. This same amount will also require a change in some asset or liability item in the current period. All affected previous financial statements must be restated using the new principle. (*Note:* If comparative statements of retained earnings are presented, the beginning balance of the statement of the earliest period will show the adjustment.)
- 10.** ■ **Common Stock:** The total dollar amount remains unchanged at \$100,000. The par value decreases to \$.50 per share.
- **Paid-in Capital in Excess of Par, Common:** The total dollar amount remains unchanged at \$1,220,000.
- **Treasury Stock:** The total dollar amount remains unchanged at $20,000 \times \$8.60 = \$172,000$.
- The total authorized shares are unchanged at 500,000. The issued shares increase to 210,000, of which 20,000 are in treasury and 190,000 are outstanding. (The cost per share of the treasury stock becomes $\$172,000/20,000 = \8.60 .)

11.

Baker Corporation
Statement of Retained Earnings
For Year Ended June 30, 2017

Balance, July 1, 2007 as reported	\$720,000
Correction for 2007 understated income	5,000
Balance, July 1 as corrected	<u>725,000</u>
Net loss	(121,000)
Less: cash dividends	<u>(40,000)</u>
Balance, June 30, 2017	<u><u>\$564,000</u></u>

SOLUTIONS

Learning Goal 30, continued

- 12.** A restriction on retained earnings is a limitation on the amount of retained earnings that may be paid out as dividends. This happens for several reasons:
- Banks and other creditors want to ensure that enough cash is kept in a company to pay business debts.
 - State laws restrict the amount of cash that can be used to purchase treasury stock. This is often done by requiring that a restricted amount of retained earnings be maintained that is equivalent to some portion of treasury stock. This requirement maintains retained earnings as a positive offset against the treasury stock.
 - If the board of directors anticipates large future cash requirements, a portion of the retained earnings may be restricted to ensure that cash will not be used for payment of dividend.
- Restrictions on retained earnings are reported in the financial statement footnotes.
- 13.** A stock dividend does not require the corporation to use cash; however, a stock dividend usually pleases the investors because they like owning more shares.
- 14.** Small: GAAP defines a small stock dividend as less than 20–25% of outstanding shares. Generally, most stock dividends are less than 20% of outstanding shares. A small stock dividend uses the market value of the stock to determine the value of the transaction by multiplying the number of new shares times the market value per share. The retained earnings account is decreased and Common Stock and Paid-in Capital in Excess of Par accounts are increased. (For no-par stock, the Common Stock account is increased.)
- Large: a large stock dividend uses par value to value the transaction by multiplying the par value per share times the number of new shares. The retained earnings account is decreased and the Common Stock account is increased. Large stock dividends do not frequently occur; instead, a corporation will declare a stock split.
- 15.** When a board of directors wants to issue a large number of new shares, a stock split is generally used. Unlike a stock dividend, a stock split will not reduce retained earnings, and the balance in retained earnings will have no effect on the decision of how many new shares to issue.
- 16.** Treasury stock is a contra equity account. This means that it acts as an offset against the rest of stockholders' equity and reduces total stockholders' equity. Treasury stock has a debit balance.
- 17.**

	Par Value	×	Shares Issued	=	Total \$ Par Value
Before split	\$1		120,000		\$120,000
2 for 1 split	.50		240,000		120,000
3 for 1 split	.3333		360,000		120,000*
3 for 2 split	.6667		180,000		120,000*
4 for 3 split	.75		160,000		120,000
1 for 2 split	2		60,000		120,000

*Rounded

SOLUTIONS

Learning Goal 30, continued

- 18. ■ Shares owned after the stock dividend: $(1,000 \times 1.15) = 1,150$ shares
 - Percent ownership before the dividend: $(1,000/50,000) = .02$; after dividend: $(1,150/57,500) = .02$. His percent ownership remains unchanged at 2% of outstanding shares.
 - Stock price should theoretically be approximately: $(\$27 \times 1/1.15) = \23.48
- 19. For a normal (non-liquidating) cash dividend, (a) there must be a sufficient balance of unrestricted and unappropriated retained earnings, (b) there must be sufficient available cash, and (c) state laws on capital maintenance cannot be violated.
- 20. A deficit in retained earnings is a debit (negative) balance in retained earnings. A deficit occurs when the cumulative amount of net losses exceeds the cumulative amount of net income. (This includes adjustments for prior period errors and the effect of changes in accounting principles.) Note that dividends cannot create a deficit because dividend declarations generally are not permitted if they would create a negative balance in retained earnings.
- 21.

Item	Stock Dividend	Stock Split
a. Total stockholders' equity	No change	No change
b. Total paid-in capital	Increase	No change
c. Total retained earnings	Decrease	No change
d. Total par or stated value	Increase	No change
e. Par or stated value per share	No change	Decrease
f. Total shares issued	Increase	Increase
g. Total shares authorized	No change	No change
h. Taxable income to stockholder	None	None

Reinforcement Problems

LG 30-1.

Crescent City, Inc.		
Balance Sheet (partial)		
December 31, 2017		
Stockholders' Equity		
Paid-in capital		
Preferred stock, \$50 par, 3%, 75,000 shares issued and outstanding	\$3,750,000	
Paid-in capital in excess of par	100,000	<u>\$3,850,00</u>
Common stock, \$.10 par value, 250,000 shares issued and 247,500 shares outstanding	25,000	
Paid-in capital in excess of par	3,790,000	
Paid-in capital from treasury stock transactions	27,000	<u>3,842,000</u>
Total paid-in capital		<u>7,692,000</u>
Retained earnings		522,300
Total paid-in capital and retained earnings		<u>8,214,300</u>
Less: treasury stock (2,500 shares at cost)		<u>(30,000)</u>
Total stockholders' equity		<u><u>\$8,184,300</u></u>

SOLUTIONS**Learning Goal 30, continued****LG 30-2.**

- A stock dividend does not affect total stockholders' equity. The amount will remain at \$1,792,000.
- Stock dividends are calculated based on the outstanding shares. Therefore Retained Earnings will decrease by $(90,000 \times .10) \times \$8 = \$72,000$. The new balance will be \$913,000. Stock Dividends Distributable will be a new account with a balance of $(9,000 \times \$0.05) = \450 . The balance will remain until the stock is distributed, at which time it will be reclassified into the Common Stock account. Paid-in Capital in Excess of Par will increase by $(9,000 \times \$7.95) = \$71,550$. The new balance will be \$943,550.
- Total shares issued will increase by 9,000 shares to 109,000 shares. Total shares outstanding will increase by 10% (9,000 shares) to 99,000 shares. The shares in treasury are not affected by a stock dividend.
- Total shares issued will be $(109,000 \times 2) = 218,000$. Total shares outstanding will be $(99,000 \times 2) = 198,000$. The difference between shares issued and outstanding $(218,000 - 198,000 = 20,000)$ is the new balance of shares in treasury, which also doubled as a result of the split.
- A stock split does not affect total stockholders' equity. The amount will remain at \$1,792,000.

LG 30-3.

Date	Account	Post. Ref.	Dr.	Cr.
Oct. 5	Retained Earnings		150,000	
	Common Stock Distributable			5,000
	Paid-in Capital in Excess of Par, Common			145,000
30	Common Stock Distributable		5,000	
	Common Stock			5,000
Nov. 11	Treasury Stock		220,000	
	Cash			220,000
Jan. 17	Retained Earnings		250,000	
	Dividends Payable, Preferred			90,000
	Dividends Payable, Common			160,000
Feb. 14	Dividends Payable, Preferred		90,000	
	Dividends Payable, Common		160,000	
	Cash			250,000
April 8	Cash		189,000	
	Treasury Stock			154,000
	Paid-in Capital from Treasury Stock			35,000

SOLUTIONS

Learning Goal 30, continued

LG 30-3, continued

Date	Account	Post. Ref.	Dr.	Cr.
24	Cash		57,000	
	Paid-in Capital from Treasury Stock		9,000	
	Treasury Stock			66,000
30	Declared a 5 for 4 stock split. Will replace 55,000 shares of \$1 par value common stock with 68,750 new shares (55,000 × 5/4) of \$.80 par value stock (\$1 × 4/5).			

LG 30-4.

Date	Account	Post. Ref.	Dr.	Cr.
April 4	Treasury Stock		200,000	
	Cash			200,000
May 27	Cash		168,000	
	Treasury Stock			140,000
	Paid-in Capital from Treasury Stock Transactions			28,000
July 8	Retained Earnings		620,000	
	Common Stock Distributable			25,000
	Paid-in Capital in Excess of Par, Common			595,000
Aug. 11	Common Stock Distributable		25,000	
	Common Stock			25,000
Sept. 4	Cash		34,000	
	Paid-in Capital from Treasury Stock Transactions		6,000	
	Treasury Stock			40,000
20	Cash		1,075,000	
	Common Stock			50,000
	Paid-in Capital in Excess of Par, Common			1,025,000
Oct. 1	Declared a 2 for 1 stock split. 375,000 issued shares of \$1 par value common stock are replaced with 750,000 new shares (375,000 × 2) of \$.50 par value common stock (\$1 × 1/2).			

SOLUTIONS

Learning Goal 30, continued

LG 30-4, continued

Calculations:

- May 27: Cost per share of the treasury stock from the April 4 purchase is $\$200,000/10,000 = \20 per share. The treasury stock was sold for $\$24$ per share, so the additional paid-in capital is $\$4 \times 7,000 = \$28,000$.
- July 8: This is a small stock dividend (less than 20% of outstanding shares: $25,000/297,000 = .084$). Therefore, the market price is used to value the transaction: $25,000 \times \$24.80 = \$620,000$. The Common Stock Distributable account is credited for the par value ($\$1 \times 25,000$), and the balance is credited to Paid-in Capital in Excess of Par.
- Sept. 4: The sales price per share of the treasury stock is $\$34,000/2,000 = \17 . Because this is less than the cost per share ($\$20$), it results in a decrease in stockholders' equity of $2,000 \times \$3 = \$6,000$. We record this reduction by debiting Paid-in Capital in Excess of Par for the common stock.
- Oct. 1: The common shares issued before the split are $300,000 + 25,000$ (stock dividend) + $50,000$ (stock sale) = 375,000 shares.

LG 30-5.

a.

Date	Account	Post. Ref.	Dr.	Cr.
July 11	Accounts Receivable		125,000	
	Retained Earnings			125,000
23	Treasury Stock		88,000	
	Cash			88,000
Aug. 8	Cash		58,000	
	Treasury Stock			44,000
	Paid-in Capital from Treasury Stock Transactions			14,000
24	Retained Earnings		612,300	
	Common Stock Distributable			4,710
	Paid-in Capital in Excess of Par			607,590
Sept. 5	Common Stock Distributable		4,750	
	Common Stock			4,750
20	Cash		20,000	
	Paid-in Capital from Treasury Stock Transactions		2,000	
	Treasury Stock			22,000
22	Retained Earnings		100,000	
	Dividends Payable, Preferred			45,000
	Dividends Payable, Common			55,000

SOLUTIONS

Learning Goal 30, continued

LG 30-5, continued

Calculations:

- July 23: $\$11 \times 8,000 = \$88,000$.
- Aug. 8: $\$14.50 \times 4,000 = \$58,000$. $(\$14.50 \text{ sales price} - \$11 \text{ cost}) \times 4,000 = \$14,000$ Paid in Capital from Treasury Stock Transactions.
- Aug. 24: $(475,000 - 8,000 \text{ treasury shares purchased} + 4,000 \text{ treasury shares sold}) = 471,000$ common shares outstanding. $471,000 \times .10 = 47,100$ new shares. This is a small stock dividend so market value is used. $47,100 \times \$13 = \$612,300$. Par value: $\$.10 \times 47,100 = \$4,710$.
- Sept. 20: Cost of shares sold is $\$11 \times 2,000 = \$22,000$. $\$20,000 - \$22,000 = \$2,000$ decrease in stockholders' equity. Because there is a Paid-in Capital from Treasury Stock Transactions account balance, this account is debited for the decrease in stockholders' equity.
- Sept. 22: Preferred stock dividend: $(20,000 \times \$100 \times .09) / 4 = \$45,000$. Common dividend: $\$100,000 - \$45,000 = \$55,000$.

b.

Bakersfield Corporation	
Statement of Retained Earnings	
For the Three Months Ended September 30, 2017	
Balance, June 30, 2017 as reported	\$2,320,000
Correction for prior year understated revenue	125,000
Balance, June 30, 2017 as corrected	<u>2,445,000</u>
Net loss	(186,000)
Less: dividends	
Cash dividends payable	(\$100,000)
Stock dividend	<u>(612,300)</u> (712,300)
Balance, September 30, 2017	<u><u>\$1,546,700</u></u>

LG 30-6.

Item	Common Stock	Paid-in Capital in Excess of Par	Paid-in Capital: Treasury Stock	Common Stock Distributable	Retained Earnings	Treasury Stock
1	\$50,000	\$700,000	NE	NE	NE	NE
2	NE	NE	NE	NE	(\$25,000)	NE
3	NE	204,000	NE	\$12,000	(216,000)	NE
4	NE	NE	NE	NE	NE	\$60,000
5	12,000	NE	NE	(12,000)	NE	NE
6	NE	NE	\$8,000	NE	NE	(24,000)
7	NE	NE	NE	NE	(238,000)	NE
8	NE	NE	NE	NE	NE	NE
9	NE	NE	(2,000)	NE	NE	(12,000)
10	NE	NE	NE	NE	NE	NE
11	NE	NE	NE	NE	77,000	NE

SOLUTIONS

Learning Goal 30, continued

LG 30-6, continued

Comments:

Item 4. The treasury stock account increases by the cost of the purchase.

Item 6. A sale of treasury decreases the treasury stock account by the cost of the shares sold which is $2,000 \times \$12 = \$24,000$. If the treasury stock is sold for more than cost, the additional amount is added to paid-in capital from treasury stock transactions. In this case: $\$4 \times 2,000 = \$8,000$.

Item 8. Paying a previously declared cash dividend reduces Cash and Dividends Payable accounts but does not affect any stockholders' equity accounts.

Item 9. A sale of treasury stock decreases the Treasury Stock account by the cost of the shares sold which is $1,000 \times \$12 = \$12,000$. If the treasury stock is sold for less than cost, the difference is subtracted from paid-in capital from treasury stock transactions. In this case: $\$2 \times 1,000 = \$2,000$. If there is not sufficient balance in Paid-In Capital from Treasury Stock Transactions, (here, \$8,000) the balance would be subtracted from retained earnings.

Item 10. A stock split does not affect the total dollar value of any stockholders' equity accounts; however, total shares issued, outstanding, and in treasury increase.

- Issued shares: $(40,000 + 50,000 + 12,000) \times 2 = 204,000$
- Outstanding shares: $(40,000 + 50,000 + 12,000 - 5,000 + 2,000 + 1,000) \times 2 = 200,000$
- Treasury shares: $(5,000 - 2,000 - 1,000) \times 2 = 4,000$

LG 30-7.

Palo Alto Properties, Inc.		
Statement of Retained Earnings		
For the Year Ended December 31, 2017		
Balance, January 1, 2017 as reported		\$840,000
Correction for 2014–2016 overstated income		<u>(238,000)</u>
Balance, January 1, 2017 as corrected		602,000
Net income		77,000
Less: dividends		
Cash dividend	(\$25,000)	
Stock dividend	(216,000)	<u>(241,000)</u>
Balance, December 31, 2017		<u><u>\$438,000</u></u>

SOLUTIONS

Learning Goal 30, continued

LG 30-7, continued

Palo Alto Properties, Inc.	
Balance Sheet (partial)	
December 31, 2017	
Stockholders' Equity	
Paid-in capital	
Common stock, \$.50 par, 204,000 shares issued, 200,000 shares outstanding . . .	\$ 102,000
Paid-in capital in excess of par, common	1,354,000
Paid-in capital from treasury stock transactions	6,000
Total paid-in capital	1,462,000
Retained earnings	438,000
Total paid-in capital and retained earnings	1,900,000
Less: Treasury stock, common (4,000 shares at cost)	(24,000)
Total stockholders equity	<u>\$1,876,000</u>

Comments:

- The beginning balance of common shares issued and outstanding is $(\$40,000/\$1) = 40,000$ shares. The year-end number of shares issued is $(40,000 + 50,000 + 12,000) \times 2 = 204,000$.
- The par value of the stock is $(\$1 \times 1/2) = \$.50$.
- The number of treasury stock shares is $(5,000 - 2,000 - 1,000) \times 2 = 4,000$. The stock split affects the number of shares but does not change the total cost of the shares. However, the cost of the treasury stock per share has now been reduced to \$6 per share from \$12 per share.

LG 30-8.

De Leon Corporation	
Balance Sheet (partial)	
December 31, 2017	
Stockholders' Equity	
Paid-in capital	
Preferred stock, \$100 par, 7% cumulative; 5,000 shares issued and outstanding	\$ 500,000
Common stock, \$1 par, 101,000 shares issued, 100,000 shares outstanding	101,000
Paid-in capital in excess of par, common	1,031,000
Paid-in capital from treasury stock transactions	23,000
Total paid-in capital	1,655,000
Retained earnings	1,094,000
Total paid-in capital and retained earnings	2,749,000
Less: Treasury stock, common (1,000 shares at cost)	(20,000)
Total stockholders equity	<u>\$2,729,000</u>

SOLUTIONS**Learning Goal 30, continued****LG 30-8, continued***Calculations:*

- Common shares issued: $92,000 + 9,000$ stock dividend = 101,000 shares
- Common shares outstanding: $90,000 + 9,000$ stock dividend + 1,000 from treasury stock = 100,000 shares
- Common stock total dollars: $\$92,000 + (\$1 \times 9,000) = \$101,000$ (or, 101,000 shares \times $\$1$)
- Paid-in capital in excess of par: $\$815,000 + (9,000 \times \24 excess from stock dividend) = $\$1,031,000$
- Paid-in capital from treasury stock transactions: $\$20,000 + (\3 per share sale above cost \times 1,000 treasury shares) = $\$23,000$
- Retained earnings: $\$1,210,000 + \$109,000$ net income $- (\$25 \times 9,000$ stock dividend) = $\$1,094,000$
- Treasury stock shares: $2,000 - 1,000$ resold = 1,000 shares
- Treasury stock total dollars: $\$40,000 - (\20 cost per share \times 1,000 shares sold) = $\$20,000$

Note: Check total stockholders' equity, $\$2,597,000$ beginning balance + $\$109,000$ net income + $\$23,000$ from treasury stock sale = $\$2,729,000$.

LG 30-9.

a.

Date	Account	Post. Ref.	Dr.	Cr.
Jan. 5	Retained Earnings		250,000	
	Dividends Payable, Preferred			150,000
	Dividends Payable, Common			100,000
Feb. 15	Dividends Payable, Preferred		150,000	
	Dividends Payable, Common		100,000	
	Cash			250,000
Mar. 12	Treasury Stock		240,000	
	Cash			240,000
April 20	Retained Earnings		1,200,000	
	Common Stock Distributable			2,400
	Paid-in Capital in Excess of Par, Common			1,197,600
May 17	Common Stock Distributable		2,400	
	Common Stock			2,400

SOLUTIONS

Learning Goal 30, continued

LG 30-9, continued

Date	Account	Post. Ref.	Dr.	Cr.
July 8	Retained Earnings		350,000	
	Dividends Payable, Preferred			150,000
	Dividends Payable, Common			200,000
Aug. 17	Dividends Payable, Preferred		150,000	
	Dividends Payable, Common		200,000	
	Cash			350,000
23	Cash		46,000	
	Retained Earnings		14,000	
	Treasury Stock			60,000
Sept. 19	Declared a 3 for 2 common stock split. Will replace 540,000 shares of \$.06 par value common stock with 810,000 new shares (540,000 × 3/2) of \$.04 par value stock (\$.06 × 2/3).			
Oct. 21	Cash		22,000	
	Treasury Stock			20,000
	Paid-in Capital from Treasury Stock Transactions			2,000
Nov. 30	Inventory		352,000	
	Retained Earnings			352,000

Calculations:

- Jan. 5: Preferred cash dividend (semi-annual) is $[(100,000 \times \$3)/2] = \$150,000$. The remainder of the dividend goes to common stockholders.
- April 20: $40,000 \text{ shares}/500,000 \text{ shares} = .08$, which is a small stock dividend. Therefore, using market price per share: $40,000 \text{ shares} \times \$30 = \$1,200,000$. Allocated to Common Stock: $\$.06 \times 40,000 = \$2,400$.
- July 8: Preferred stock dividend (semi-annual) is $[(100,000 \times \$3)/2] = \$150,000$. The remainder of the dividend goes to common stockholders.
- Aug. 23: $2,000 \times \$23 = \$46,000$ total cash received. $2,000 \times \$30 = \$60,000$ cost of treasury shares sold. There is no balance in a Paid-in Capital from Treasury Stock account, so the difference reduces retained earnings.
- Sept. 19: A stock split affects all shares issued, both outstanding and in treasury.
- Oct. 21: Before the stock split, the number of shares held in treasury are $(8,000 - 2,000) = 6,000$. After the stock split, the treasury shares increase to $(6,000 \times 3/2) = 9,000$. The cost of the shares held in treasury is $(\$240,000 - \$60,000) = \$180,000$. Therefore, after the split, the cost per share of the treasury stock now becomes $(\$180,000/9,000) = \20 per share. The sale of 1,000 shares results in a credit to Treasury Stock of $1,000 \times \$20 = \$20,000$. The cash received from the sale is $1,000 \times \$22 = \$22,000$.

SOLUTIONS

Learning Goal 30, continued

LG 30-9, continued

b.

Muncie, Inc. Statement of Retained Earnings For the Year Ended December 31, 2017		
Balance, January 1, 2017 as reported		\$2,740,000
Correction for 2011–2016 understated income		<u>352,000</u>
Balance, January 1, 2017 as corrected		3,092,000
Net loss		(284,000)
Less: dividends		
Cash dividends	(\$ 600,000)	
Stock dividend	<u>(1,200,000)</u>	(1,800,000)
Less: Treasury stock sold at less than cost		<u>(14,000)</u>
Balance, December 31, 2017		<u>\$ 994,000</u>

c. If the \$352,000 prior years' inventory error correction had been made as an adjustment to current period operations, the current period net income would have been very distorted. In fact, instead of showing a \$284,000 loss for the year, the business would show \$68,000 of net income!

LG 30-10.

a.

Date	Account	Post. Ref.	Dr.	Cr.
Jan. 4	Retained Earnings		500,000	
	Dividends Payable, Preferred			325,000
	Dividends Payable, Common			175,000
Feb. 18	Dividends Payable, Preferred		325,000	
	Dividends Payable, Common		175,000	
	Cash			500,000
March 9	Cash		1,400,00	
	Common Stock			1,400,00
April 3	Treasury Stock		330,000	
	Cash			330,000

SOLUTIONS

Learning Goal 30, continued

LG 30-10, continued

Date	Account	Post. Ref.	Dr.	Cr.
June 8	Retained Earnings		705,000	
	Common Stock Distributable			705,000
July 7	Common Stock Distributable		705,000	
	Common Stock			705,000
11	Retained Earnings		375,000	
	Dividends Payable, Preferred			325,000
	Dividends Payable, Common			50,000
Aug. 20	Dividends Payable, Preferred		325,000	
	Dividends Payable, Common		50,000	
	Cash			375,000
Sept. 9	Cash		140,000	
	Treasury Stock			110,000
	Paid-in Capital from Treasury Stock Transactions			30,000
Oct. 15	Retained Earnings		250,000	
	Short-Term Investments			250,000
Dec. 2	Cash		136,000	
	Paid-in Capital from Treasury Stock Transactions		30,000	
	Retained Earnings		10,000	
	Treasury Stock			176,000

Calculations:

- Jan. 4: To preferred stockholders: $[(130,000 \times \$5)/2] = \$325,000$. To common stockholders: $\$500,000 - \$325,000 = \$175,000$.
- June 8: $(235,000 \text{ shares} \times .10) = 23,500$ new shares. 10% is a small stock dividend, therefore the market value of \$30 per share is used. $(23,500 \times \$30) = \$705,000$.
- July 11: To preferred stockholders: $[(130,000 \times \$5)/2] = \$325,000$. To common stockholders: $\$375,000 - \$325,000 = \$50,000$.
- Sept. 9: Cost of treasury stock is \$22 per share. $(5,000 \text{ shares} \times \$22) = \$110,000$. Therefore, additional paid-in capital from the sale is $(\$140,000 - \$110,000) = \$30,000$.
- Dec. 2: Sale below cost reduces stockholders' equity by $[(8,000 \times (\$22 - \$17))] = \$40,000$. A sale of treasury stock below cost first reduces any balance in Paid-in Capital from Treasury Stock Transactions, and then reduces Retained Earnings. The Paid-in Capital from Treasury Stock Transactions has a \$30,000 balance from September 9.

SOLUTIONS

Learning Goal 30, continued

LG 30-10, continued

Common Shares Outstanding:

Date	Event	Shares	Total Shares
Jan. 1	Beginning balance		200,000
March 9	Sold new shares	50,000	250,000
April 3	Treasury shares purchased	(15,000)	235,000
July 7	Stock dividend	23,500	258,500
Sept. 9	Treasury shares sold	5,000	263,500
Dec. 2	Treasury shares sold	8,000	271,500

Common Stock Treasury Shares:

Date	Event	Shares	Total Shares
April 3	Treasury shares purchased	15,000	15,000
Sept. 9	Treasury shares sold	(5,000)	10,000
Dec. 2	Treasury shares sold	(8,000)	2,000

Preferred Shares:

Date	Event	Shares	Total Shares
Jan. 1	Beginning balance		130,000

b. Account Balances as of December 31, 2017:

<p>Preferred Stock</p> <hr/> <p style="text-align: right;">1,365,000</p>	<p>Common Stock</p> <hr/> <p style="text-align: right;">5,400,000 1,400,000 705,000 <hr/>7,505,000</p>	<p>Common Stock Distributable</p> <hr/> <p style="text-align: right;">705,000 <hr/>-0-</p>
<p>Retained Earnings</p> <hr/> <p style="text-align: right;">8,210,000 500,000 705,000 375,000 250,000 10,000 <hr/>6,784,000</p>	<p>Treasury Stock</p> <hr/> <p style="text-align: right;">330,000 110,000 176,000 <hr/>44,000</p>	<p>Paid-in Capital from Treasury Stock Trans.</p> <hr/> <p style="text-align: right;">30,000 30,000 <hr/>-0-</p>

SOLUTIONS

Learning Goal 30, continued

LG 30-10, continued

c.

Evanston, Inc.		
Statement of Retained Earnings		
For the Year Ended December 31, 2017		
Balance, January 1, 2017 as reported		\$8,210,000
Correction for 2015–2016 overstated revenue		<u>(250,000)</u>
Balance, January 1, 2017 as corrected		7,960,000
Net income		414,000
Less: dividends		
Cash dividend	(\$875,000)	
Stock dividend	<u>(705,000)</u>	(1,580,000)
Less: Treasury stock sold at less than cost		<u>(10,000)</u>
Balance, December 31, 2017		<u><u>\$6,784,000</u></u>

d.

Evanston, Inc.	
Balance Sheet (partial)	
December 31, 2017	
Stockholders' Equity	
Paid-in capital	
Preferred stock, no par, \$5; 130,000 shares issued and outstanding	\$ 1,365,000
Common stock, no par, 273,500 shares issued, 271,500 outstanding	<u>7,505,000</u>
Total paid-in capital	8,870,000
Retained earnings	<u>6,784,000</u>
Total paid-in capital and retained earnings	15,654,000
Less: Treasury stock, common (2,000 shares at cost)	<u>(44,000)</u>
Total stockholders equity	<u><u>\$15,610,000</u></u>

e. Yes, common stock dilution probably occurred during the year because new shares were issued. Although existing stockholders could have been the purchasers of the new shares, it is unlikely that they all purchased the new shares in proportion to their existing percentages.

SOLUTIONS

Learning Goal 30, continued

LG 30-11.

a.

Date	Account	Post. Ref.	Dr.	Cr.
Jan. 4	Retained Earnings		600,000	
	Dividends Payable, Preferred			450,000
	Dividends Payable, Common			150,000
Feb. 14	Dividends Payable, Preferred		450,000	
	Dividends Payable, Common		150,000	
	Cash			600,000
March 7	Cash		3,800,000	
	Common Stock			102,000
	Paid-in Capital in Excess of Par, Common			3,698,000
May 11	Preferred Stock		400,000	
	Paid-in Capital in Excess of Par, Preferred		20,000	
	Common Stock			32,000
	Paid-in Capital in Excess of Par, Common			388,000
June 5	Equipment		544,000	
	Common Stock			16,000
	Paid-in Capital in Excess of Par, Common			528,000
July 8	Retained Earnings		600,000	
	Dividends Payable, Preferred			72,000
	Dividends Payable, Common			528,000
Aug. 15	Dividends Payable, Preferred		72,000	
	Dividends Payable, Common		528,000	
	Cash			600,000

SOLUTIONS

Learning Goal 30, continued

LG 30-11, continued

Date	Account	Post. Ref.	Dr.	Cr.
Aug. 21	Declared a 5 for 4 stock split. Will replace 400,000 issued shares of \$1 par value common stock with 500,000 new shares ($400,000 \times 5/4$) of \$.80 par value stock ($\$1 \times 4/5$).			
Nov. 20	Retained Earnings		120,000	
	Commissions Payable			120,000
Dec. 12	Retained Earnings		1,950,000	
	Common Stock Distributable			39,000
	Paid-in Capital in Excess of Par, Common			1,911,000
29	Cash		380,000	
	Treasury Stock			176,000
	Paid-in Capital from Treasury Stock Transactions			204,000

Calculations:

- Jan. 4: Preferred stock: $(40,000 \times \$50 \times .09 \times 2) = \$360,000$ dividends in arrears. $(40,000 \times \$50 \times .09) / 2 = \$90,000$ current semi-annual dividend. Total is $(\$360,000 + \$90,000) = \$450,000$. Common stock: $(\$600,000 - \$450,000) = \$150,000$.
- March 7: Cash received: $(102,000 \times \$40 - \$280,000) = \$3,800,000$. Common stock: $102,000 \times \$1 = \$102,000$. Paid-in Capital in Excess of Par: $(\$3,800,000 - \$102,000) = \$3,698,000$.
- May 11: Common shares issued: $(8,000 \times 4) = 32,000$. Preferred equity converted to common equity is $[(8,000/40,000) \times \$2,000,000] = \$400,000$ preferred par value + $[(8,000/40,000) \times \$100,000] = \$20,000$ preferred paid-in capital in excess of par.
- June 5: The value of stock that is actively traded on an exchange is a better measure of value than a dealer's asking price. Therefore, the value of the equipment is recorded as $(16,000 \times \$34) = \$544,000$.

SOLUTIONS

Learning Goal 30, continued

LG 30-11, continued

- July 8: Preferred dividends: $(32,000 \times \$50 \times .09) / 2 = \$72,000$. Common dividends: $(\$600,000 - \$72,000) = \$528,000$.
- Dec. 12: Because this is a small stock dividend (less than 20–25% of outstanding common shares), the market price of the stock is used to value the transaction. 500,000 shares have been issued, of which 487,500 are outstanding and 12,500 are held in treasury (stock split increased all shares including the treasury shares). The stock dividend is based on outstanding shares. Therefore: $(487,500 \times \$40 \times .10) = \$1,950,000$. $(487,500 \times .10) = 48,750$ number of new shares to be issued. This is recorded as Common Stock Distributable of $(48,750 \times \$0.80 \text{ par value per share}) = \$39,000$.
- Dec. 29: The number of treasury stock shares: 10,000 beginning balance, increased to 12,500 from the stock split $(10,000 \times 5/4)$ on August 21. The total cost of the treasury stock is \$220,000. Therefore, the average cost per share is $\$220,000 / 12,500 = \17.60 per share. $(10,000 \text{ shares} \times \$17.60) = \$176,000$ cost of treasury stock sold.

b. *Account Balances as of December 31, 2017:*

Preferred Stock		Paid-in Capital in Excess of Par, Preferred		Common Stock		Paid-in Capital in Excess of Par, Common	
	2,000,000		100,000		250,000		8,750,000
400,000	1,600,000	20,000	80,000		102,000		3,698,000
					32,000		388,000
					16,000		528,000
					400,000		1,911,000
							15,275,000
<hr/>		<hr/>		<hr/>		<hr/>	
Common Stock Distributable		Paid-in Capital from Treasury Stock Trans.		Retained Earnings		Treasury Stock	
	39,000		204,000		15,980,000	220,000	176,000
				600,000	2,970,000	44,000	
				600,000			
				120,000			
				1,950,000			
					15,680,000		

SOLUTIONS**Learning Goal 30, continued****LG 30-11, continued**

Common Shares Outstanding:

Date	Event	Shares	Total Shares
Jan. 1	Beginning balance		240,000
Mar. 7	New shares sold	102,000	342,000
May 11	Shares issued for preferred stock	32,000	374,000
June 5	New shares issued for equipment	16,000	390,000
Aug. 21	5 for 4 stock split	—	487,500
Dec. 29	Treasury shares sold	10,000	497,500

Common Stock Treasury Shares:

Date	Event	Shares	Total Shares
Jan. 1	Beginning balance		10,000
Aug. 21	5 for 4 stock split	—	12,500
Dec. 29	Shares sold	(10,000)	2,500

Preferred Shares:

Date	Event	Shares	Total Shares
Jan. 1	Beginning balance		40,000
May 11	Shares converted to common stock	8,000	32,000

Note: Common shares from the December 12 stock dividend declaration will not be issued until January.

SOLUTIONS

Learning Goal 30, continued

LG 30-11, continued

c.

Minneapolis Corporation		
Statement of Retained Earnings		
For the Year Ended December 31, 2017		
Balance, January 1, 2017 as reported		\$15,980,000
Correction for prior year understated		<u>(120,000)</u>
Balance, January 1, 2017 as corrected		15,860,000
Net income		2,970,000
Less: dividends		
Cash dividend	(\$1,200,000)	
Stock dividend	<u>(1,950,000)</u>	<u>(3,150,000)</u>
Balance, December 31, 2017		<u><u>\$15,680,000</u></u>

d.

Minneapolis Corporation		
Balance Sheet (partial)		
December 31, 2017		
Stockholders' Equity		
Paid-in capital		
Preferred stock, \$50 par, 9%, convertible, 32,000 shares issued and outstanding	\$1,600,000	
Paid-in capital in excess of par	<u>80,000</u>	\$1,680,000
Common stock, 500,000 shares issued, \$.80 par, 497,500 shares outstanding	400,000	
Common stock distributable (48,750 shares)	39,000	
Paid-in capital in excess of par	15,275,000	
Paid-in capital from treasury stock	<u>204,000</u>	15,918,000
Total paid-in capital		17,598,000
Retained Earnings		<u>15,680,000</u>
Total paid-in capital and retained earnings		33,278,000
Less: Treasury stock, common (2,500 shares at cost)		<u>(44,000)</u>
Total stockholders' equity		<u><u>\$33,234,000</u></u>