CHAPTER 15

Stockholders' Equity

ASSIGNMENT CLASSIFICATION TABLE (BY TOPIC)

Topics	Questions	Brief Exercises	Exercises	Problems	Concepts for Analysis
1. Stockholders' rights; corporate form.	1, 2, 3, 4,				1
2. Stockholders' equity.	5, 6, 16, 17, 18	3	7, 10	1, 2, 3	
3. Issuance of shares.	7, 10	1, 2, 6	1, 2, 3, 4, 6, 9	1, 3, 4, 6	
4. Noncash stock transactions; lump sum sales.	8, 9	4, 5	3, 4, 5, 6	1, 4, 6	2
5. Treasury stock transactions, cost method.	11, 12	7, 8	3, 6, 7, 9, 10, 18	1, 3, 5, 6	7
6. Preferred stock.	3, 13, 14, 15	9	8	1, 3	
7. Stockholders' equity accounts; classifications; terminology.			11	9, 11, 12	3
8. Dividend policy.	19, 20, 21, 22, 25, 26	10	12, 15	7, 10	
9. Cash and stock dividends; stock splits; property dividends; liquidating dividends.	22, 23, 24	10, 11, 12, 13, 14	13, 14, 15, 18, 19	8, 10, 11	4, 5, 6
10. Restrictions of retained earnings.	27, 28		16	9, 10	
11. Analysis			17, 19, 20		
*12. Dividend preferences and book value.	29	15	8, 21, 22, 23, 24		

*This material is covered in an Appendix to the chapter.

ASSIGNMENT CLASSIFICATION TABLE (BY LEARNING OBJECTIVE)

Learning Objectives	Brief Exercises	Exercises	Problems
1. Discuss the characteristics of the corporate form of organization.			
2. Identify the key components of stockholders' equity.			
3. Explain the accounting procedures for issuing shares of stock.	1, 2, 4, 5, 6	1, 2, 3, 4, 5, 6, 8, 9, 10	1, 3, 4, 9, 12
4. Describe the accounting for treasury stock.	3, 7, 8	6, 7, 9, 10, 18	1, 2, 3, 5, 6, 7, 9, 12
5. Explain the accounting for and reporting of preferred stock.	9	5	4
6. Describe the policies used in distributing dividends.	10, 11, 12	16	
7. Identify the various forms of dividend distributions.	11, 12	11, 12, 15, 16, 18	3, 6, 7, 8, 9, 11, 12
8. Explain the accounting for small and large stock dividends, and for stock splits.	13, 14	11, 12, 13, 14, 15, 16, 18	3, 8, 10, 11, 12
9. Indicate how to present and analyze stockholders' equity.	3	17, 19, 20	1, 2, 6, 9, 12
*10. Explain the different types of preferred stock dividends and their effect on book value per share.	15	8, 21, 22, 23, 24	

ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E15-1	Recording the issuances of common stock.	Simple	15–20
E15-2	Recording the issuance of common and preferred stock.	Simple	15–20
E15-3	Stock issued for land.	Simple	10–15
E15-4	Lump-sum sale of stock with bonds.	Moderate	20–25
E15-5	Lump-sum sales of stock with preferred stock.	Simple	10–15
E15-6	Stock issuances and repurchase.	Moderate	25–30
E15-7	Effect of treasury stock transactions on financials.	Moderate	15–20
E15-8	Preferred stock entries and dividends.	Moderate	15–20
E15-9	Correcting entries for equity transactions.	Moderate	15–20
E15-10	Analysis of equity data and equity section preparation.	Moderate	20–25
E15-11	Equity items on the balance sheet.	Simple	15–20
E15-12	Cash dividend and liquidating dividend.	Simple	10–15
E15-13	Stock split and stock dividend.	Simple	10–15
E15-14	Entries for stock dividends and stock splits.	Simple	10–12
E15-15	Dividend entries.	Simple	10–15
E15-16	Computation of retained earnings.	Simple	05–10
E15-17	Stockholders' equity section.	Moderate	20–25
E15-18	Dividends and stockholders' equity section.	Moderate	30–35
E15-19	Comparison of alternative forms of financing.	Moderate	20–25
E15-20	Trading on the equity analysis.	Moderate	15–20
*E15-21	Preferred dividends.	Simple	10–15
*E15-22	Preferred dividends.	Moderate	15–20
*E15-23	Preferred stock dividends.	Complex	15–20
*E15-24	Computation of book value per share.	Moderate	10–20
P15-1	Equity transactions and statement preparation.	Moderate	50–60
P15-2	Treasury stock transactions and presentation.	Simple	25–35
P15-3	Equity transactions and statement preparation.	Moderate	25–30
P15-4	Stock transactions—lump sum.	Moderate	20–30
P15-5	Treasury stock—cost method.	Moderate	30–40
P15-6	Treasury stock—cost method—equity section preparation.	Moderate	30–40
P15-7	Cash dividend entries.	Moderate	15–20
P15-8	Dividends and splits.	Moderate	20–25
P15-9	Stockholders' equity section of balance sheet.	Simple	20–25
P15-10	Stock dividends and stock splits.	Moderate	35–45
P15-11	Stock and cash dividends.	Simple	25–35
P15-12	Analysis and classification of equity transactions.	Complex	35–45
CA15-1	Preemptive rights and dilution of ownership.	Moderate	10–20
CA15-2	Issuance of stock for land.	Moderate	15–20
CA15-3	Conceptual issues—equity.	Moderate	25–30
CA15-4	Stock dividends and splits.	Simple	25–30
CA15-5	Stock dividends.	Simple	15–20
CA15-6	Stock dividend, cash dividend, and treasury stock.	Moderate	20–25
CA15-7	Treasury stock, ethics	Moderate	10–15

*This material is presented in an appendix to the chapter.

ANSWERS TO QUESTIONS

1. The basic rights of each stockholder (unless otherwise restricted) are to share proportionately: (1) in profits, (2) in management (the right to vote for directors), (3) in corporate assets upon liquidation, and (4) in any new issues of stock of the same class (preemptive right).

2. The preemptive right protects existing share holders from dilution of the ownership share in the event the corporation issues new shares.

3. Preferred stock commonly has preference to dividends in the form of a fixed dividend rate and a preference over common stock to remaining corporate assets in the event of liquidation. Preferred stock usually does not give the holder the right to share in the management of the company. Common stock is the residual security possessing the greater risk of loss and the greater potential for gain; it is guaranteed neither dividends nor assets upon dissolution but it generally controls the management.

4. The distinction between paid-in capital and retained earnings is important for both legal and economic points of view. Legally, dividends can be declared out of retained earnings in all states, but in many states dividends cannot be declared out of paid-in capital. Economically, management, stockholders, and others look to earnings for the continued existence and growth of the corporation.

5. Authorized capital stock—the total number of shares authorized by the state of incorporation for issuance.
   Unissued capital stock—the total number of shares authorized but not issued.
   Issued capital stock—the total number of shares issued (distributed to stockholders).
   Outstanding capital stock—the total number of shares issued and still in the hands of stockholders (issued less treasury stock).
   Treasury stock—shares of stock issued and repurchased by the issuing corporation but not retired.

6. Par value is an arbitrary, fixed per share amount assigned to a stock by the incorporators. It is recognized by the state of incorporation as the amount that must be paid in for each share if the stock is to be fully paid when issued. If not fully paid, a contingent liability for the discount results.

7. The issuance for cash of no-par value common stock at a price in excess of the stated value of the common stock is accounted for as follows:
   1. Cash is debited for the proceeds from the issuance of the common stock.
   2. Common Stock is credited for the stated value of the common stock.
   3. Additional Paid-in Capital is credited for the excess of the proceeds from the issuance of the common stock over its stated value.

8. The proportional method is used to allocate the lump sum received on sales of two or more classes of securities when the fair market value or other sound basis for determining relative value is available for each class of security. In instances where the fair market value of all classes of securities is not determinable in a lump sum sale, the incremental method must be used. The value of the securities is used for those classes that are known and the remainder is allocated to the class for which the value is not known.

9. The general rule to be applied when stock is issued for services or property other than cash is that the property or services be recorded at either their fair market value or the fair market value of the stock issued, whichever is more clearly determinable. If neither is readily determinable, the value to be assigned is generally established by the board of directors.

10. The direct costs of issuing stock, such as underwriting costs, accounting and legal fees, printing costs, and taxes, should be reported as a reduction of the amounts paid in. Issue costs are therefore debited to Additional Paid-in Capital because they are unrelated to corporate operations.

11. The major reasons for purchasing its own shares are: (1) to provide tax-efficient distributions of excess cash to shareholders, (2) to increase earnings per share and return on equity, (3) to provide stock for employee stock compensation contracts, (4) to thwart takeover attempts or reduce the number of stockholders, (5) to make a market in the company's stock, and (6) to contract the operations of the business.

12. (a) Treasury stock should not be classified as an asset since a corporation cannot own itself.
    (b) The "gain" or "loss" on sale of treasury stock should not be treated as additions to or deductions from income. If treasury stock is carried in the accounts at cost, these so-called gains or losses arise when the treasury stock is sold. These "gains" or "losses" should be considered as additions to or reductions of paid-in capital. In some instances, the "loss" should be charged to Retained Earnings. "Gains" or "losses" arising from treasury stock transactions are not included as a component of net income since dealings in treasury stock represent capital transactions.
    (c) Dividends on treasury stock should never be included as income, but should be credited directly to retained earnings, against which they were incorrectly charged. Since treasury stock cannot be considered an asset, dividends on treasury stock are not properly included in net income.

13. The character of preferred stock can be altered by being cumulative or noncumulative, participating or nonparticipating, convertible or nonconvertible, and/or callable or noncallable.

14. Nonparticipating means the security holder is entitled to no more than the specified fixed dividend. If the security is partially participating, it means that in addition to the specified fixed dividend the security may participate with the common stock in dividends up to a certain stated rate or amount. A fully participating security shares pro rata with the common stock dividends declared without limitation. In this case, Little Texas Inc. has a fully participating preferred stock. Cumulative means dividends not paid in any year must be made up in a later year before any profits can be distributed to common stockholders. Any dividends not paid on cumulative preferred stock constitute a dividend in arrears. A dividend in arrears is not a liability until the board of directors declares a dividend.

15. Preferred stock is generally reported at par value as the first item in the stockholders' equity section of a company's balance sheet. Any excess over par value is reported as part of additional paid-in capital.

16. Additional paid-in capital results from: (1) premiums on stock issued, (2) sale of treasury stock above cost, (3) recapitalizations or revisions in the capital structure, (4) assessments on stockholders, (5) conversion of convertible bonds or preferred stock, and (6) declaration of a small stock dividend.

17. When treasury stock is purchased, the Treasury Stock account is debited and Cash is credited at **cost** ($290,000 in this case). Treasury Stock is a contra stockholders' equity account and Cash is an asset. Thus, this transaction has: (a) no effect on net income, (b) decreases total assets, (c) has no effect on total paid-in capital, and (d) decreases total stockholders' equity.

18. The answers are summarized in the table below:

	Account	Classification
(a)	Common Stock	Paid-in capital—capital stock
(b)	Retained Earnings	Retained earnings
(c)	Paid-in Capital in Excess of Par Value	Paid-in capital—additional paid-in capital
(d)	Treasury Stock	Deducted from total paid-in capital and retained earnings
(e)	Paid-in Capital from Treasury Stock	Paid-in capital—additional paid-in capital
(f)	Paid-in Capital in Excess of Stated Value	Paid-in capital—additional paid-in capital
(g)	Preferred Stock	Paid-in capital—capital stock

19. The dividend policy of a company is influenced by (1) the availability of cash, (2) the stability of earnings, (3) current earnings, (4) prospective earnings, (5) the existence or absence of contractual restrictions on working capital or retained earnings, and (6) a retained earnings balance.

20. In declaring a dividend, the board of directors must consider the condition of the corporation such that a dividend is (1) legally permissible and (2) economically sound.

In general, directors should give consideration to the following factors in determining the legality of a dividend declaration:

1. Retained earnings, unless legally encumbered in some manner, is usually the correct basis for dividend distribution.
2. Revaluation capital is seldom the correct basis for dividends (except possibly stock dividends).
3. In some states, additional paid-in capital may be used for dividends, although such dividends may be limited to preferred stock.
4. Deficits in retained earnings and debits in paid-in capital accounts must be restored before payment of any dividends.
5. Dividends in some states may not reduce retained earnings below the cost of treasury stock held.

In order that dividends be economically sound, the board of directors should consider: (1) the availability (liquidity) of assets for distribution; (2) agreements with creditors; (3) the effect of a dividend on investor perceptions (e.g. maintaining an expected “pay-out ratio”); and (4) the size of the dividend with respect to the possibility of paying dividends in future bad years. In addition, the ability to expand or replace existing facilities should be considered.

21. Dividends, at least cash dividends, use cash. A balance must exist in retained earnings to permit a legal distribution of profits, but having a balance in retained earnings does not ensure the ability to pay a dividend if the cash situation does not permit it.

22. A **cash dividend** is a distribution in cash while a **property dividend** is a distribution in assets other than cash. Any dividend not based on retained earnings is a **liquidating dividend**. A **stock dividend** is the issuance of additional shares of the corporation’s stock in nonreciprocal exchange involving existing stockholders with no change in the par or stated value.

23. A stock dividend results in the transfer from retained earnings to paid-in capital of an amount equal to the market value of each share (if the dividend is less than 20–25%) or the par value of each share (if the dividend is greater than 20–25%). No formal journal entries are required for a stock split, but a notation in the ledger accounts would be appropriate to show that the par value of the shares has changed.

24. (a) A stock split effected in the form of a dividend is a distribution of corporate stock to present stockholders in proportion to each stockholder's current holdings and can be expected to cause a material decrease in the market value per share of the stock. **Accounting Research Bulletin No. 43** specifies that a distribution in excess of 20% to 25% of the number of shares previously outstanding would cause a material decrease in the market value. This is a characteristic of a stock split as opposed to a stock dividend, but, for legal reasons, the term "dividend" must be used for this distribution. From an accounting viewpoint, it should be disclosed as a stock split effected in the form of a dividend because it meets the accounting definition of a stock split as explained above.

    (b) The stock split effected in the form of a dividend differs from an ordinary stock dividend in the amount of other paid-in capital or retained earnings to be capitalized. An ordinary stock dividend involves capitalizing (charging) retained earnings equal to the market value of the stock distributed. A stock split effected in the form of a dividend involves charging retained earnings for the par (stated) value of the additional shares issued.

    Another distinction between a stock dividend and a stock split is that a stock dividend usually involves distributing additional shares of the same class of stock with the same par or stated value. A stock split usually involves distributing additional shares of the same class of stock but with a proportionate reduction in par or stated value. The aggregate par or stated value would then be the same before and after the stock split.

    (c) A declared but unissued stock dividend should be classified as part of paid-in capital rather than as a liability in a statement of financial position. A stock dividend affects only capital accounts; that is, retained earnings is decreased and contributed capital is increased. Thus, there is no debt to be paid, and, consequently, there is no severance of corporate assets when a stock dividend is issued. Furthermore, stock dividends declared can be revoked by a corporation's board of directors any time prior to issuance. Finally, the corporation usually will formally announce its intent to issue a specific number of additional shares, and these shares must be reserved for this purpose.

25. A partially liquidating dividend will be debited both to Retained Earnings and Additional Paid-in Capital. The portion of dividends that is a return of capital should be debited to Additional Paid-in Capital.

26. A property dividend is a nonreciprocal transfer of nonmonetary assets between an enterprise and its owners. A transfer of a nonmonetary asset to a stockholder or to another entity in a nonreciprocal transfer should be recorded at the fair value of the asset transferred, and a gain or loss should be recognized on the disposition of the asset.

27. Retained earnings are restricted because of legal or contractual restrictions, or the necessity to protect the working capital position.

28. Restrictions are best disclosed in a note to the financial statements. This allows a more complete explanation of the restriction.

*29.

		Preferred	Common	Total
(a)	Current year's dividend, 10%	$10,000	$30,000[a]	$40,000
	Participating dividend of 12%	12,000	36,000	48,000
	Totals	$22,000	$66,000	$88,000

[a](see schedule below for computation of amounts)

The participating dividend was determined as follows:

Current year's dividend:	
Preferred, 10% of $100,000 = $10,000	
Common, 10% of 300,000 = 30,000	$40,000
Amount available for participation ($88,000 – $40,000)	$48,000
Par value of stock that is to participate ($100,000 + $300,000)	$400,000
Rate of participation ($48,000 ÷ $400,000)	12%
Participating dividend:	
Preferred, 12% of $100,000	$12,000
Common, 12% of $300,000	36,000
Dividends	$48,000

(b)

	Preferred	Common	Total
Dividends in arrears, 10% of $100,000	$10,000		$10,000
Current year's dividend, 10%	10,000	$30,000	40,000
Participating dividend 9.5% ($38,000 ÷ $400,000)*	9,500	28,500	38,000
Totals	$29,500	$58,500	$88,000

*(The same type of schedule as shown in (a) could be used here)

(c)

	Preferred	Common	Total
Dividends in arrears ($100,000 X 10%) – $5,000	$5,000	–0–	$5,000
Current year's dividend, 10%	10,000		10,000
Remainder to common		$15,000	15,000
Totals	$15,000	$15,000	$30,000

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 15-1

Cash	4,100	
Common Stock (300 X $10)		3,000
Paid-in Capital in Excess of Par		1,100

BRIEF EXERCISE 15-2

(a) Cash	10,200	
Common Stock—No-Par Value		10,200
(b) Cash	10,200	
Common Stock (600 X $2)		1,200
Paid-in Capital in Excess of Stated Value		9,000

BRIEF EXERCISE 15-3

LUFIA CORPORATION
Stockholders' Equity
December 31, 2007

Common stock, $5 par value	$ 210,000
Paid-in capital in excess of par	1,320,000
Retained earnings	2,340,000
	3,870,000
Less: Treasury stock	(90,000)
Total stockholders' equity	$3,780,000

BRIEF EXERCISE 15-4

Cash	14,200	
Preferred Stock (100 X $50)		5,000
Paid-in Capital in Excess of Par—Preferred		3,520
Common Stock (300 X $10)		3,000
Paid-in Capital in Excess of Par—Common		2,680

FMV of common (300 X $20)	$ 6,000
FMV of preferred (100 X $90)	9,000
Total FMV	$15,000

BRIEF EXERCISE 15-4 (Continued)

Allocated to common $\frac{\$6{,}000}{\$15{,}000}$ X \$14,200 = \$ 5,680

Allocated to preferred $\frac{\$9{,}000}{\$15{,}000}$ X \$14,200 = $\underline{\quad 8{,}520}$

$\underline{\underline{\$14{,}200}}$

BRIEF EXERCISE 15-5

Land	31,000	
Common Stock (2,000 X \$5)		10,000
Paid-in Capital in Excess of Par		21,000

BRIEF EXERCISE 15-6

Cash (\$70,000 – \$1,500)	68,500	
Common Stock (2,000 X \$10)		20,000
Paid-in Capital in Excess of Par		48,500

BRIEF EXERCISE 15-7

7/1/07	Treasury Stock (100 X \$85)	8,500	
	Cash		8,500
9/1/07	Cash (60 X \$90)	5,400	
	Treasury Stock (60 X \$85)		5,100
	Paid-in Capital from Treasury Stock		300
11/1/07	Cash (40 X \$83)	3,320	
	Paid-in Capital from Treasury Stock	80	
	Treasury Stock (40 X \$85)		3,400

BRIEF EXERCISE 15-8

8/1/07	Treasury Stock (200 X $75)	15,000	
	Cash		15,000
11/1/07	Cash (200 X $70)	14,000	
	Retained Earnings	1,000	
	Treasury Stock		15,000

BRIEF EXERCISE 15-9

Cash	61,500	
Preferred Stock (450 X $100)		45,000
Paid-in Capital in Excess of Par—Preferred		16,500

BRIEF EXERCISE 15-10

Aug. 1	Retained Earnings (2,000,000 X $1.50)	3,000,000	
	Dividends Payable		3,000,000
Aug. 15	No entry.		
Sep. 9	Dividends Payable	3,000,000	
	Cash		3,000,000

BRIEF EXERCISE 15-11

Sep. 21	Available-for-Sale Securities	525,000	
	Gain on Appreciation of Securities ($1,400,000 – $875,000)		525,000
	Retained Earnings	1,400,000	
	Property Dividends Payable		1,400,000
Oct. 8	No entry.		
Oct. 23	Property Dividends Payable	1,400,000	
	Available-for-Sale Securities		1,400,000

BRIEF EXERCISE 15-12

Apr. 20	Retained Earnings ($700,000 – $125,000)	575,000	
	Paid-in Capital in Excess of Par	125,000	
	Dividends Payable		700,000
June 1	Dividends Payable	700,000	
	Cash		700,000

BRIEF EXERCISE 15-13

Declaration Date.

Retained Earnings	650,000	
Common Stock Dividend Distributable		100,000
Paid-in Capital in Excess of Par		550,000
(10,000 X $65 = $650,000; 10,000 X $10 = $100,000)		

Distribution Date.

Common Stock Dividend Distributable	100,000	
Common Stock		100,000

BRIEF EXERCISE 15-14

Declaration Date.

Retained Earnings	2,000,000	
Common Stock Dividend Distributable		2,000,000
(200,000 X $10)		

Distribution Date.

Common Stock Dividend Distributable	2,000,000	
Common Stock		2,000,000

***BRIEF EXERCISE 15-15**

(a) Preferred stockholders would receive $80,000 (8% X $1,000,000) and the remainder of $220,000 ($300,000 – $80,000) would be distributed to common stockholders.

(b) Preferred stockholders would receive $240,000 (8% X $1,000,000 X 3) and the remainder of $60,000 would be distributed to the common stockholders.

SOLUTIONS TO EXERCISES

EXERCISE 15-1 (15–20 minutes)

(a)	Jan.	10	Cash (80,000 X $6)	480,000	
			Common Stock (80,000 X $5)		400,000
			Paid-in Capital in Excess of Par		80,000
	Mar.	1	Organization Expense	35,000	
			Common Stock (5,000 X $5)		25,000
			Paid-in Capital in Excess of Par		10,000
	July	1	Cash (30,000 X $8)	240,000	
			Common Stock (30,000 X $5)		150,000
			Paid-in Capital in Excess of Par (30,000 X $3)		90,000
	Sept.	1	Cash (60,000 X $10)	600,000	
			Common Stock (60,000 X $5)		300,000
			Paid-in Capital in Excess of Par (60,000 X $5)		300,000
(b)	Jan.	10	Cash (80,000 X $6)	480,000	
			Common Stock (80,000 X $3)		240,000
			Paid-in Capital in Excess of Stated Value (80,000 X $3)		240,000
	Mar.	1	Organization Expense	35,000	
			Common Stock (5,000 X $3)		15,000
			Paid-in Capital in Excess of Stated Value ($35,000 – $15,000 or 5,000 X $4)		20,000
	July	1	Cash (30,000 X $8)	240,000	
			Common Stock (30,000 X $3)		90,000
			Paid-in Capital in Excess of Stated Value (30,000 X $5)		150,000

EXERCISE 15-1 (Continued)

Sept. 1	Cash (60,000 X $10)	600,000	
	Common Stock (60,000 X $3)		180,000
	Paid-in Capital in Excess of Stated Value (60,000 X $7)		420,000

EXERCISE 15-2 (15–20 minutes)

Jan. 10	Cash (80,000 X $5)	400,000	
	Common Stock (80,000 X $1)		80,000
	Paid-in Capital in Excess of Stated Value—Common Stock (80,000 X $4)		320,000
Mar. 1	Cash (5,000 X $108)	540,000	
	Preferred Stock (5,000 X $100)		500,000
	Paid-in Capital in Excess of Par Value—Preferred Stock (5,000 X $8)		40,000
April 1	Land	80,000	
	Common Stock (24,000 X $1)		24,000
	Paid-in Capital in Excess of Stated Value—Common Stock ($80,000 – $24,000)		56,000
May 1	Cash (80,000 X $7)	560,000	
	Common Stock (80,000 X $1)		80,000
	Paid-in Capital in Excess of Stated Value—Common Stock (80,000 X $6)		480,000
Aug. 1	Organization Expense	50,000	
	Common Stock (10,000 X $1)		10,000
	Paid-in Capital in Excess of Stated Value—Common Stock ($50,000 – $10,000)		40,000

EXERCISE 15-2 (Continued)

Sept.	1	Cash (10,000 X $9)	90,000	
		Common Stock (10,000 X $1)		10,000
		Paid-in Capital in Excess of Stated Value—Common Stock (10,000 X $8)		80,000
Nov.	1	Cash (1,000 X $112)	112,000	
		Preferred Stock (1,000 X $100)		100,000
		Paid-in Capital in Excess of Par Value—Preferred Stock (1,000 X $12)		12,000

EXERCISE 15-3 (10–15 minutes)

(a)

Land ($62 X 25,000)	1,550,000	
Treasury Stock ($53 X 25,000)		1,325,000
Paid-in Capital from Treasury Stock		225,000

(b) One might use the cost of treasury stock. However, this is not a relevant measure of this economic event. Rather, it is a measure of a prior, unrelated event. The appraised value of the land is a reasonable alternative (if based on appropriate fair value estimation techniques). However, it is an appraisal as opposed to a market-determined price. The trading price of the stock is probably the best measure of fair value in this transaction.

EXERCISE 15-4 (20–25 minutes)

(a) 1.

Unamortized Bond Issue Costs ($352,000 X $500/$880)	200,000	
Cash ($880 X 9,600)	8,448,000	
Bonds Payable		5,000,000
Common Stock (100,000 X $5)		500,000
Paid-in Capital in Excess of Par		3,148,000

Assumes bonds properly priced and issued at par; residual attributed to common stock has a questionable measure of fair value.

EXERCISE 15-4 (Continued)

Incremental method

Lump sum receipt (9,600 X $880)	$8,448,000
Allocated to subordinated debenture (9,600 X $500)	4,800,000
Balance allocated to common stock	$3,648,000

Computation of common stock and paid-in capital

Balance allocated to common stock	$3,648,000
Less: Common stock (10,000 X $5 X 10)	500,000
Paid-in capital in excess of par.	$3,148,000
Lump sum receipt (10,000 X $880)	$8,800,000
Allocated to debenture (10,000 X $500)	5,000,000
Balance allocated to common stock	$3,800,000

Bond issue cost allocation

Total issue cost (400 X $880)	$352,000
Less: Amount allocated to bonds	200,000
Amount allocated to common	$152,000

Investment banking costs 400 @ $880 = $352,000 allocate 5/8.8 to debentures and 3.8/8.8 to common stock. Bond portion is bond issue costs; common stock portion is a reduction of paid-in capital, which means that total paid-in capital is $3,648,000 ($3,800,000 – $152,000).

2.

Cash	8,448,000	
Unamortized Bond Issue Costs	195,556	
Bond Discount ($5,000,000 – $4,888,889)	111,111	
Bonds Payable		5,000,000
Common Stock (100,000 X $5)		500,000
Paid-in Capital in Excess of Par		3,254,667

The allocation based on fair value for one unit is

Subordinated debenture	$500
Common stock (10 shares X $40)	400
Total fair value	$900

Therefore 5/9 is allocated to the bonds and 4/9 to the common stock.

EXERCISE 15-4 (Continued)

$8,800,000 X (5/9) = $4,888,889 To Debentures
$8,800,000 X (4/9) = $3,911,111 To Common
$352,000 X (5/9) = $195,556
$352,000 X (4/9) = $156,444
Paid-in capital in excess of par = $3,911,111 – $500,000 – $156,444
= $3,254,667

(b) One is not better than the other, but would depend on the relative reliability of the valuations for the stocks and bonds. This question is presented to stimulate some thought and class discussion.

EXERCISE 15-5 (10–15 minutes)

(a)	**FMV of Common (500 X $165)**	**$ 82,500**
	FMV of Preferred (100 X $230)	**23,000**
		$105,500
	Allocated to Common: $82,500/$105,500 X $100,000	**$ 78,199**
	Allocated to Preferred: $23,000/$105,500 X $100,000	**21,801**
	Total allocation (rounded to nearest dollar)	**$100,000**

Cash	**100,000**	
Common Stock (500 X $10)		**5,000**
Paid-in Capital in Excess of Par— Common ($78,199 – $5,000)		**73,199**
Preferred Stock (100 X $100)		**10,000**
Paid-in Capital in Excess of Par— Preferred ($21,801 – $10,000)		**11,801**

(b)	**Lump-sum receipt**	**$100,000**
	Allocated to common (500 X $170)	**85,000**
	Balance allocated to preferred	**$ 15,000**

Cash	**100,000**	
Common Stock		**5,000**
Paid-in Capital in Excess of Par— Common ($85,000 – $5,000)		**80,000**
Preferred Stock		**10,000**
Paid-in Capital in Excess of Par— Preferred ($15,000 – $10,000)		**5,000**

EXERCISE 15-6 (25–30 minutes)

(a)	Cash [(5,000 X $45) – $7,000]	218,000	
	Common Stock (5,000 X $5)		25,000
	Paid-in Capital in Excess of Par		193,000
(b)	Land (1,000 X $46)	46,000	
	Common Stock (1,000 X $5)		5,000
	Paid-in Capital in Excess of Par ($46,000 – $5,000)		41,000

Note: The market value of the stock ($46,000) is used to value the exchange because it is a more objective measure than the appraised value of the land ($50,000).

(c)	Treasury Stock (500 X $43)	21,500	
	Cash		21,500

EXERCISE 15-7 (15–20 minutes)

#	Assets	Liabilities	Stockholders' Equity	Paid-in Capital	Retained Earnings	Net Income
1	D	NE	D	NE	NE	NE
2	I	NE	I	I	NE	NE
3	I	NE	I	D	NE	NE

EXERCISE 15-8 (15–20 minutes)

(a) $1,000,000 X 8% = $80,000; $80,000 X 3 = $240,000. The cumulative dividend is disclosed in a note to the stockholders' equity section; it is not reported as a liability.

(b)	Preferred Stock (4,000 X $100)	400,000	
	Common Stock (4,000 X 7 X $10)		280,000
	Paid-in Capital in Excess of Par Value—Common		120,000

(c) Paid-in capital

Preferred stock, $100 par 8%, 10,000 shares issued	$1,000,000
Paid-in capital in excess of par (10,000 X $7)	70,000

EXERCISE 15-9 (15–20 minutes)

May 2	Cash	192,000	
	Common Stock (12,000 X $5)		60,000
	Paid-in Capital in Excess of Par—Common Stock (12,000 X $11)		132,000
10	Cash	600,000	
	Preferred Stock (10,000 X $30)		300,000
	Paid-in Capital in Excess of Par—Preferred Stock (10,000 X $30)		300,000
15	Treasury Stock	15,000	
	Cash		15,000
31	Cash	8,500	
	Treasury Stock (500 X $15)		7,500
	Paid-in Capital from Treasury Stock (500 X $2)		1,000

EXERCISE 15-10 (20–25 minutes)

(a) (1) The par value is $2.50. This amount is obtained from either of the following: 2007—$545 ÷ 218 or 2006—$540 ÷ 216.

(2) The cost of treasury shares was higher in 2007. The cost at December 31, 2007 was $46 per share ($1,564 ÷ 34) compared to the cost at December 31, 2006 of $34 per share ($918 ÷ 27).

(b) Stockholders' equity (in millions of dollars)

Paid-in capital	
Common stock, $2.50 par value, 500,000,000 shares authorized, 218,000,000 shares issued, and 184,000,000 shares outstanding	$ 545
Additional paid-in capital	931
Total paid-in capital	1,476
Retained earnings	7,167
Total paid-in capital and retained earnings	8,643
Less: Cost of treasury stock (34,000,000 shares)	(1,564)
Total stockholders' equity	$7,079

EXERCISE 15-11 (15–20 minutes)

Item	Assets	Liabilities	Stockholders' Equity	Paid-in Capital	Retained Earnings	Net Income
1.	I	NE	I	NE	I	I
2.	NE	I	D	NE	D	NE
3.	NE	NE	NE	NE	NE	NE
4.	NE	NE	NE	NE	NE	NE
5.	D	NE	D	NE	D	D
6.	D	D	NE	NE	NE	NE
7.	NE	I	D	NE	D	D
8.	NE	NE	NE	I	D	NE
9.	NE	NE	NE	NE	NE	NE

EXERCISE 15-12 (10–15 minutes)

(a)	6/1	Retained Earnings	8,000,000	
		Dividends Payable		8,000,000
	6/14	No entry on date of record.		
	6/30	Dividends Payable	8,000,000	
		Cash		8,000,000

(b) If this were a liquidating dividend, the debit entry on the date of declaration would be to Additional Paid-in Capital rather than Retained Earnings.

EXERCISE 15-13 (10–15 minutes)

(a) No entry—simply a memorandum note indicating the number of shares has increased to 18 million and par value has been reduced from $10 to $5 per share.

(b)	**Retained Earnings ($10 X 9,000,000)**	**90,000,000**	
	Common Stock Dividend Distributable		**90,000,000**
	Common Stock Dividend Distributable	**90,000,000**	
	Common Stock		**90,000,000**

(c) Stock dividends and splits serve the same function with regard to the securities markets. Both techniques allow the board of directors to increase the quantity of shares and reduce share prices into a desired "trading range."

For accounting purposes the 20%–25% rule reasonably views large stock dividends as substantive stock splits. In this case, it is necessary to capitalize par value with a stock dividend because the number of shares is increased and the par value remains the same. Earnings are capitalized for purely procedural reasons.

EXERCISE 15-14 (10–12 minutes)

(a)	**Retained Earnings (15,000 X $37)**	**555,000**	
	Common Stock Dividend Distributable		**150,000**
	Paid-in Capital in Excess of Par		**405,000**
	Common Stock Dividend Distributable	**150,000**	
	Common Stock		**150,000**
(b)	**Retained Earnings (300,000 X $10)**	**3,000,000**	
	Common Stock Dividend Distributable		**3,000,000**
	Common Stock Dividend Distributable	**3,000,000**	
	Common Stock		**3,000,000**

(c) No entry, the par value becomes $5.00 and the number of shares outstanding increases to 600,000.

EXERCISE 15-15 (10–15 minutes)

(a)

Retained Earnings	97,500	
Common Stock Dividend Distributable		25,000
Paid-in Capital in Excess of Par		72,500
(50,000 shares X 5% X $39 = $97,500)		
Common Stock Dividend Distributable	25,000	
Common Stock		25,000

(b) No entry, memorandum note to indicate that par value is reduced to $2 and shares outstanding are now 250,000 (50,000 X 5).

(c)

January 5, 2007		
Investments (Bonds)	35,000	
Gain on Appreciation of Investments (Bonds)		35,000
Retained Earnings	135,000	
Property Dividends Payable		135,000
January 25, 2007		
Property Dividends Payable	135,000	
Investments (Bonds)		135,000

EXERCISE 15-16 (5–10 minutes)

Total income since incorporation		$317,000
Less: Total cash dividends paid	$60,000	
Total value of stock dividends	30,000	90,000
Current balance of retained earnings		$227,000

The unamortized discount on bonds payable is shown as a contra liability; the gain on treasury stock is recorded as additional paid-in capital.

EXERCISE 15-17 (20–25 minutes)

Bruno Corporation
Stockholders' Equity
December 31, 2007

Capital stock	
Preferred stock, $4 cumulative, par value $50 per share; authorized 60,000 shares, issued and outstanding 10,000 shares	$ 500,000
Common stock, par value $1 per share; authorized 600,000 shares, issued 200,000 shares, and outstanding 190,000 shares	200,000
Total capital stock	700,000
Additional paid-in capital—	
In excess of par value	1,300,000
From sale of treasury stock	160,000
Total paid-in capital	2,160,000
Retained earnings	301,000
Total paid-in capital and retained earnings	2,461,000
Less: Treasury stock, 10,000 shares at cost	170,000
Total stockholders' equity	$2,291,000

EXERCISE 15-18 (30–35 minutes)

(a)	1.	Dividends Payable—Preferred (2,000 X $10)	20,000	
		Dividends Payable—Common (20,000 X $2)	40,000	
		Cash		60,000
	2.	Treasury Stock	68,000	
		Cash (1,700 X $40)		68,000
	3.	Land	30,000	
		Treasury Stock (700 X $40)		28,000
		Paid-in Capital From Treasury Stock		2,000

4.	Cash (500 X $105)	52,500	
	Preferred Stock (500 X $100)		50,000
	Paid-in Capital in Excess of Par—Preferred		2,500
5.	Retained Earnings (1,900* X $45)	85,500	
	Common Stock Dividend Distributable (1,900 X $5)		9,500
	Paid-in Capital in Excess of Par—Common		76,000
	*(20,000 – 1,700 + 700 = 19,000; 19,000 X 10%)		
6.	Common Stock Dividend Distributable	9,500	
	Common Stock		9,500
7.	Retained Earnings	66,800	
	Dividends Payable—Preferred (2,500 X $10)		25,000
	Dividends Payable—Common (20,900* X $2)		41,800
	*(19,000 + 1,900)		

(b)

Anne Cleves Company
Stockholders' Equity
December 31, 2007

Capital stock	
Preferred stock, 10%, $100 par, 10,000 shares authorized, 2,500 shares issued and outstanding	$250,000
Common stock, $5 par, 100,000 shares authorized, 21,900 shares issued, 20,900 shares outstanding	109,500
Total capital stock	359,500
Additional paid-in capital	205,500
Total paid-in capital	565,000
Retained earnings	627,700

EXERCISE 15-18 (Continued)

Total paid-in capital and retained earnings	**1,192,700**
Less: Cost of treasury stock (1,000 shares common)	**40,000**
Total stockholders' equity	**$1,152,700**

Computations:

Preferred stock $200,000 + $50,000 = $250,000

Common stock $100,000 + $ 9,500 = $109,500

Additional paid-in capital: $125,000 + $2,000 + $2,500 + $76,000 = $205,500

Retained earnings: $450,000 – $85,500 – $66,800 + $330,000 = $627,700

Treasury stock $68,000 – $28,000 = $40,000

EXERCISE 15-19 (20–25 minutes)

(a) Mary Ann Benson Company is the more profitable in terms of rate of return on total assets. This may be shown as follows:

Benson Company $\frac{\$660{,}000}{\$4{,}200{,}000} = 15.71\%$

Kingston Company $\frac{\$594{,}000}{\$4{,}200{,}000} = 14.14\%$

It should be noted that these returns are based on net income related to total assets, where the ending amount of total assets is considered representative. If the rate of return on total assets uses net income before interest but after taxes in the numerator, the rates of return on total assets are the same as shown below:

Benson Company $\frac{\$660{,}000}{\$4{,}200{,}000} = 15.71\%$

Kingston Company $\frac{\$594{,}000 + \$120{,}000 - \$54{,}000}{\$4{,}200{,}000} = \frac{\$660{,}000}{\$4{,}200{,}000}$

$= 15.71\%$

EXERCISE 15-19 (Continued)

(b) Kingston Company is the more profitable in terms of return on stockholder' equity. This may be shown as follows:

Kingston Company $\frac{\$594{,}000}{\$2{,}700{,}000} = 22\%$

Benson Company $\frac{\$660{,}000}{\$3{,}600{,}000} = 18.33\%$

(Note to instructor: To explain why the difference in rate of return on assets and rate of return on stockholders' equity occurs, the following schedule might be provided to the student.)

Kingston Company

Funds Supplied	Funds Supplied	Rate of Return on Funds at 15.71%*	Cost of Funds	Accruing to Common Stock
Current liabilities	$ 300,000	$ 47,130	$ 0	$ 47,130
Long-term debt	1,200,000	188,520	66,000**	122,520
Common stock	2,000,000	314,200	0	314,200
Retained earnings	700,000	109,970	0	109,970
	$4,200,000	$659,820	$66,000	$593,820

*Determined in part (a), 15.71%

**The cost of funds is the interest of $120,000 ($1,200,000 X 10%). This interest cost must be reduced by the tax savings (45%) related to the interest.

The schedule indicates that the income earned on the total assets (before interest cost) was $659,820. The interest cost (net of tax) of this income was $66,000, which indicates a net return to the common equity of $593,820.

(c) The Kingston Company earned a net income per share of $5.94 ($594,000 ÷ 100,000) while Benson Company had an income per share of $4.55 ($660,000 ÷ 145,000). Kingston Company has borrowed a substantial portion of its assets at a cost of 10% and has used these assets to earn a return in excess of 10%. The excess earned on the borrowed assets represents additional income for the stockholders and has resulted in the higher income per share. Due to the debt financing, Kingston has fewer shares of stock outstanding.

EXERCISE 15-19 (Continued)

(d) Yes, from the point of view of income it is advantageous for the stockholders of the Kingston Company to have long-term debt outstanding. The assets obtained from incurrence of this debt are earning a higher return than their cost to the Kingston Company.

(e) Book value per share.

Kingston Company $\dfrac{\$2{,}000{,}000 + \$700{,}000}{100{,}000} = \$27.00$

Benson Company $\dfrac{\$2{,}900{,}000 + \$700{,}000}{145{,}000} = \$24.83$

EXERCISE 15-20 (15 minutes)

(a) Rate of return on common stock equity:

$$\frac{\$213{,}718}{\$875{,}000 + \$375{,}000} = \frac{\$213{,}718}{\$1{,}250{,}000} = 17.1\%$$

Rate of interest paid on bonds payable: $\dfrac{\$135{,}000}{\$1{,}000{,}000} = 13.5\%$

(b) Emporia Plastics, Inc. is trading on the equity successfully, since its return on common stock equity is greater than interest paid on bonds.

<u>Note:</u> Some analysts use after-tax interest expense to compute the bond rate.

*EXERCISE 15-21 (10–15 minutes)

	Preferred	Common	Total
(a) Preferred stock is noncumulative, nonparticipating (2,000 X $100 X 8%)	$16,000		
Remainder ($90,000 – $16,000)		$74,000	$90,000
(b) Preferred stock is cumulative, nonparticipating ($16,000 X 3)	$48,000		
Remainder ($90,000 – $42,000)		$42,000	$90,000

EXERCISE 15-21 (Continued)

	Preferred	Common	Total
(c) Preferred stock is cumulative, participating	$57,778	$32,222	$90,000

The computation for these amounts is as follows:

	Preferred	Common	Total
Dividends in arrears (2 X $16,000)	$32,000		$32,000
Current dividend	16,000		16,000
Pro-rata share to common (5,000 X $50 X 8%)		$20,000	20,000
Balance dividend pro-rata	9,778	12,222	22,000*
	$57,778	$32,222	$90,000

*Additional amount available for participation ($90,000 – $32,000 – $16,000 – $20,000)		22,000
Par value of stock that is to participate		
Preferred (2,000 X $100)	$200,000	
Common (5,000 X $50)	250,000	450,000
Rate of participation		
$22,000 ÷ $450,000		4.8889%
Participating dividend		
Preferred, 4.8889% X $200,000		$ 9,778
Common, 4.8889% X $250,000		12,222
		$22,000

Note to instructor: Another way to compute the participating amount is as follows:

Preferred $\dfrac{\$200,000}{\$450,000}$ X $22,000 $ 9,778

Common $\dfrac{\$250,000}{\$450,000}$ X $22,000 12,222

$22,000

***EXERCISE 15-22 (10–15 minutes)**

	Preferred	Common	Total
(a) Preferred stock is cumulative, fully participating	$36,000	$330,000	$366,000

The computation for these amounts is as follows:

	Preferred	Common	Total
Dividends in arrears			
(7% X $10 X 20,000)	$14,000		$ 14,000
Current dividend			
Preferred	14,000		
Common (7% X $100 X 30,000)		$210,000	224,000
Balance dividend pro-rata	8,000	120,000	128,000*
	$36,000	$330,000	$366,000

*Additional amount available for participation	
($366,000 – $14,000 – $210,000)	$ 128,000
Par value of stock that is to participate	
($200,000 + $3,000,000)	$3,200,000
Rate of participation	
$128,000 ÷ $3,200,000	4%
Participating dividend	
Preferred, 4% X $200,000	$ 8,000
Common, 4% X $3,000,000	120,000
	$128,000

Note to instructor: Another way to compute the participating amount is as follows:

Preferred $\dfrac{\$200{,}000}{\$3{,}200{,}000} \times \$128{,}000$ $ 8,000

Common $\dfrac{\$3{,}000{,}000}{\$3{,}200{,}000} \times \$128{,}000$ 120,000

$128,000

***EXERCISE 15-22 (Continued)**

	Preferred	Common	Total
(b) Preferred stock is cumulative and participating	$14,000	$352,000	$366,000

The computation for these amounts is as follows:

Current dividend (preferred) (7% X $10 X 20,000)	$ 14,000
Remainder to common ($366,000 – $14,000)	352,000
	$366,000

	Preferred	Common	Total
(c) Preferred stock is noncumulative and participating in distributions in excess of 10%	$17,250	$348,750	$366,000

The computation for these amounts is as follows:

	Preferred	Common	Total
Current year			
Preferred (7% X $10 X 20,000)	$14,000		$ 14,000
Common (7% X $3,000,000)		$210,000	210,000
Additional 3% to common (3% X $3,000,000)		90,000	90,000
Balance dividend pro-rata	3,250	48,750	52,000*
	$17,250	$348,750	$366,000

*Additional amount available for participation ($366,000 – $14,000 – $210,000 – $90,000)	$ 52,000
Par value of stock that is to participate ($200,000 + $3,000,000)	$3,200,000
Rate of participation $52,000 ÷ $3,200,000	1.625%
Participating dividend	
Preferred 1.625% X $200,000	$ 3,250
Common 1.625% X $3,000,000	48,750
	$52,000

***EXERCISE 15-23 (10–15 minutes)**

Assumptions

		(a) Preferred, noncumulative and nonparticipating		(b) Preferred, cumulative and fully participating	
Year	**Paid-out**	**Preferred**	**Common**	**Preferred**	**Common**
2005	$13,000	$5.20	-0-	$ 5.20	-0-
2006	$26,000	$6.00	$ .73[a]	$ 6.80[b]	$ .60[c]
2007	$57,000	$6.00	$2.80[d]	$14.25[e]	$1.43[e]
2008	$76,000	$6.00	$4.07[f]	$19.00[g]	$1.90[g]

The computations for part (a) are as follows:

2005

Dividends paid	$13,000	
Amount due preferred (2,500 X $100 X 6%)	$15,000	
Preferred per share ($13,000 ÷ 2,500)		$5.20
Common per share		– 0 –

2006

Dividends paid	$26,000	
Amount due preferred	15,000	
Amount due common	$11,000	
Preferred per share ($15,000 ÷ 2,500)		$6.00
Common per share ($11,000 ÷ 15,000)		$ .73

2007

Dividends paid	$57,000	
Amount due preferred	15,000	
Amount due common	$42,000	
Preferred per share ($15,000 ÷ 2,500)		$6.00
Common per share ($42,000 ÷ 15,000)		$2.80

*EXERCISE 15-23 (Continued)

2008		
Dividends paid	$76,000	
Amount due preferred	15,000	
Amount due common	$61,000	
Preferred per share ($15,000 ÷ 2,500)		$6.00
Common per share ($61,000 ÷ 15,000)		$4.07

The computations for part (b) are as follows:

2005		
Dividends paid	$13,000	
Amount due preferred (2,500 X $100 X 6%)	$15,000	
Preferred per share ($13,000 ÷ 2,500)		$5.20
Common per share		– 0 –

2006		
Dividends paid	$26,000	
Amount due preferred		
In arrears ($15,000 – $13,000)	2,000	
Current	15,000	
	$17,000	
Amount due common ($26,000 – $17,000)	$ 9,000	
Preferred per share ($17,000 ÷ 2,500)		$6.80
Common per share ($9,000 ÷ 15,000)		$ .60

*EXERCISE 15-23 (Continued)

	2007		
Dividends paid		$57,000	
Amount due preferred			
Current (2,500 X $100 X 6%)		$15,000	
Amount due common			
Current (15,000 X $10 X 6%)		$ 9,000	
Amount available for participation			
($57,000 – $15,000 – $9,000)			$ 33,000
Par value of stock that is to participate			
($250,000 + $150,000)			$400,000
Rate of participation			
$33,000 ÷ $400,000			8.25%
Participating dividend			
Preferred (8.25% X $250,000)			$20,625
Common (8.25% X $150,000)			$12,375
Total amount per share—Preferred			
Current	$15,000		
Participation	20,625		
	$35,625 ÷ 2,500		$14.25
Total amount per share—Common			
Current	$ 9,000		
Participation	12,375		
	$21,375 ÷ 15,000		$1.43

***EXERCISE 15-23 (Continued)**

	2008	
Dividends paid	**$76,000**	
Amount due preferred		
Current (2,500 X $100 X 6%)	**$15,000**	
Amount due common		
Current (15,000 X $10 X 6%)	**$ 9,000**	
Amount available for participation		
($76,000 – $15,000 – $9,000)		**$ 52,000**
Par value that is to participate		
($250,000 + $150,000)		**$400,000**
Rate of participation		
$52,000 ÷ $400,000		**13%**
Participating dividend		
Preferred (13% X $250,000)		**$32,500**
Common (13% X $150,000)		**$19,500**

Total amount per share—Preferred

Current	**$15,000**	
Participation	**32,500**	
	$47,500 ÷ 2,500	**$19.00**

Total amount per share—Common

Current	**$ 9,000**	
Participation	**19,500**	
	$28,500 ÷ 15,000	**$1.90**

***EXERCISE 15-24 (10–15 minutes)**

(a)

	Common	Preferred
Stockholders' equity		
Preferred stock		$500,000
Common stock	$ 750,000	
Retained earnings		
Dividends in arrears (3 years at 8%)		120,000
Remainder to common*	380,000	
	$1,130,000	$620,000
Shares outstanding	750,000	
Book value per share ($1,130,000 ÷ 750,000)	$1.51	

*Balance in retained earnings ($800,000 – $40,000 – $260,000)	$500,000
Less: Dividends to preferred	(120,000)
Available to common	$380,000

(b)

	Common	Preferred
Stockholders' equity		
Preferred stock		$500,000
Liquidating premium		30,000
Common stock	$ 750,000	
Retained earnings		
Dividends in arrears (3 years at 8%)		$120,000
Remainder to common*	350,000	
	$1,100,000	$650,000
Shares outstanding	750,000	
Book value per share ($1,100,000 ÷ 750,000)	$1.47	

*Balance in retained earnings ($800,000 – $40,000 – $260,000)	$500,000
Less: Liquidating premium to preferred	(30,000)
Dividends to preferred	(120,000)
Available to common	$350,000

TIME AND PURPOSE OF PROBLEMS

Problem 15-1 (Time 50–60 minutes)
Purpose—to provide the student with an understanding of the necessary entries to properly account for a corporation's stock transactions. This problem involves such concepts as stock sold for cash, noncash stock transactions, and declaration and distribution of stock dividends. The student is required to prepare the respective journal entries and the stockholders' equity section of the balance sheet to reflect these transactions.

Problem 15-2 (Time 25–35 minutes)
Purpose—to provide the student with an opportunity to record the acquisition of treasury stock and its sale at three different prices. In addition, a stockholders' equity section of the balance sheet must be prepared.

Problem 15-3 (Time 25–30 minutes)
Purpose—to provide the student with an opportunity to record seven different transactions involving stock issuances, reacquisitions, and dividend payments. Throughout the problem the student needs to keep track of the shares outstanding.

Problem 15-4 (Time 20–30 minutes)
Purpose—to provide the student with an understanding of the necessary entries to properly account for a corporation's stock transactions. This problem involves such concepts as a capital stock assessment, lump-sum sales of capital stock, and a noncash stock exchange. The student is required to prepare the journal entries to reflect these transactions.

Problem 15-5 (Time 30–40 minutes)
Purpose—to provide the student with an understanding of the proper entries to reflect the reacquisition, and reissuance of a corporation's shares of stock. The student is required to record these treasury stock transactions under the cost method, assuming the FIFO method for purchase and sale purposes.

Problem 15-6 (Time 30–40 minutes)
Purpose—to provide the student with an understanding of the necessary entries to properly account for a corporation's stock transactions. This problem involves such concepts as the reacquisition, and reissuance of shares of stock; plus a declaration and payment of a cash dividend. The student is required to prepare the respective journal entries and the stockholders' equity section of the balance sheet to reflect these transactions.

Problem 15-7 (Time 15–20 minutes)
Purpose—to provide the student with an understanding of the proper accounting for the declaration and payment of cash dividends on both preferred and common stock. This problem also involves a dividend arrearage on preferred stock, which will be satisfied by the issuance of shares of treasury stock. The student is required to prepare the necessary journal entries for the dividend declaration and payment, assuming that they occur simultaneously.

Problem 15-8 (Time 20–25 minutes)
Purpose—to provide the student with an understanding of the accounting effects related to the stock dividends and stock splits. The student is required to analyze their effect on total assets, common stock, paid-in capital, retained earnings, and total stockholders' equity.

Problem 15-9 (Time 20–25 minutes)
Purpose—to provide the student with an understanding of the effect which a series of transactions involving such items as the issuance and reacquisition of common and preferred stock, the donation of a block of preferred stock which was immediately resold, and a retained earnings appropriation, have on the company's equity accounts. The student is required to prepare the stockholders' equity section of the balance sheet in proper form reflecting the above transactions.

Time and Purpose of Problems (Continued)

Problem 15-10 (Time 35–45 minutes)
Purpose—to provide the student with an understanding of the differences between a stock dividend and a stock split. Acting as a financial advisor to the Board of Directors, the student must report on each option and make a recommendation.

Problem 15-11 (Time 25–35 minutes)
Purpose—to provide the student with an understanding of the proper accounting for the declaration and payment of both a cash and stock dividend. The student is required to prepare both the necessary journal entries to record cash and stock dividends and the stockholders' equity section of the balance sheet, including a note to the financial statements setting forth the basis of the accounting for the stock dividend.

Problem 15-12 (Time 35–45 minutes)
Purpose—to provide the student a comprehensive problem involving all facets of the stockholders' equity section. The student must prepare the stockholders' equity section of the balance sheet, analyzing and classifying a dozen different transactions to come up with proper accounts and amounts. A good review of Chapter 15.

SOLUTIONS TO PROBLEMS

PROBLEM 15-1

(a)

	January 11		
	Cash (20,000 X $16)	320,000	
	Common Stock (20,000 X $5)		100,000
	Paid-in Capital in Excess of Par—Common		220,000
	February 1		
	Machinery	50,000	
	Factory Building	110,000	
	Land	270,000	
	Preferred Stock (4,000 X $100)		400,000
	Paid-in Capital in Excess of Par—Preferred		30,000
	July 29		
	Treasury Stock (1,800 X $19)	34,200	
	Cash		34,200
	August 10		
	Cash (1,800 X $14)	25,200	
	Retained Earnings (1,800 X $5)	9,000*	
	Treasury Stock		34,200

*(The debit is made to Retained Earnings because no Paid-in Capital from Treasury Stock exists.)

PROBLEM 15-1 (Continued)

	December 31		
Retained Earnings		37,000	
Cash Dividend Payable—Common			5,000*
Cash Dividend Payable—Preferred			32,000**

*Common Stock Cash Dividend:

Common shares outstanding	20,000
Common cash dividend	X $.25
	$5,000

**(4,000 X 100 X 8%)

	December 31		
Income Summary		175,700	
Retained Earnings			175,700

(b)

DRABEK CORPORATION
Stockholders' Equity
December 31, 2007

Capital stock		
Preferred stock—par value $100 per share, 8% cumulative and nonparticipating, 5,000 shares authorized, 4,000 shares issued and outstanding		$400,000
Common stock—par value $5 per share, 50,000 shares authorized, 20,000 shares issued and outstanding		100,000
Total capital stock		500,000
Additional paid-in capital		
Paid-in capital in excess of par—preferred	$ 30,000	
Paid-in capital in excess of par—common	220,000	250,000
Total paid-in capital		750,000
Retained earnings		129,700*
Total stockholders' equity		$879,700

*($175,700 – $9,000 – $37,000)

PROBLEM 15-2

(a)

Feb. 1	Treasury Stock ($18 X 2,000)		36,000	
		Cash		36,000
Mar. 1	Cash ($17 X 800)		13,600	
	Retained Earnings ($1 X 800)		800	
		Treasury Stock ($18 X 800)		14,400
Mar. 18	Cash ($14 X 500)		7,000	
	Retained Earnings ($4 X 500)		2,000	
		Treasury Stock ($18 X 500)		9,000
Apr. 22	Cash ($20 X 600)		12,000	
		Treasury Stock ($18 X 600)		10,800
		Paid-in Capital from Treasury Stock		1,200

(b)

ANDRUW JONES COMPANY
Stockholders' Equity
April 30, 2007

Common stock, $5 par value, 20,000 shares issued, 19,900 shares outstanding	$100,000
Paid-in capital in excess of par—common	300,000
Paid-in capital from treasury stock	1,200
Total paid-in capital	401,200
Retained earnings*	427,200
	828,400
Less: Treasury stock (100 shares)**	1,800
Total stockholders' equity	$826,600

*Retained earnings (beginning balance)	$320,000
March 1 reissuance	(800)
March 18 reissuance	(2,000)
Net income for period	110,000
Retained earnings (ending balance)	$427,200

**Treasury stock (beginning balance)	$ 0
February 1 purchase (2,000 shares)	36,000
March 1 sale (800 shares)	(14,400)
March 18 sale (500 shares)	(9,000)
April 12 sale (600 shares)	(10,800)
Treasury stock (ending balance)	$ 1,800

PROBLEM 15-3

AMADO COMPANY
Stockholders' Equity
December 31, 2007

<u>Capital Stock</u>		
Preferred stock, $20 par, 8%, 175,000 shares issued and outstanding		$ 3,500,000
Common stock, $2.50 par, 4,080,000 shares issued, 4,060,000 shares outstanding		10,200,000
Total capital stock		13,700,000
<u>Additional paid-in capital</u>		
Excess over par—preferred	$ 250,000	
Excess over par—common	27,600,000	
From treasury stock transactions	20,000	27,870,000
Total paid-in capital		41,570,000
Retained earnings		4,290,000
Total paid-in capital and retained earnings		45,860,000
Less: Cost of treasury stock (20,000 shares common)		(180,000)
Total stockholders' equity		$45,680,000

Supporting balances are indicated in the following T-Accounts.

Preferred Stock

	Bal.	3,000,000
	1.	500,000
		3,500,000

Paid-in Capital—Common

	Bal.	27,000,000
	4.	600,000
		27,600,000

PROBLEM 15-3 (Continued)

Common Stock

		Bal.	10,000,000
		3.	200,000
			10,200,000

Retained Earnings

		Bal.	4,500,000
9.	280,000	8.	2,100,000
10.	2,030,000		
			4,290,000

Paid-in Capital—Preferred

		Bal.	200,000
		2.	50,000
			250,000

Treasury Stock

5.	270,000	6.	90,000
	180,000		

Paid-in Capital—Treasury Stock

		7.	20,000
			20,000

1.	Jan. 1	25,000 X $20
2.	Jan. 1	25,000 X $2
3.	Feb. 1	40,000 X $5
4.	Feb. 1	40,000 X $15
5.	July 1	30,000 X $9
6.	Sept. 15	10,000 X $9
7.	Sept. 15	10,000 X $2
8.	Dec. 31	Net income
9.	Dec. 31	3,500,000 X 8%
10.	Dec. 31	4,060,000 X 50¢

PROBLEM 15-4

-1-

Cash	10,000	
Discount on Bonds Payable	106	
Bonds Payable		10,000
Preferred Stock		50
Paid-in Capital in Excess of Par—Preferred Stock ($106 – $50)		56

-2-

Machinery (500 X $15)	7,500	
Common Stock		5,000
Paid-in Capital in Excess of Par—Common Stock		2,500

(Assuming the stock is regularly traded, the value of the stock would be used.)

-3-

Cash	11,300	
Preferred Stock		5,000
Paid-in Capital in Excess of Par—Preferred Stock ($6,251 – $5,000)		1,251
Common Stock		3,750
Paid-in Capital in Excess of Par—Common Stock ($5,049 – $3,750)		1,299

Fair market value of common (375 X $14)	$ 5,250
Fair market value of preferred (100 X $65)	6,500
Aggregate	$11,750

Allocated to common: $\frac{\$5,250}{\$11,750}$ X $11,300 = $ 5,049

Allocated to preferred: $\frac{\$6,500}{\$11,750}$ X $11,300 = 6,251

Total allocated $11,300

PROBLEM 15-4 (Continued)

-4-

Furniture and Fixtures	**6,200**	
Preferred Stock		**2,500**
Paid-in Capital in Excess of Par—Preferred Stock ($3,000 – $2,500)		**500**
Common Stock		**2,000**
Paid-in Capital in Excess of Par—Common Stock ($3,200 – $2,000)		**1,200**

Fair value of furniture and equipment	**$6,200**
Less: Market value of common stock	**3,200**
Total value assigned to preferred stock	**$3,000**

PROBLEM 15-5

(a)	Treasury Stock (380 X $39)	14,820	
	Cash		14,820
(b)	Treasury Stock (300 X $43)	12,900	
	Cash		12,900
(c)	Cash (350 X $42)	14,700	
	Treasury Stock (350 X $39)		13,650
	Paid-in Capital from Treasury Stock (350 X $3)		1,050
(d)	Cash (120 X $38)	4,560	
	Paid-in Capital from Treasury Stock	480	
	Treasury Stock		5,040*

*30 shares purchased at $39 =	$1,170
90 shares purchased at $43 =	3,870
Cost of treasury shares sold using FIFO =	$5,040

PROBLEM 15-6

(a)

-1-

Treasury Stock (240 X $97)	23,280	
Cash		23,280

-2-

Retained Earnings	91,200	
Dividends Payable		91,200
[(4,800 – 240) X $20 = $91,200]		

-3-

Dividends Payable	91,200	
Cash		91,200

-4-

Cash (240 X $102)	24,480	
Treasury Stock		23,280
Paid-in Capital from Treasury Stock (240 X $5)		1,200

-5-

Treasury Stock (500 X $103)	51,500	
Cash		51,500

-6-

Cash (330 X $96)	31,680	
Paid-in Capital from Treasury Stock	1,200	
Retained Earnings	1,110	
Treasury Stock (330 X $103)		33,990

(b)

CONSTANTINE COMPANY
Stockholders' Equity
December 31, 2007

Common stock, $100 par value, authorized 8,000 shares; issued 4,800 shares, 4,630 shares outstanding	$480,000
Retained earnings (restricted in the amount of $17,510* by the acquisition of treasury stock)	295,690
Total paid-in capital and retained earnings	775,690
Less: Treasury stock (170 shares)	17,510
Total stockholders' equity	$758,180

*($51,500 – $33,990)

PROBLEM 15-7

(a) **For preferred dividends in arrears:**

Retained Earnings	12,000	
Treasury Stock		12,000*

*1,500 shares of treasury stock issued as dividend
1,500 X $8 = $12,000

For 6% preferred current year dividend:

Retained Earnings	12,000	
Cash		12,000*

*(6% X $200,000)

For $.30 per share common dividend:

Retained Earnings	89,190	
Cash		89,190*

*Since all preferred dividends must be paid before the common dividend, outstanding common shares include—

As of Dec. 31, 2006 (300,000 – 4,200)	295,800	shares
Preferred distribution	1,500	shares
	297,300	shares
Common dividend	.30	/share
Amount of common cash dividend	$ 89,190	

(b) The suggested cash dividend could be paid even if state law did restrict the retained earnings balance in the amount of the cost of treasury stock. Total dividends would be $112,740,* which is adequately covered by the cash balance. The retained earnings balance, after adding the 2007 net income (estimated at $77,000), is sufficient to cover the dividends.**

PROBLEM 15-7 (Continued)

*Preferred dividends in arrears (6% X $200,000)	$ 12,000
Current preferred dividend (6% X $200,000)	12,000
Common dividend ($.30 X 295,800)	88,740
Total cash dividend	$112,740

**Beginning balance	$105,000
Estimated net income	77,000
Total balance available	182,000
If restricted by cost of treasury shares	(33,600)
Available to pay dividends	$148,400

PROBLEM 15-8

Transactions:

(a) Assuming Gutsy Co. declares and pays a $.50 per share cash dividend.

(1) Total assets—decrease $5,000 [($20,000 ÷ $2) X $.50]

(2) Common stock—no effect

(3) Paid-in capital in excess of par—no effect

(4) Retained earnings—decrease $5,000

(5) Total stockholders' equity—decrease $5,000

(b) Gutsy declares and issues a 10% stock dividend when the market price of the stock is $14.

(1) Total assets—no effect

(2) Common stock—increase $2,000 (10,000 X 10%) X $2

(3) Paid-in capital in excess of par—increase $12,000 (1,000 X $14) – $2,000

(4) Retained earnings—decrease $14,000 ($14 X 1,000)

(5) Total stockholders' equity—no effect

(c) Gutsy declares and issues a 40% stock dividend when the market price of the stock is $15 per share.

(1) Total assets—no effect

(2) Common stock—increase $8,000 (10,000 X 40%) X $2

(3) Paid-in capital in excess of par—no effect

(4) Retained earnings—decrease $8,000

(5) Total stockholders' equity—no effect

(d) Gutsy declares and distributes a property dividend

(1) Total assets—decrease $30,000 (5,000 X $6)—$20,000 gain less $50,000 dividend.

(2) Common stock—no effect

(3) Paid-in capital in excess of par—no effect

(4) Retained earnings—decrease $30,000—$20,000 gain less $50,000 dividend.

(5) Total stockholders' equity—decrease $30,000

PROBLEM 15-8 (Continued)

Note:

The journal entries made for the above transaction are:

Investments in ABC Stock ($10 – $6) X 5,000........	20,000	
Gain on Appreciation of Securities		20,000
(To record increase in value of securities to be issued)		
Retained Earnings ($10 X 5,000)	50,000	
Investments in ABC stock		50,000
(To record distribution of property dividend)		

(e) Gutsy declares a 2-for-1 stock split

(1) Total assets—no effect

(2) Common stock—no effect

(3) Paid-in capital in excess of par—no effect

(4) Retained earnings—no effect

(5) Total stockholders' equity—no effect

PROBLEM 15-9

Jackson Day Corporation
STOCKHOLDERS' EQUITY
December 31, 2009

Capital stock:		
Preferred stock, $100 par value		
10,000 shares authorized, 4,000 shares issued & outstanding		$400,000
Common stock, $50 par value		
15,000 shares authorized,		
8,000 shares issued 7,700 shares outstanding		400,000
Total capital stock		800,000
Additional paid-in capital:		
Paid-in capital in excess of par—preferred	$52,000	
Paid-in capital in excess of par—common	61,000*	
Paid-in capital from treasury stock—preferred	4,700	117,700
Total paid-in capital		917,700
Retained earnings		235,400**
Total paid-in capital and retained earnings		1,153,100
Less: Cost of treasury stock (300 shares—common)		19,800
Total stockholders' equity		$1,133,300

*[($57 – $50) X 7,000 + ($62 – $50) X 1,000]

**$610,000 – $312,600 – ($62 X 1,000 shares)

PROBLEM 15-10

To: Jenny Dill Board of Directors

From: Good Student, Financial Advisor

Date: Today

Subject: Report on the effects of a stock dividend and a stock split

INTRODUCTION

As financial advisor to the Board of Directors for Jenny Dill, I have been asked to report on the effects of the following options for creating interest in Jenny Dill stock: a 20% stock dividend, a 100% stock dividend, and a 2-for-1 stock split. The board wishes to maintain stockholders' equity as it presently appears on the most recent balance sheet. The Board also wishes to generate interest in stock purchases, and the current market value of the stock ($120 per share) may be discouraging potential investors. Finally, the Board thinks that a cash dividend at this point would be unwise.

RECOMMENDATION

In order to meet the needs of Jenny Dill Inc., the board should choose a 2-for-1 stock split. The stock split is the only option which would not change the dollar balances in the stockholders' equity section of the company's balance sheet.

DISCUSSION OF OPTIONS

The three above-mentioned options would all result in an increased number of common shares outstanding. Because the shares would be distributed on a pro rata basis to current stockholders, each stockholder of record would maintain his/her proportion of ownership after the declaration. All three options would probably generate significant interest in the stock.

PROBLEM 15-10 (Continued)

A 20% STOCK DIVIDEND

This option would increase the shares outstanding by 20 percent, which translates into 1,000,000 additional shares of $10 par value common stock.

The problem with this type of stock dividend is that GAAP requires these shares to be accounted for at their current market value if it significantly exceeds par.

The following journal entry must be made to record this dividend.

Retained Earnings ($120 X 1,000,000)....................	**120,000,000**	
Common Stock Dividend Distributable		**10,000,000**
Paid-in Capital in Excess of Par.......................		**110,000,000**

Although the Common Stock Dividend Distributable and the Paid-in Capital accounts increase, Retained Earnings decreases dramatically. This reduction in Retained Earnings may hinder Jenny Dill's success with the subsequent stock offer.

A 100% STOCK DIVIDEND

This option would double the number of $10 par value common stock currently issued and outstanding. Because this type of dividend is considered, in substance, a stock split, the shares do not have to be accounted for at market value. Instead, Retained Earnings is reduced only by the par value of the additional shares, while Common Stock Dividend Distributable and, later, Common Stock are increased for that same amount. However, when 5,000,000 shares are already issued and outstanding, the reduction in Retained Earnings reflecting the stock dividend is still great: $50,000,000. In addition, no increase in any Paid-in Capital account occurs.

The following journal entry would be made to record the declaration of this dividend:

Retained Earnings ($10 X 5,000,000)	**50,000,000**	
Common Stock Dividend Distributable		**50,000,000**

PROBLEM 15-10 (Continued)

A 2-FOR-1 STOCK SPLIT

This option doubles the number of shares issued and outstanding; however, it also cuts the par value per share in half. No accounting treatment beyond a memorandum entry is required for the split because the effect of splitting the par value cancels out the effect of doubling the number of shares. Therefore, Retained Earnings remains unchanged as does the Common Stock and Paid-in Capital Accounts. In addition, the decreased market value will encourage investors who might otherwise consider the stock too expensive.

CONCLUSION

To generate the greatest interest in Jenny Dill stock while maintaining the present balances in the stockholders' equity section of the balance sheet, you should opt for the 2-for-1 stock split.

PROBLEM 15-11

(a)	Retained Earnings	1,200,000	
	Cash		1,200,000
	(Cash dividend of $.60 per share on 2,000,000 shares)		
(b)	Retained Earnings	4,200,000	
	Common Stock (120,000 X $10)		1,200,000
	Additional Paid-in Capital in Excess of Par		3,000,000
	(Stock dividend of 6%, 120,000 shares, at $35 per share)		

(c)

GUL DUCAT CORPORATION
Stockholders' Equity
December 31, 2007

Common stock—$10 par value, issued 2,120,000 shares	$21,200,000
Additional paid-in capital	8,000,000
Retained earnings	24,300,000
Total stockholders' equity	$53,500,000

Statement of Retained Earnings
For the Year Ended December 31, 2007

Balance, January 1		$24,000,000
Add: Net income		5,700,000
		29,700,000
Less: Dividends on common stock:		
Cash	$1,200,000	
Stock (see note)	4,200,000	5,400,000
Balance December 31		$24,300,000

Schedule of Additional Paid-in Capital
For the Year Ended December 31, 2007

Balance January 1	$5,000,000
Excess of fair value over par value of 120,000 shares of common stock distributed as a dividend (see note)	3,000,000
Balance December 31	$8,000,000

PROBLEM 15-11 (Continued)

<u>Note:</u> The 6% stock dividend (120,000 shares) was declared on November 30, 2007. For the purposes of the dividend, the stock was assigned a price of $35 per share. The par value of $10 per share ($1,200,000) was credited to Common Stock and the excess of $25 ($35 – $10) per share ($3,000,000) to Additional Paid-in Capital.

PROBLEM 15-12

Ohio Company
Stockholders' Equity
June 30, 2006

Capital stock		
8% preferred stock, $25 par value, cumulative and nonparticipating, 100,000 shares authorized, 50,000 shares issued and outstanding—Note A		$1,250,000
Common stock, $10 par value, 300,000 shares authorized, 115,400 shares issued with 1,500 shares held in the treasury		1,154,000
Total capital stock		2,404,000
Additional paid-in capital		
On preferred stock	$ 950,000	
On common stock	2,711,800*	
On treasury stock	1,500	3,663,300
Total paid-in capital		6,067,300
Retained earnings		399,200
Total paid-in capital and retained earnings		6,466,500
Less: Treasury stock, 1,500 shares at cost		58,500
Total stockholders' equity		$6,408,000

Note A: Ohio Company is in arrears on the preferred stock in the amount of $50,000.

*Additional Paid-In Capital on Common Stock:	
Issue of 95,000 shares X ($31 – $10)	$1,995,000
Plot of land	170,000
Issue of 10,000 shares (3/1/04) [10,000 X ($42 – $10)]	320,000
5,400 shares as dividend [5,400 X ($52 – $10)]	226,800
	$2,711,800

PROBLEM 15-12 (Continued)

Account Balances

Common Stock

	950,000
	50,000
	100,000
	54,000
	1,154,000

Paid-in Capital in Excess of Par—C.S.

	1,995,000
	170,000
	320,000
	226,800
	2,711,800

Preferred Stock

	1,250,000

Paid-in Capital in Excess of Par—Pfd

	950,000

Treasury Stock

78,000	
	19,500
58,500	

Paid-in Capital—T.S.

	1,500

Retained Earnings

	690,000
280,800	
	40,000
50,000	
	399,200

Note that the Ohio Company is authorized to issue 300,000 shares of $10 par value common and 100,000 shares of $25 per value, cumulative and nonparticipating preferred.

PROBLEM 15-12 (Continued)

Entries supporting the balances.

Common Stock

Entries

1.	Cash	2,945,000	
	Common Stock		950,000
	Paid-in Capital in Excess of Par		1,995,000
2.	Land	220,000	
	Common Stock		50,000
	Paid-in Capital in Excess of Par		170,000
3.	Cash	420,000	
	Common Stock		100,000
	Paid-in Capital in Excess of Par		320,000

At the beginning of the year, Ohio had 110,000 common shares outstanding, of which 95,000 shares were issued at $31 per share, resulting in $950,000 (95,000 shares at $10) of common stock and $1,995,000 of additional paid-in capital on common stock (95,000 shares at $21). The 5,000 shares exchanged for a plot of land would be recorded at $50,000 of common stock and $170,000 of paid-in capital (use the current market value of the land on July 24 to value the stock issuance). The 10,000 shares issued in 2004 at $42 a share resulted in $100,000 of common stock and $320,000 of paid-in capital.

Preferred Stock

	Cash	2,200,000	
	Preferred Stock		1,250,000
	Paid-in Capital in Excess of Par—Pfd		950,000

Treasury Stock

Nov. 30	Treasury Stock	78,000	
	Cash		78,000
June 30	Cash	21,000	
	Additional Paid-in Capital—Treasury Stock		1,500
	Treasury Stock		19,500

The 2,000 shares of treasury stock purchased resulted in a debit balance of treasury stock of $78,000. Later, 500 shares were sold at $21,000, which brings the balance down to $58,500 (1,500 shares at $39 per share).

The sale of the treasury shares above cost ($21,000 minus $19,500 cost) is recorded in a separate paid-in capital amount.

Stock Dividend

Dec. 15	Retained Earnings	280,800**	
	Common Stock		54,000*
	Paid-in Capital in Excess of Par—C.S.		226,800

*Shares outstanding, beginning of year: 110,000
Treasury Stock (2,000)
108,000 X 5% = 5,400
X $10 Par
$54,000

**5,400 Shares X $52

The 5% stock dividend resulted in an increase of 5,400 shares. Recall that there were 110,000 shares outstanding at the beginning of the year. The purchase of 2,000 treasury shares occurred before the stock dividend, bringing the number of shares outstanding at the time of the dividend (December 2005) to 108,000 shares. The resale of 500 treasury shares occurred after the stock dividend.

The issuance of 50,000 shares of preferred at $44 resulted in $1,250,000 (50,000 shares at $25) of preferred stock outstanding and $950,000 (50,000 shares at $19) of paid-in capital on preferred.

Retained Earnings

The cash dividends only affect the retained earnings. Note that the preferred stock is in arrears for the dividends that should have been declared in June 2006. Ending retained earnings is the beginning balance of $690,000 plus net income of $40,000, less the preferred dividend of $50,000 and the common stock dividend of $280,800 (5,400 shares at $52), resulting in an ending balance of $399,200.

TIME AND PURPOSE OF CONCEPTS FOR ANALYSIS

CA 15-1 (Time 10–20 minutes)
Purpose—to provide the student with some familiarity with the applications of the capital stock share system. This case requires the student to analyze the concept dealing with the dilution of ownership interest and the establishment of any necessary corrective actions to compensate an existing stockholder for this dilution effect.

CA 15-2 (Time 15–20 minutes)
Purpose—to provide the student with an opportunity to discuss the bases for recording the issuance of stock in exchange for nonmonetary assets.

CA 15-3 (Time 25–30 minutes)
Purpose—to provide a five-part theory case on equity based on Statement of Financial Accounting Concepts No. 6. It requires defining terms and analyzing the effects of equity transactions on financial statement elements.

CA 15-4 (Time 25–30 minutes)
Purpose—to provide the student with an understanding of the conceptual framework which underlies a stock dividend and a stock split. The student is required to explain what a stock dividend is, the amount of retained earnings to be capitalized in connection with a stock dividend, and how it differs from a stock split both from a legal standpoint and an accounting standpoint. This case also requires an explanation of the various reasons why a corporation declares a stock dividend or a stock split.

CA 15-5 (Time 15–20 minutes)
Purpose—to provide the student with an understanding of the theoretical concepts and implications that underlie the issuance of a stock dividend. The student is required to discuss the arguments against either considering the stock dividend as income to the recipient or issuing stock dividends on treasury shares.

CA 15-6 (Time 20–25 minutes)
Purpose—to provide the student with a situation containing a cash dividend declaration, a stock dividend, and a reacquisition and reissuance of shares requiring the student to explain the accounting treatment.

CA 15-7 (Time 10–15 minutes)
Purpose—to provide an opportunity for the student to consider and discuss the ethical issues involved when the control of a corporation is at stake. The student should recognize the potential conflict between the CEO's personal will and the responsibility and accountability the CEO has to the stockholders.

SOLUTIONS TO CONCEPTS FOR ANALYSIS

CA 15-1

(a) To share proportionately in any new issues of stock of the same class (the preemptive right).

(b) Eduardo Alvarado bought an additional $100,000 par value stock. His original ownership was $200,000 ($250,000 X 80%). Thus he increased his ownership by 100/200 (50%). This imbalance can be corrected by issuing to Ms. Jones, at par, shares equal to 50% of her present holdings of $25,000 or stock with a par value of $12,500. Other stockholders should also be offered the right to purchase shares equal to 50% of their holdings in order that all stockholders may retain the same proportionate interest as before the issuance of additional shares.

(c) No information is given with respect to the fair value of the stock. In this situation, an estimate for fair value could be developed based on market transactions involving comparable assets. Otherwise, discounted expected cash flows could be used to approximate fair value. In this closely held company, and in the absence of reliable fair value data, the book value might be used for the computation of the amount of the cash settlement.

Book value of Ms. Jones' capital stock, June 30, 2007, before issuance of additional shares, 25/250 X $422,000	$42,200
Book value after issuance of additional shares to Eduardo Alvarado, 25/350 X $522,000	37,286
Loss in book value and amount of cash settlement	$ 4,914

CA 15-2

(a) The general rule to be applied when stock is issued for services or property other than cash is that the property or services be recorded at either their fair market value or the fair market value of the stock issued, whichever is more clearly determinable.

(b) If the fair market value of the land is readily determinable, it is used as a basis for recording the exchange. The fair market value could be determined by observing the cash sales price of similar pieces of property or through independent appraisals.

(c) If the fair market value of the land is not readily determinable, but the fair market value of the stock issued is determinable, the fair market value of the stock is used as a basis for recording the exchange. If the stock is traded on a stock exchange, the fair market value can be determined from that day's cash sales of the stock. If the stock is traded over the counter, recent sales or bid prices can be used to estimate fair market value.

(d) If the Corporation intentionally records this transaction at an amount greater than fair market value, both assets and stockholders' equity will be overstated. This overvaluation of stockholders' equity from the inflated asset value is referred to as watered stock. This excess can be eliminated by writing down the overvalued assets with a corresponding charge to the appropriate paid-in capital accounts.

CA 15-3

(a) Equity, or net assets, is the owners' residual interest in the assets of an entity that remains after deducting liabilities; in other words, equity equals assets less liabilities. Assets are probable future economic benefits controlled by a particular entity as the result of past transactions or events, and liabilities are probable future sacrifices of economic benefits arising from present obligations of a particular entity which result from past transactions or events; therefore equity can be defined as future economic benefits which will **not** be sacrificed to satisfy present obligations.

CA 15-3 (Continued)

(b) Transactions or events that change owners' equity include revenues and expenses, gains and losses, investments by owners, distributions to owners, and changes within owners' equity.

(c) Investments by owners are increases in net assets resulting from transfers by other entities of something of value to obtain ownership. Examples of investments by owners are issuance of preferred or common stock, conversion of convertible bonds, reissuance of treasury stock, assessments on stock, and issuance of stock warrants. Generally, investments by owners cause an increase in assets in addition to the increase in equity.

(d) Distribution to owners are decreases in net assets resulting from transferring assets to owners, rendering services for owners or incurring liabilities to owners. Examples of distributions to owners are cash or property dividends and purchase of treasury stock. Dividends generally initially cause an increase in liabilities but eventually cause a decrease in assets in addition to the decrease in equity. The purchase of treasury stock causes a decrease in assets in addition to the decrease in equity.

(e) Some examples of changes within owners' equity that do not change the total amount of owners' equity are retirement of treasury stock, quasi-reorganization (except revaluing of assets), conversion of preferred stock into common stock, stock dividends, and retained earnings appropriations.

CA 15-4

(a) A stock dividend is the issuance by a corporation of its own stock to its stockholders on a prorata basis without receiving payment therefor. The stock dividend results in an increase in the amount of the legal or stated capital of the enterprise. The dividend may be charged to retained earnings or to any other capital account that is not a part of legal capital.

  (1) From the legal standpoint a stock split is distinguished from a stock dividend in that a split results in an increase in the number of shares outstanding and a corresponding decrease in the par or stated value per share. A stock dividend, though it results in an increase in the number of shares outstanding, does not result in a decrease in the par or stated value of the shares.

  (2) The major distinction is that a stock dividend requires a journal entry to decrease retained earnings and increase paid-in capital, while there is no entry for a stock split. Also, from the accounting standpoint the distinction between a stock dividend and a stock split is dependent upon the intent of the board of directors in making the declaration. If the intent is to give to stockholders some separate evidence of a part of their prorata interests in accumulated corporate earnings, the action results in a stock dividend. If the intent is to issue enough shares to reduce the market price per share of the stock, the action results in a stock split, regardless of the form it may take. In other words, if the action takes the form of a stock dividend but reduces the market price markedly, it should be considered a stock split. Such reduction will seldom occur unless the number of shares issued is at least 20% to 25% of the number previously outstanding.

(b) The usual reason for issuing a stock dividend is to give the stockholders something on a dividend date and yet conserve working capital.

A stock dividend that is charged to retained earnings reduces the total accumulated earnings, and all stock dividends reduce the per share earnings. Issuing a stock dividend to achieve these ends would be a public relations gesture in that the public would be less likely to criticize the corporation for high profits or undue retention of earnings.

CA 15-4 (Continued)

A stock dividend also may be issued for the purpose of obtaining a wider distribution of the stock. Although this is the main consideration in a stock split, it may be a secondary consideration in the issuance of a stock dividend. The issuance of a series of stock dividends will accomplish the same objective as a stock split.

A stock split is intended to obtain wider distribution and improved marketability of shares by means of a reduction in the market value of the company's shares.

(c) The amount of retained earnings to be capitalized in connection with a stock dividend (in the accounting sense) might be (1) the legal minimum (usually par or stated value), (2) the average paid-in capital per outstanding share, or (3) the market value of the shares.

The third basis is generally recommended on the grounds that recipients tend to regard the market value of the stock received as a dividend as the amount of earnings distributed to them. If the corporation in such cases does not capitalize an amount equal to the fair value of the shares distributed as a dividend, there is left in the corporation's retained earnings account an amount of earnings that the stockholders believe has been distributed to them. This amount would be subject to further stock dividends or to cash dividends. The recipients might thus be misled into believing that the company's distributions—and earnings—are greater than they actually are.

If the per share market value of the stock is materially reduced as a result of a distribution (usually 20%–25% of shares outstanding or more), no matter what form the distribution takes, the action is in substance a stock split and should be so designated and treated as such.

CA 15-5

(a) The case against treating an ordinary stock dividend as income is supported by a majority of accounting authorities. It is based upon "entity" and "proprietary" interpretations.

If the corporation is considered an entity separate from stockholders, the income of the corporation is corporate income and not income to stockholders, although the equity of the stockholders in the corporation increases as income to the corporation increases. This position is consistent with the interpretation that a dividend is not income to the recipient until it is realized as a result of a division, distribution, or severance of corporate assets. The stock dividend received merely redistributes each stockholder's equity over a large number of shares. Selling the stock dividend under this interpretation has the effect of reducing the recipient's proportionate share of the corporation's equity.

A similar position is based upon a "proprietary" interpretation. Income of the corporation is considered income to the owners and, hence, stock dividends represent only a reclassification of equity since there is no increase in total proprietorship.

(b) The case against issuing stock dividends on treasury stock rests principally upon the argument that stock reacquired by the corporation is a "reduction of capital" through the payment of cash to reduce the number of outstanding shares. According to this view, the corporation cannot obtain a proprietary interest in itself when it reacquires its own stock. The retained earnings are considered divisible only among the owners of outstanding shares and only the outstanding shares are entitled to a stock dividend. In those states that permit treasury shares to participate in the distribution accompanying a stock dividend or stock split, practice is influenced by the planned use of the treasury shares (such as, the issuance of treasury shares in connection with employee stock options). Unless there are specific uses for the treasury stock, no useful purpose is served by issuing additional shares to treasury.

CA 15-6

(a) AROD Company should account for the purchase of the treasury stock on August 15, 2007, by debiting Treasury Stock and crediting Cash for the cost of the purchase (1,000 shares X $16 per share). AROD should account for the sale of the treasury stock on September 14, 2007, by debiting Cash for the selling price (500 shares X $20 per share), crediting Treasury Stock for cost (500 shares X $16 per share), and crediting Additional Paid-in Capital from Treasury Stock Transactions for the excess of the selling price over the cost (500 shares X $4 per share). The remaining treasury stock (500 shares X $16 per share) should be presented separately in the stockholders' equity section of AROD's December 31, 2007, balance sheet as an unallocated reduction of stockholders' equity. These shares are considered issued but not part of common stock outstanding.

(b) AROD should account for the stock dividend by debiting Retained Earnings for $21 per share (the market value of the stock in October 2007, the date of the stock dividend) multiplied by the 1,950 shares distributed. AROD should then credit Common Stock for the par value of the common stock ($10 per share) multiplied by the 1,950 shares distributed, and credit Additional Paid-In Capital for the excess of the market value ($21 per share) over the par value ($10 per share) multiplied by the 1,950 shares distributed. Total stockholders' equity does not change, but, because this is considered a small stock dividend, recognition has been made of capitalization of retained earnings equivalent to the market value of the additional shares resulting from the stock dividend.

(c) AROD should account for the cash dividend on December 20, 2007, the declaration date, by debiting Retained Earnings and crediting Cash Dividends Payable for $1 per share multiplied by the number of shares outstanding 21,450. A cash dividend is a distribution to the corporation's stockholders. The liability for this distribution is incurred on the declaration date, and it is a current liability because it is payable within one year (January 10, 2008). The effect of the cash dividend on AROD's balance sheet at December 31, 2007, is an increase in current liabilities and a decrease in retained earnings.

CA 15-7

(a) The stakeholders are the dissident stockholders, the other stockholders, potential investors, creditors, and Loptien.

(b) The ethical issues are honesty, job security, and personal responsibility to others. That is, by using her inside information and her authority to do the buy-back, she can benefit herself at the potential expense of other stakeholders.

(c) It is important for Loptien to consider what is good for the corporation, not just for her (in finance terminology, an *agency issue*). Loptien should consider the following questions: (1) Are there better uses for the cash? (2) Can she possibly win over the dissidents in some other way? (3) Would this buyout be in the long-term best interest of all parties?

FINANCIAL REPORTING PROBLEM

(a) P&G's preferred stock has a par value of $1 per share.

(b) P&G's common stock has par value of $1 per share. Like many companies, the par value of P&G's common stock is small relative to its market value.

(c) At June 30, 2004, P&G had 2,543.8 million shares of common stock issued and outstanding. This represents 50.9 percent (2,543.8/5,000) of P&G's authorized common stock.

(d) At June 30, 2004 and June 30, 2003, P&G had 2,543.8 million and 2,594.4 million shares of common stock outstanding, respectively.

(e) The cash dividends caused P&G's Retained Earnings to decrease by $2,539,000 (including both common and preferred dividends).

(f) Return on common stock equity:

2004: ($6,481 – $131)/[$15,752 + $14,606)/2] = 41.8%

2003: ($5,186 – $125)/[$14,606 + $12,072)/2] = 37.9%

(g) Payout ratio:

2004: $2,408/($6,481 – $131) = 37.9%

2003: $2,121/($5,186 – $125) = 41.9%

(h) Price range for the quarter ended June 30, 2004:

High—$56.34
Low—$51.64

Note to instructor: Stock price information can be found in P&G's full 10-K at the KWW website.

FINANCIAL STATEMENT ANALYSIS CASES

CASE 1

(a) Management might purchase treasury stock to provide to stockholders a tax-efficient method for receiving cash from the corporation. In addition, it might have to repurchase shares to have them available to issue to people exercising options to purchase stock, or management might purchase treasury stock because it feels that its stock price is too low. It may believe that by purchasing shares it is signalling to the market that the price is too low. Management might also use excess cash to purchase stock to ward off a hostile takeover. Finally, management might purchase stock in an effort to change its capital structure. If it purchases stock and issues debt (or at least does not retire debt), it will increase the percentage of debt in its capital structure.

(b) Earnings per share is calculated by dividing net income by the weighted average number of shares outstanding during the year.

If shares are reduced by treasury stock purchases, the denominator (weighted average number of shares outstanding) is reduced. As a result, earnings per share is often increased. However, because corporate assets are reduced by purchase of the treasury stock, earnings potential may decrease. If this occurs, the effect on earnings per share may be mitigated.

(c) One measure of solvency is the ratio of debt divided by total assets. This ratio shows how many dollars of assets are backing up each dollar of debt, should the company become financially troubled. For 2004 and 2003, this can be calculated as follows:

2004	2003
($8,533 ÷ $10,790) = .79	($8,699 ÷ $10,143) = .86

This represents a decrease in the ratio of debt to assets. It may be determined that Kellogg's solvency is improving, but it should definitely be watched. A ratio of debt to assets ratio of 79% means that Kellogg is highly leveraged and that its financial flexibility may be weak.

CASE 2

(a) The date of record marks the time when ownership of the outstanding shares is determined for dividend purposes. This in turn identifies which shareholders will receive the stock dividend. This date is also used when a stock split occurs. The date of distribution is when the additional shares are distributed (issued) to stockholders.

(b) The purpose of a stock split is to increase the marketability of the stock by lowering its market value per share. This may make it easier for the corporation to issue additional shares of stock.

(c) The effects are (1) no effect, (2) no effect, (3) increase, and (4) decrease.

COMPARATIVE ANALYSIS CASE

(a) Par value:

Coca-Cola, $0.25 per share.
PepsiCo, $0.01 $^{2}/_{3}$ per share.

(b) Percentage of authorized shares issued:

Coca-Cola, 3,500,489,544 ÷ 5,600,000,000 = 62.5%.
PepsiCo, 1,782,000,000 ÷ 3,600,000,000 = 49.5%.

(c) Treasury shares, year-end 2004:

Coca-Cola, 1,091,150,977 shares.
PepsiCo, 103,000,000 shares.

(d) Common or capital stock shares outstanding, year-end 2004:

Coca-Cola, 3,500,489,544 – 1,091,150,977 = 2,409,338,567.
PepsiCo, 1,782,000,000 – 103,000,000 = 1,679,000,000.

(e) Coca-Cola declared cash dividends of $1.00 per share in 2004. This dividend reduced retained earnings by $2,429,000,000.

PepsiCo declared cash dividends of $0.85 per share in 2004. This dividend reduced retained earnings by $1,443,000,000.

(f) Rate of return on common stock equity.

2004:

Coca-Cola, $$\frac{\$4,847}{\frac{\$15,935 + \$14,090}{2}} = 32.3\%$$

PepsiCo, $$\frac{\$4,212 - \$3}{\frac{\$13,572 + \$11,896}{2}} = 33.1\%$$

2003:

Coca-Cola, $$\frac{\$4{,}347}{\frac{\$14{,}090 + \$11{,}800}{2}} = 33.6\%$$

PepsiCo, $$\frac{\$3{,}568 - \$3}{\frac{\$11{,}896 + \$9{,}530}{2}} = 33.3\%$$

During 2003, Coca-Cola earned a higher return on its stockholders' equity, but in 2004, PepsiCo earned a higher return on its stockholders' equity.

(g) Payout ratios for 2004.

Coca-Cola, $$\frac{\$2{,}429}{\$4{,}847} = 50.1\%$$

PepsiCo, $$\frac{\$1{,}329^{*}}{\$4{,}212 - \$3} = 31.6\%$$

*Based on dividends paid.

(h) Market price range of stock during the fourth quarter of 2004:

Coca-Cola,	High	$41.91
	Low	$38.30
PepsiCo,	High	$53.00
	Low	$47.37

2004 stock price increase (decrease):

Coca-Cola (from $50.75 to $41.64) –17.95%
PepsiCo (from $46.47 to $51.94) 11.77%

RESEARCH CASE

(a) AT&T is doing a reverse stock split to increase its stock price. In 1999 its stock was at $60, and recently has dropped to $15. There is concern that it will drop into single digits. The reason the company is employing a reverse stock split is to attract investors who often don't like to invest in companies with a single-digit stock price. Also AT&T does not want to be thought of as a $5 stock. In addition, its stock outstanding has ballooned to 3.5 billion and it believes a lower amount outstanding would be more appropriate.

(b) Reverse stock splits are seen as a sign of weakness because they are often used to artificially increase the price of the stock. However, total capitalization does not change. Some analysts, for example, indicate the company is looking to financial engineering to help achieve what its own management team cannot: a healthy stock price.

A reverse stock split is not recorded formally with accounts. Common stock, paid-in capital or retained earnings is not affected by the reverse stock split.

(c) Share buybacks are considered a sign of strength because the company has decided that its shares are undervalued and therefore it makes sense to purchase their own shares. In addition, the purchasing of the company's own stock creates a more active market for the company's stock. In addition, the purchase of treasury stock reduces shares outstanding which may lead to an in increase in earnings per share. Share buybacks are recorded as a debit to Treasury Stock and a credit to Cash. The treasury stock is reported in the stockholders' equity section as a deduction from total stockholders' equity.

(d) While AT&T's move may prove successful, history shows that reverse stock splits are not always the panacea they appear. Webvan and Maxicare, for instance, both have since filed for bankruptcy-court protection. One disadvantage of a reverse stock split is that if a dividend were presently being paid, it is possible that dividends may decline because less shares are outstanding. Overall, however, as a stockholder, you probably would accept the argument that a higher price might increase interest in the stock.

Search Strings: "disclosure and capital structure"

(a) FAS 129 "Disclosure of Information About Capital Structure, *SFAS No. 129* (February 1997).

(b) FAS 129, Par 2. The following terms and definitions are used in this Statement:

1. Securities—the evidence of debt or ownership or a related right. For purposes of this Statement, the term securities includes options and warrants as well as debt and stock.
2. Participation rights—contractual rights of security holders to receive dividends or returns from the security issuer's profits, cash flows, or returns on investments.
3. Preferred stock—a security that has preferential rights compared to common stock.

(c) FAS 129, Par 4. An entity shall explain, in summary form within its financial statements, the pertinent rights and privileges of the various securities outstanding. Examples of information that shall be disclosed are dividend and liquidation preferences, participation rights, call prices and dates, conversion or exercise prices or rates and pertinent dates, sinking-fund requirements, unusual voting rights, and significant terms of contracts to issue additional shares.

FAS 129, Par. 5. An entity shall disclose within its financial statements the number of shares issued upon conversion, exercise, or satisfaction of required conditions during at least the most recent annual fiscal period and any subsequent interim period presented.

PROFESSIONAL SIMULATION

Explanation

(a) Common stock represents an owner's claim against a portion of the total assets of the corporation. As a result, it is a residual interest. It therefore is part of stockholders' equity.

(b) Treasury stock is not an asset. When treasury stock is purchased, a reduction occurs in both assets (cash) and stockholders' equity. It is inappropriate to imply that a corporation can own part of itself. Treasury stock may be sold to obtain funds, but that possibility does not make it an asset. When a corporation buys back some of its own outstanding stock, it has reduced its capitalization, but it has not acquired an asset.

(c) "Accumulated other comprehensive loss" is the sum of all previous "other comprehensive income and loss" amounts. A number of items may be included in the accumulated other comprehensive loss. Among these items are foreign currency translation adjustments, unrealized holding gains and losses for available-for-sale securities, excess of additional pension liability over unrecognized prior service cost and others.

(d) The accumulated deficit is larger in 2004 because AMR, like many other major airlines, reported a net loss of $761 million. AMR did not pay dividends in 2004, which would reduce retained earnings.

Analysis

$(581) ÷ 161.156* = $(3.61)

***(182,350,259 – 21,194,312 treasury stock)**

Thus, AMR's net worth is negative due to Treasury Stock and Accumulated Losses.