CHAPTER 15

Equity

ASSIGNMENT CLASSIFICATION TABLE (BY TOPIC)

Topics	Questions	Brief Exercises	Exercises	Problems	Concepts for Analysis
1. Shareholders' rights; corporate form.	1, 2, 3				1
2. Equity.	4, 5, 6, 16, 17, 18, 29, 30, 31	3	7, 10, 16, 17	1, 2, 3, 9	
3. Issuance of shares.	7, 10	1, 2, 6	1, 2, 4, 6, 9	1, 3, 4	
4. Noncash share transactions; lump sum sales.	8, 9	4, 5	3, 4, 5, 6	1, 4	2
5. Treasury share transactions, cost method.	11, 12, 17	7, 8	3, 6, 7, 9, 10, 18	1, 2, 3, 5, 6, 7	7
6. Preference stock.	3, 13, 14, 15	9	2, 8	1, 3	
7. Equity accounts; classifications; terminology.			10, 11, 16, 17	9, 11, 12	3
8. Dividend policy.	19, 20, 21, 22, 25, 26	10	12, 15	7, 10	
9. Cash and share dividends; share splits; property dividends; liquidating dividends.	22, 23, 24	10, 11, 12, 13, 14	13, 14, 15, 18	6, 7, 8, 10, 11	4, 5, 6
10. Restrictions of retained earnings.	27, 28			9	
11. Presentation and analysis			17, 19, 20	12	
*12. Dividend preferences and book value.	32	15	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 equity.			
3. Explain the accounting procedures for issuing shares.	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 shares.	3, 7, 8	6, 7, 9, 10, 18	1, 2, 3, 5, 6, 7, 9, 12
5. Explain the accounting for and reporting of preference shares.	9	5, 8	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 share dividends and for share splits.	13, 14	11, 13, 14, 15, 16, 18	3, 8, 10, 11, 12
9. Indicate how to present and analyze equity.	3	17, 19, 20	1, 2, 6, 9, 11, 12
*10. Explain the different types of preference share 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 ordinary shares.	Simple	15–20
E15-2	Recording the issuance of ordinary and preference shares.	Simple	15–20
E15-3	Shares issued for land.	Simple	10–15
E15-4	Lump-sum sale of shares with bonds.	Moderate	20–25
E15-5	Lump-sum sales of ordinary and preference shares.	Simple	10–15
E15-6	Share issuances and repurchase.	Moderate	25–30
E15-7	Effect of treasury share transactions on financials.	Moderate	15–20
E15-8	Preference share 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 statement of financial position.	Simple	15–20
E15-12	Cash dividend and liquidating dividend.	Simple	10–15
E15-13	Share split and share dividend.	Simple	10–15
E15-14	Entries for share dividends and share splits.	Simple	10–12
E15-15	Dividend entries.	Simple	10–15
E15-16	Computation of retained earnings.	Simple	05–10
E15-17	Equity section.	Moderate	20–25
E15-18	Dividends and 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	Preference dividends.	Simple	10–15
*E15-22	Preference dividends.	Moderate	15–20
*E15-23	Preference share 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 share transactions and presentation.	Simple	25–35
P15-3	Equity transactions and statement preparation.	Moderate	25–30
P15-4	Share transactions—lump sum.	Moderate	20–30
P15-5	Treasury shares—cost method.	Moderate	30–40
P15-6	Treasury shares—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	Equity section of statement of financial position.	Simple	20–25
P15-10	Share dividends and share split.	Moderate	35–45
P15-11	Share 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 shares for land.	Moderate	15–20
CA15-3	Conceptual issues—equity.	Moderate	25–30
CA15-4	Share dividends and splits.	Simple	25–30
CA15-5	Share dividends.	Simple	15–20
CA15-6	Share dividend, cash dividend, and treasury shares.	Moderate	20–25
CA15-7	Treasury shares.	Moderate	10–15

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

ANSWERS TO QUESTIONS

1. The basic rights of each shareholder (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 shares of the same class (preemptive right).

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

3. **Preference shares** commonly have preference to dividends in the form of a fixed dividend rate and a preference over ordinary shares to remaining corporate assets in the event of liquidation. Preference shares usually do not give the holder the right to share in the management of the company. **Ordinary shares** are the residual security possessing the greater risk of loss and the greater potential for gain; they are guaranteed neither dividends nor assets upon dissolution but they generally control the management.

4. The distinction between contributed (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 countries, but in many countries dividends cannot be declared out of contributed (paid-in) capital. Economically, management, shareholders, and others look to earnings for the continued existence and growth of the corporation.

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

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

7. The issuance for cash of no-par value ordinary shares at a price in excess of the stated value of the ordinary shares is accounted for as follows:
   (1) Cash is debited for the proceeds from the issuance of the ordinary shares.
   (2) Share Capital—Ordinary is credited for the stated value of the ordinary shares.
   (3) Share Premium—Ordinary is credited for the excess of the proceeds from the issuance of the ordinary shares over their 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 value or other sound basis for determining relative value is available for each class of security. In instances where the fair 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 shares are issued for services or property other than cash is that companies should record the shares issued at the fair value of the goods or services received, unless that fair value cannot be measured reliably. If the fair value of the goods or services cannot be measured reliably, use the fair value of the shares issued. If a company cannot readily determine either the fair value of the shares it issues or the property or services it receives, it should employ an appropriate valuation technique. Depending on available data, the valuation may be based on market transactions involving comparable assets or the use of discounted expected future cash flows. Companies should avoid the use of the book, par, or stated values as a basis of valuation for these transactions.

10. The direct costs of issuing shares, 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 Share Premium 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 shares for employee compensation contracts, (4) to thwart takeover attempts or to reduce the number of shareholders, (5) to make a market in the company's shares.

12. (a) Treasury shares should not be classified as an asset since a corporation cannot own itself.

    (b) The "gain" or "loss" on sale of treasury shares should not be treated as additions to or deductions from income. If treasury shares are carried in the accounts at cost, these so-called gains or losses arise when the treasury shares are sold. These "gains" or "losses" should be considered as additions to or reductions of equity. In some instances, the "loss" should be charged to Retained Earnings. "Gains" or "losses" arising from treasury shares transactions are not included as a component of net income since dealings in treasury shares represent equity transactions.

    (c) Dividends on treasury shares should never be included as income, but should be credited directly to Retained Earnings, against which they were incorrectly charged. Since treasury shares cannot be considered an asset, dividends on treasury shares are not properly included in net income.

13. The character of preference shares can be altered by being cumulative or non-cumulative, participating (fully or partially) or non-participating, convertible or non-convertible, and/or callable or non-callable.

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 ordinary shares in dividends up to a certain stated rate or amount. A fully participating security shares pro rata with the ordinary shares dividends declared without limitation. In this case, Kim Inc. has fully participating preference shares. Cumulative means dividends not paid in any year must be made up in a later year before any profits can be distributed to ordinary shareholders. Any dividends not paid on cumulative preference shares constitute a dividend in arrears. A dividend in arrears is not a liability until the board of directors declares a dividend.

15. Preference shares are generally reported at par value as the first item in the equity section of a company's statement of financial position. Any excess over par value is reported as share premium-preference.

16. Elements of equity include (1) share capital, (2) share premium, (3) retained earnings, (4) accumulated other comprehensive income, and reduced by (5) treasury shares.

17. When treasury shares are purchased, the Treasury Shares account is debited and Cash is credited at **cost** (€290,000 in this case). Treasury Shares is a contra 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 retained earnings, and (d) decreases total equity.

18. The answers are summarized in the table below:

	Account	Classification
(a)	Share Capital—Ordinary	Share capital
(b)	Retained Earnings	Retained earnings
(c)	Share Premium—Ordinary	Share premium
(d)	Treasury Shares	Deducted in the equity section
(e)	Share Premium—Treasury	Share premium
(f)	Accumulated Other Comprehensive Income	Added in the equity section
(g)	Share Capital—Preference	Share capital

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) Dividends in some jurisdictions may not reduce retained earnings below the cost of treasury shares held.

In addition, in some jurisdictions, share premium may be used for dividends, although such dividends may be limited to preference shares. Generally, deficits in retained earnings and debits in contributed (paid-in) capital accounts must be restored before payment of any dividends.

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. Cash dividends are paid out of 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 **share dividend** is the issuance of additional shares in a nonreciprocal exchange involving existing shareholders with no change in the par or stated value.

23. A **share dividend** results in the transfer from retained earnings to share capital equal to the par value of each share. No formal journal entries are required for a **share 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 share split differs from a share dividend in the amount of retained earnings to be capitalized. A share dividend involves capitalizing (charging) retained earnings equal to the par value of the shares distributed.

Another distinction between a share dividend and a share split is that a share dividend usually involves distributing additional shares of the same class with the same par or stated value. A share split usually involves distributing additional shares of the same class 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 share split.

(b) A declared but unissued share dividend should be classified as part of equity rather than as a liability in a statement of financial position. A share dividend affects only equity accounts; that is, retained earnings is decreased and share capital is increased. Thus, there is no debt to be paid, and, consequently, there is no severance of corporate assets when a share dividend is issued. Furthermore, share 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 Share Premium. The portion of dividends that is a return of capital should be debited to Share Premium.

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 shareholder 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 of retained earnings are best disclosed in a note to the financial statements. This allows a more complete explanation of the restriction.

29. No, Mary should not make that conclusion. While IFRS allows unrealized losses on non-trading equity investments to be reported under "Reserves", U.S. GAAP requires these losses to be reported as other comprehensive income. Specifically, unrealized losses are reported in the Accumulated Other Comprehensive Income (Loss) account under U.S. GAAP.

30. **Key similarities** between IFRS and U.S. GAAP for transactions related to equity pertain to (1) issuance of shares, (2) purchase of treasury shares, (3) declaration and payment of dividends, (4), the costs associated with issuing shares reduce the proceeds from the issuance and reduce contributed (paid-in) capital, and (5) the accounting for par, no par and no par shares with a stated value.

Major differences relate to terminology used, introduction of items such as revaluation surplus, and presentation of stockholder equity information. In addition, the accounting for treasury stock retirements differs between IFRS and U.S. GAAP. Under U.S. GAAP a company has the option of charging the excess of the cost of treasury stock over par value to (1) retained earnings, (2) allocate the difference between paid-in capital and retained earnings, or (3) charge the entire amount to paid-in capital. Under IFRS, the excess may have to be charged to paid-in capital, depending on the original transaction related to the issuance of the shares. Under U.S. GAAP, small share dividends (less than 20–25%) are accounted for using the fair value of shares issued in determing the transfer from retained earnings. An IFRS/U.S. GAAP difference relates to the account Revaluation Surplus. Revaluation surplus arises under IFRS because of increases or decreases in property, plant and equipment, mineral resources, and intangible assets. This account is part of general reserves under IFRS and is not considered contributed capital.

31. It is likely that the statement of stockholders' equity and its presentation will be examined closely in the financial statement presentation project. In addition the options of how to present other comprehensive income under U.S. GAAP will change in any converged standard in this area.

***32.**

(a)

	Preference	Ordinary	Total
Current year's dividend, 7%	$ 7,000	$21,000[a]	$28,000
Participating dividend of 9%	9,000	27,000	36,000
Totals	$16,000	$48,000	$64,000

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

The participating dividend was determined as follows:

Current year's dividend:		
Preference, 7% of $100,000 = $ 7,000		
Ordinary, 7% of $300,000 = 21,000		$28,000
Amount available for participation ($64,000 – $28,000)		$36,000
Par value of shares that are to participate ($100,000 + $300,000)		$400,000
Rate of participation ($36,000 ÷ $400,000)		9%
Participating dividend:		
Preference, 9% of $100,000		$ 9,000
Ordinary, 9% of $300,000		27,000
Dividends		$36,000

(b)

	Preference	Ordinary	Total
Dividends in arrears, 7% of $100,000	$ 7,000		$ 7,000
Current year's dividend, 7%	7,000	$21,000	28,000
Participating dividend 7.25% ($29,000 ÷ $400,000)*	7,250	21,750	29,000
Totals	$21,250	$42,750	$64,000

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

(c)

	Preference	Ordinary	Total
Dividends in arrears ($100,000 X 7%) – $5,000	$2,000		$ 2,000
Current year's dividend, 7%	7,000		7,000
Remainder to common		$21,000	21,000
Totals	$9,000	$21,000	$30,000

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 15-1

Cash	4,500	
Share Capital—Ordinary (300 X €10)		3,000
Share Premium—Ordinary		1,500

BRIEF EXERCISE 15-2

(a)	Cash	8,200	
	Share Capital—Ordinary		8,200
(b)	Cash	8,200	
	Share Capital—Ordinary (600 X €2)		1,200
	Share Premium—Ordinary		7,000

BRIEF EXERCISE 15-3

WILCO CORPORATION
Equity
December 31, 2015

Share capital—ordinary, €5 par value	€ 510,000
Share premium—ordinary	1,320,000
Retained earnings	2,340,000
Less: Treasury shares	90,000
Total equity	€4,080,000

BRIEF EXERCISE 15-4

Cash	13,500	
Share Capital—Preference (100 X $50)		5,000
Share Premium—Preference		3,100
Share Capital—Ordinary (300 X $10)		3,000
Share Premium—Ordinary		2,400

FV of ordinary (300 X $20)	$ 6,000
FV of preference (100 X $90)	9,000
Total FV	$15,000

BRIEF EXERCISE 15-4 (Continued)

Allocated to ordinary $\frac{\$6,000}{\$15,000}$ X \$13,500 = \$ 5,400

Allocated to preference $\frac{\$9,000}{\$15,000}$ X \$13,500 = 8,100

\$13,500

BRIEF EXERCISE 15-5

Land	31,000	
Share Capital—Ordinary (3,000 X £5)		15,000
Share Premium—Ordinary		16,000

BRIEF EXERCISE 15-6

Cash (\$60,000 – \$1,500)	58,500	
Share Capital—Ordinary (2,000 X \$10)		20,000
Share Premium—Ordinary		38,500

BRIEF EXERCISE 15-7

7/1/15	Treasury Shares (100 X €87)	8,700	
	Cash		8,700
9/1/15	Cash (60 X €90)	5,400	
	Treasury Shares (60 X €87)		5,220
	Share Premium—Treasury		180
11/1/15	Cash (40 X €83)	3,320	
	Share Premium—Treasury	160	
	Treasury Shares (40 X €87)		3,480

BRIEF EXERCISE 15-8

8/1/15	Treasury Shares (200 X R$80)	16,000	
	Cash		16,000
11/1/15	Cash (200 X R$70)	14,000	
	Retained Earnings	2,000	
	Treasury Shares		16,000

BRIEF EXERCISE 15-9

Cash	61,500	
Share Capital—Preference (500 X €100)		50,000
Share Premium—Preference		11,500

BRIEF EXERCISE 15-10

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

BRIEF EXERCISE 15-11

Sep. 21	Equity Investments	325,000	
	Unrealized Holding Gain or Loss— Income (R$1,200,000 – R$875,000) ...		325,000
	Retained Earnings (Property Dividends Declared)	1,200,000	
	Property Dividends Payable		1,200,000
Oct. 8	No entry.		
Oct. 23	Property Dividends Payable	1,200,000	
	Equity Investments		1,200,000

BRIEF EXERCISE 15-12

Apr. 20	Retained Earnings		
	(¥500,000,000 – ¥125,000,000)	375,000,000	
	Share Premium—Ordinary	125,000,000	
	Dividends Payable		500,000,000
June 1	Dividends Payable	500,000,000	
	Cash		500,000,000

BRIEF EXERCISE 15-13

<u>Declaration Date.</u>

Retained Earnings	200,000	
Ordinary Share Dividend Distributable		
([400,000 X 5%] X $10)		200,000

<u>Distribution Date.</u>

Ordinary Share Dividend Distributable	200,000	
Share Capital—Ordinary		200,000

BRIEF EXERCISE 15-14

<u>Declaration Date.</u>

Retained Earnings	4,000,000	
Ordinary Share Dividend Distributable		
(400,000 X $10)		4,000,000

<u>Distribution Date.</u>

Ordinary Share Dividend Distributable	4,000,000	
Share Capital—Ordinary		4,000,000

***BRIEF EXERCISE 15-15**

(a) Preference shareholders would receive €60,000 (6% X €1,000,000) and the remainder of €240,000 (€300,000 – €60,000) would be distributed to ordinary shareholders.

(b) Preference shareholders would receive €180,000 (6% X €1,000,000 X 3) and the remainder of €120,000 would be distributed to the ordinary shareholders.

SOLUTIONS TO EXERCISES

EXERCISE 15-1 (15–20 minutes)

(a)	Jan.	10	Cash (80,000 X €6)	480,000	
			Share Capital—Ordinary		
			(80,000 X €3)		240,000
			Share Premium—Ordinary		240,000
	Mar.	1	Organization Expense	35,000	
			Share Capital—Ordinary		
			(5,000 X €3)		15,000
			Share Premium—Ordinary		20,000
	July	1	Cash (30,000 X €8)	240,000	
			Share Capital—Ordinary		
			(30,000 X €3)		90,000
			Share Premium—Ordinary		
			(30,000 X €5)		150,000
	Sept.	1	Cash (60,000 X €10)	600,000	
			Share Capital—Ordinary		
			(60,000 X €3)		180,000
			Share Premium—Ordinary		
			(60,000 X €7)		420,000

(b) If the shares have a stated value of €2 per share, the entries in (a) would be the same except for the euro amounts. For example, the Jan. 10 entry would include credits of €160,000 to Share Capital—Ordinary and €320,000 to Share Premium—Ordinary.

EXERCISE 15-2 (15–20 minutes)

Jan. 10	Cash (80,000 X $5)	400,000	
	Share Capital—Ordinary (80,000 X $2)		160,000
	Share Premium—Ordinary (80,000 X $3)		240,000
Mar. 1	Cash (5,000 X $108)	540,000	
	Share Capital—Preference (5,000 X $50)		250,000
	Share Premium—Preference (5,000 X $58)		290,000
April 1	Land	80,000	
	Share Capital—Ordinary (24,000 X $2)		48,000
	Share Premium—Ordinary ($80,000 – $48,000)		32,000
May 1	Cash (80,000 X $7)	560,000	
	Share Capital—Ordinary (80,000 X $2)		160,000
	Share Premium—Ordinary (80,000 X $5)		400,000
Aug. 1	Organization Expense	50,000	
	Share Capital—Ordinary (10,000 X $2)		20,000
	Share Premium—Ordinary ($50,000 – $20,000)		30,000
Sept. 1	Cash (10,000 X $9)	90,000	
	Share Capital—Ordinary (10,000 X $2)		20,000
	Share Premium—Ordinary (10,000 X $7)		70,000
Nov. 1	Cash (1,000 X $112)	112,000	
	Share Capital—Preference (1,000 X $50)		50,000
	Share Premium—Preference (1,000 X $62)		62,000

EXERCISE 15-3 (10–15 minutes)

(a)	Land (£60 X 25,000)	1,500,000	
	Treasury Shares (£48 X 25,000)		1,200,000
	Share Premium—Treasury		300,000

(b) One might use the cost of treasury shares. 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 shares is probably the best measure of fair value in this transaction.

EXERCISE 15-4 (20–25 minutes)

(a) (1)	Cash (CHF850 X 9,600)	8,160,000	
	Bonds Payable (CHF5,000,000 – CHF200,000*)		4,800,000
	Share Capital—Ordinary (100,000 X CHF5)		500,000
	Share Premium—Ordinary		2,860,000

*[CHF340,000 (CHF850 X 400) X CHF500/CHF850]

Assumes bonds are properly priced and issued at par; the residual attributed to share capital has a questionable measure of fair value.

Incremental method

Lump-sum receipt (9,600 X CHF850)	CHF8,160,000
Less: Allocated to subordinated debenture (9,600 X CHF500)	4,800,000
Balance allocated to ordinary shares	CHF3,360,000

Computation of share capital and share premium

Balance allocated to ordinary shares	CHF3,360,000
Less: Share capital (10,000 X CHF5 X 10)	500,000
Share premium	CHF2,860,000

EXERCISE 15-4 (Continued)

Bond issue cost allocation

Total issue cost (400 X CHF850)	CHF	340,000
Less: Amount allocated to bonds		200,000
Amount allocated to ordinary shares	CHF	140,000

Investment banking costs 400 @ CHF850 = CHF340,000 allocate 5/8.5 to debentures and 3.5/8.5 to ordinary shares. Bond portion is bond issue costs; share capital portion is a reduction of share premium, which means that total contributed (paid-in) capital is CHF3,360,000 (CHF3,500,000 – CHF140,000).

(2)

Cash	8,160,000	
Bonds Payable		4,533,333
Share Capital—Ordinary (100,000 X CHF5)		500,000
Share Premium—Ordinary		3,126,667

The allocation based on fair value for one unit is

Subordinated debenture	CHF500
Ordinary shares (10 shares X CHF 40)	400
Total fair value	CHF900

Therefore 5/9 is allocated to the bonds and 4/9 to the ordinary shares.

CHF8,500,000 X (5/9)	= CHF4,722,222	To Debentures
CHF8,500,000 X (4/9)	= CHF3,777,778	To Ordinary Shares
CHF340,000 X (5/9)	= CHF188,889	
CHF340,000 X (4/9)	= CHF151,111	
Share Premium	= CHF3,777,778 – CHF500,000 – CHF151,111	
	= CHF3,126,667	

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

EXERCISE 15-5 (10–15 minutes)

(a)	Fair value of Ordinary Shares (500 X €168)..........		€ 84,000
	Fair value of Preference Shares (100 X €210)......		21,000
			€105,000
	Allocated to Ordinary Shares:		
	€84,000/€105,000 X €100,000............................		€ 80,000
	Allocated to Preference Shares:		
	€21,000/€105,000 X €100,000............................		20,000
	Total allocation		€100,000
	Cash..	100,000	
	Share Capital—Ordinary (500 X €10).............		5,000
	Share Premium—Ordinary (€80,000 – €5,000)		75,000
	Share Capital—Preference (100 X €100)		10,000
	Share Premium—Preference (€20,000 – €10,000).......................................		10,000
(b)	Lump-sum receipt		€100,000
	Allocated to ordinary (500 X €170)		(85,000)
	Balance allocated to preference		€ 15,000
	Cash..	100,000	
	Share Capital—Ordinary		5,000
	Share Premium—Ordinary (€85,000 – €5,000)		80,000
	Share Capital—Preference.............................		10,000
	Share Premium—Preference (€15,000 – €10,000).......................................		5,000

EXERCISE 15-6 (25–30 minutes)

(a)	Cash [(5,000 X $45) – $7,000]	218,000	
	Share Capital—Ordinary (5,000 X $10)............		50,000
	Share Premium—Ordinary................................		168,000

EXERCISE 15-6 (Continued)

(b) Land (1,000 X $46) 46,000
Share Capital—Ordinary (1,000 X $10) 10,000
Share Premium—Ordinary
($46,000 – $10,000).. 36,000

<u>Note</u>: The fair value of the shares ($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 Shares (500 X $44)................................... 22,000
Cash 22,000

EXERCISE 15-7 (15–20 minutes)

#	Assets	Liabilities	Equity	Share Premium	Retained Earnings	Net Income
1.	D	NE	D	NE	NE	NE
2.	I	NE	I	NE	D	NE
3.	I	NE	I	I	NE	NE

EXERCISE 15-8 (15–20 minutes)

(a) $1,000,000 X 6% = $60,000; $60,000 X 3 = $180,000. The cumulative dividend is disclosed in a note to the equity section; it is <u>not</u> reported as a liability.

(b) Share Capital—Preference (3,000 X $100) 300,000
Share Capital—Ordinary (3,000 X 7 X $10)...... 210,000
Share Premium—Ordinary 90,000

(c) Preference Shares, $100 par 6%,
10,000 shares issued.. $1,000,000
Share Premium—Preference (10,000 X $7)............. 70,000

EXERCISE 15-9 (15–20 minutes)

May	2	Cash	192,000	
		Share Capital—Ordinary (12,000 X £10)		120,000
		Share Premium—Ordinary (12,000 X £6)		72,000
	10	Cash	600,000	
		Share Capital—Preference (10,000 X £30)		300,000
		Share Premium—Preference (10,000 X £30)		300,000
	15	Treasury Shares	14,000	
		Cash		14,000
	31	Cash	8,500	
		Treasury Shares (500 X £14)		7,000
		Share Premium—Treasury (500 X £3)		1,500

EXERCISE 15-10 (20–25 minutes)

(a) (1) The par value is HK$2.50. This amount is obtained from either of the following: 2016—HK$545 ÷ 218 or 2015—HK$540 ÷ 216.

(2) The cost of treasury shares was higher in 2016. The cost at December 31, 2016 was HK$42 per share (HK$1,428 ÷ 34) compared to the cost at December 31, 2015 of HK$34 per share (HK$918 ÷ 27).

(b) Equity (in millions of HK$)

Share capital—ordinary, HK$2.50 par value, 500,000,000 shares authorized, 218,000,000 shares issued, and 184,000,000 shares outstanding	HK$ 545
Share premium—ordinary	891
Retained earnings	7,167
Less: Cost of treasury shares (34,000,000 shares)	1,428
Total equity	HK$7,175

EXERCISE 15-11 (15–20 minutes)

Item	Assets	Liabilities	Equity	Share Premium	Retained Earnings	Net Income
1.	I	NE	I	NE	I	I
2.	NE	NE	NE	NE	NE	NE
3.	NE	I	D	NE	D	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	NE	D	NE
9.	NE	NE	NE	NE	NE	NE

EXERCISE 15-12 (10–15 minutes)

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

(b) If this were a liquidating dividend, the debit entry on the date of declaration would be to Share Premium 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 10 million and par value has been reduced from ₺10 to ₺5 per share.

(b)	Retained Earnings (₺10 X 5,000,000)	50,000,000	
	Ordinary Share Dividend Distributable		50,000,000
	Ordinary Share Dividend Distributable	50,000,000	
	Share Capital—Ordinary		50,000,000

EXERCISE 15-13 (Continued)

(c) Share 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 issued and reduce share prices into a desired "trading range."

EXERCISE 15-14 (10–12 minutes)

(a)	Retained Earnings (10,000 X €10)	100,000	
	Ordinary Share Dividend Distributable		100,000
	Ordinary Share Dividend Distributable	100,000	
	Share Capital—Ordinary		100,000
(b)	Retained Earnings (200,000 X €10)	2,000,000	
	Ordinary Share Dividend Distributable		2,000,000
	Ordinary Share Dividend Distributable	2,000,000	
	Share Capital—Ordinary		2,000,000

(c) No entry, the par value becomes €5 and the number of shares outstanding increases to 400,000.

EXERCISE 15-15 (10–15 minutes)

(a)	Retained Earnings	30,000	
	Ordinary Share Dividend Distributable		30,000
	(60,000 shares X 5% X R$10 = R$30,000)		
	Ordinary Share Dividend Distributable	30,000	
	Share Capital—Ordinary		30,000

(b) No entry; memorandum to indicate that par value is reduced to R$2 and shares outstanding are now 300,000 (60,000 X 5).

EXERCISE 15-15 (Continued)

(c)

	January 5, 2016		
	Debt Investments (R$ 125,000 – R$90,000)	35,000	
	Unrealized Holding Gain or Loss—Income		35,000
	Retained Earnings	125,000	
	Property Dividends Payable		125,000
	January 25, 2016		
	Property Dividends Payable	125,000	
	Debt Investments		125,000

EXERCISE 15-16 (5–10 minutes)

Total income since incorporation		₩287,000
Less: Total cash dividends paid	₩60,000	
Total value of share dividends	40,000	100,000
Current balance of retained earnings		₩187,000

The accumulated other comprehensive income is shown as part of equity; the gains on treasury share transactions are recorded as share premium—treasury.

EXERCISE 15-17 (20–25 minutes)

TELLER CORPORATION
Partial Statement of Financial Position
December 31, 2015

Equity		
Share capital—preference, €4 cumulative, par value €50 per share; authorized 60,000 shares, issued and outstanding 10,000 shares	€ 500,000	
Share capital—ordinary, par value €1 per share; authorized 600,000 shares, issued 200,000 shares, and outstanding 190,000 shares	200,000	€ 700,000
Share premium—ordinary	1,000,000	
Share premium—treasury	160,000	1,160,000
Retained earnings		201,000
Treasury shares, 10,000 shares at cost		(170,000)
Total equity		€1,891,000

EXERCISE 15-18 (30–35 minutes)

(a)	1.	Dividends Payable—Preference (2,000 X $8)	16,000	
		Dividends Payable—Ordinary (20,000 X $2)	40,000	
		Cash		56,000
	2.	Treasury Shares	108,000	
		Cash (2,700 X $40)		108,000
	3.	Land	30,000	
		Treasury Shares (700 X $40)		28,000
		Share Premium—Treasury		2,000
	4.	Cash (500 X $105)	52,500	
		Share Capital—Preference (500 X $100)		50,000
		Share Premium—Preference		2,500

		Dr.	Cr.
5.	Retained Earnings (1,800* X $5)	9,000	
	Ordinary Share Dividend Distributable (1,800 X $5)		9,000
	*(20,000 – 2,700 + 700 = 18,000; 18,000 X 10%)		
6.	Ordinary Share Dividend Distributable	9,000	
	Share Capital—Ordinary		9,000
7.	Retained Earnings	59,600	
	Dividends Payable—Preference (2,500 X $8)		20,000
	Dividends Payable—Ordinary (19,800* X $2)		39,600
	*(18,000 + 1,800)		

(b)

ELIZABETH COMPANY
Partial Statement of Financial Position
December 31, 2016

Equity		
Share capital—preference, 8%, $100 par, 10,000 shares authorized, 2,500 shares issued and outstanding	$250,000	
Share capital—ordinary, $5 par, 100,000 shares authorized, 21,800 shares issued, 19,800 shares outstanding	109,000	$ 359,000
Share premium—preference		127,500
Share premium—treasury		2,000
Retained earnings		711,400
Less: Treasury shares (2,000 ordinary shares)		80,000
Total equity		$1,119,900

EXERCISE 15-18 (Continued)

Computations:

Preference shares	**$200,000 + $50,000 = $250,000**	
Ordinary shares	**$100,000 + $ 9,000 = $109,000**	
Share premium:	**$125,000 + $ 2,000 + $2,500**	**= $129,500**

Retained earnings: $450,000 – $9,000 – $59,600 + $330,000 = $711,400

Treasury shares $108,000 – $28,000 = $80,000

EXERCISE 15-19 (20–25 minutes)

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

Wilder Company $\frac{£720{,}000}{£4{,}200{,}000} = 17.14\%$

Ingalls Company $\frac{£648{,}000}{£4{,}200{,}000} = 15.43\%$

Note to Instructor: These returns are based on net income related to total assets, where the ending amount of total assets is considered representative. If the 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:

Wilder Company $\frac{£720{,}000}{£4{,}200{,}000} = 17.14\%$

Ingalls Company $\frac{£648{,}000 + £120{,}000 – £48{,}000}{£4{,}200{,}000} = \frac{£720{,}000}{£4{,}200{,}000}$

$= 17.14\%$

EXERCISE 15-19 (Continued)

(b) Ingalls Company is the more profitable in terms of return on ordinary share equity. This may be shown as follows:

Ingalls Company $\dfrac{£648,000}{£2,700,000} = 24\%$

Wilder Company $\dfrac{£720,000}{£3,600,000} = 20\%$

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

Ingalls Company

Funds Supplied	Funds Supplied	Rate of Return on Funds at 17.14%*	Cost of Funds	Accruing to Ordinary Shares
Non-current	£1,200,000	£205,680	£72,000*	£133,680
Current liabilities	300,000	51,420	0	51,420
Share capital	2,000,000	342,800	0	342,800
Retained earnings	700,000	119,980	0	119,980
	£4,200,000	£719,880	£72,000	£647,880

***Determined in part (a), 17.14%**

****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 (40%) related to the interest.**

The schedule indicates that the income earned on the total assets (before interest cost) was £719,880. The interest cost (net of tax) of this income was £72,000, which indicates a net return to the ordinary share equity of £647,880.

(c) The Ingalls Company earned a net income per share of £6.48 (£648,000 ÷ 100,000) while Wilder Company had an income per share of £4.97 (£720,000 ÷ 145,000). Ingalls 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 shareholders and has resulted in the higher income per share. Due to the debt financing, Ingalls has fewer shares outstanding.

EXERCISE 15-19 (Continued)

(d) Yes, from the point of view of net income it is advantageous for the shareholders of Ingalls Company to have non-current liabilities outstanding. The assets obtained from incurrence of this debt are earning a higher return than their cost to Ingalls Company.

(e) Book value per share.

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

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

EXERCISE 15-20 (15 minutes)

(a) Rate of return on ordinary share equity:

$$\frac{€213,718}{€875,000 + €575,000} = \frac{€213,718}{€1,450,000} = 14.7\%$$

Rate of interest paid on bonds payable: $\dfrac{€135,000}{€1,500,000} = 9\%$

(b) DeVries Plastics, Inc. is trading on the equity successfully, since its return on ordinary share equity is greater than interest paid on bonds.

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

***EXERCISE 15-21 (10–15 minutes)**

	Preference	Ordinary	Total
(a) Preference shares are non-cumulative, non-participating (2,000 X $100 X 6%)	$12,000		
Remainder ($70,000 – $12,000)		$58,000	$70,000
(b) Preference shares are cumulative, non-participating ($12,000 X 3)	$36,000		
Remainder ($70,000 – $36,000)		$34,000	$70,000

*EXERCISE 15-21 (Continued)

	Preference	Ordinary	Total
(c) Preference shares are cumulative, participating	$44,444	$25,556	$70,000

The computation for these amounts is as follows:

	Preference	Ordinary	Total
Dividends in arrears (2 X $12,000)	$24,000		$24,000
Current dividend	12,000		12,000
Pro-rata share to ordinary (5,000 X $50 X 6%)		$15,000	15,000
Balance dividend pro-rata	8,444	10,556	19,000*
	$44,444	$25,556	$70,000

*Additional amount available for participation ($70,000 – $24,000 – $12,000 – $15,000)		19,000
Par value of shares that are to participate		
Preference (2,000 X $100)	$200,000	
Ordinary (5,000 X $50)	250,000	450,000
Rate of participation $19,000 ÷ $450,000		4.2222%
Participating dividend		
Preference, 4.2222% X $200,000		$ 8,444
Ordinary, 4.2222% X $250,000		10,556
		$19,000

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

Preference $\frac{\$200,000}{\$450,000} \times \$19,000$ $ 8,444

Ordinary $\frac{\$250,000}{\$450,000} \times \$19,000$ 10,556

$19,000

***EXERCISE 15-22 (10–15 minutes)**

(a)

	Preference	Ordinary	Total
Preference shares are cumulative and fully participating	€26,000	€240,000	€266,000

The computation for these amounts is as follows:

	Preference	Ordinary	Total
Dividends in arrears			
(5% X €10 X 20,000)	€10,000		€ 10,000
Current dividend			
Preference	10,000		
Ordinary (5% X €100 X 30,000)		€150,000	160,000
Balance dividend pro-rata	6,000	90,000	96,000*
	€26,000	€240,000	€266,000

***Additional amount available for participation**	
(€266,000 – €10,000 – €160,000)	€ 96,000
Par value of shares that are to participate	
(€200,000 + €3,000,000)	€3,200,000
Rate of participation	
€96,000 ÷ €3,200,000	3%
Participating dividend	
Preference, 3% X €200,000	€ 6,000
Ordinary, 3% X €3,000,000	90,000
	€ 96,000

<u>Note to instructor</u>: Another way to compute the participating amount is as follows:

Preference $\dfrac{€200{,}000}{€3{,}200{,}000}$ X €96,000 € 6,000

Ordinary $\dfrac{€3{,}000{,}000}{€3{,}200{,}000}$ X €96,000 90,000

€ 96,000

*EXERCISE 15-22 (Continued)

(b)

	Preference	Ordinary	Total
Preference shares are non-cumulative and non-participating	€10,000	€256,000	€266,000

The computation for these amounts is as follows:

Current dividend (preferred)	
(5% X €10 X 20,000)	€ 10,000
Remainder to ordinary	
(€266,000 – €10,000)	256,000
	€266,000

(c)

	Preference	Ordinary	Total
Preference shares are non-cumulative and participating in distributions in excess of 7%	€12,875	€253,125	€266,000

The computation for these amounts is as follows:

	Preference	Ordinary	Total
Current year			
Preference (5% X €10 X 20,000)	€10,000		€ 10,000
Ordinary (5% X €3,000,000)		€150,000	150,000
Additional 2% to ordinary			
(2% X €3,000,000)		60,000	60,000
Balance dividend pro-rata	2,875	43,125	46,000*
	€12,875	€253,125	€266,000

*Additional amount available for participation		
(€266,000 – €10,000 – €150,000 – €60,000)		€ 46,000
Par value of shares that are to participate		
(€200,000 + €3,000,000)		€3,200,000
Rate of participation		
€46,000 ÷ €3,200,000		1.4375%
Participating dividend		
Preference	1.4375% X €200,000	€ 2,875
Ordinary	1.4375% X €3,000,000	43,125
		€ 46,000

***EXERCISE 15-23 (10–15 minutes)**

Assumptions

		(a) Preference, non-cumulative, and non-participating		(b) Preference, cumulative, and fully participating	
Year	**Paid-out**	**Preference**	**Ordinary**	**Preference**	**Ordinary**
2014	£12,000	£4.80	–0–	£ 4.80	–0–
2015	£26,000	£6.00	£ .73	£ 7.20	£ .53
2016	£52,000	£6.00	£2.47	£13.00	£1.30
2017	£76,000	£6.00	£4.07	£19.00	£1.90

The computations for part (a) are as follows:

2014

Dividends paid	£12,000	
Amount due preference (2,500 X £100 X 6%)	£15,000	
Preference per share (£12,000 ÷ 2,500)		£4.80
Ordinary per share		–0–

2015

Dividends paid	£26,000	
Less: Amount due preference	15,000	
Amount due ordinary	£11,000	
Preference per share (£15,000 ÷ 2,500)		£6.00
Ordinary per share (£11,000 ÷ 15,000)		£ .73

2016

Dividends paid	£52,000	
Less: Amount due preference	15,000	
Amount due ordinary	£37,000	
Preference per share (£15,000 ÷ 2,500)		£6.00
Ordinary per share (£37,000 ÷ 15,000)		£2.47

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

2017

Dividends paid	£76,000	
Less: Amount due preference	15,000	
Amount due ordinary	£61,000	
Preference per share (£15,000 ÷ 2,500)		£6.00
Ordinary per share (£61,000 ÷ 15,000)		£4.07

The computations for part (b) are as follows:

2014

Dividends paid	£12,000	
Amount due preference (2,500 X £100 X 6%)	£15,000	
Preference per share (£12,000 ÷ 2,500)		£4.80
Ordinary per share		–0–

2015

Dividends paid	£26,000	
Less: Amount due preference		
In arrears (£15,000 – £12,000)	3,000	
Current	15,000	
	£18,000	
Amount due ordinary (£26,000 – £18,000)	£ 8,000	
Preference per share (£18,000 ÷ 2,500)		£7.20
Ordinary per share (£8,000 ÷ 15,000)		£ .53

*EXERCISE 15-23 (Continued)

	2016		
Dividends paid		£52,000	
Amount due preference			
Current (2,500 X £100 X 6%)		£15,000	
Amount due ordinary			
Current (15,000 X £10 X 6%)		£ 9,000	
Amount available for participation			
(£52,000 – £15,000 – £9,000)			£ 28,000
Par value of shares that are to participate			
(£250,000 + £150,000)			£400,000
Rate of participation			
£28,000 ÷ £400,000			7%
Participating dividend			
Preference (7% X £250,000)			£ 17,500
Ordinary (7% X £150,000)			£ 10,500
Total amount per share—Preference			
Current	£15,000		
Participation	17,500		
	£32,500 ÷ 2,500		£13.00
Total amount per share—Ordinary			
Current	£ 9,000		
Participation	10,500		
	£19,500 ÷ 15,000		£ 1.30

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

	2017		
Dividends paid		**£76,000**	
Amount due preference			
Current (2,500 X £100 X 6%)		**£15,000**	
Amount due ordinary			
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			
Preference (13% X £250,000)			**£ 32,500**
Ordinary (13% X £150,000)			**£ 19,500**

Total amount per share—Preference

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

Total amount per share—Ordinary

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

*EXERCISE 15-24 (10–15 minutes)

(a)

	Preference	Ordinary
Equity		
Preference shares	$500,000	
Ordinary shares		$ 750,000
Retained earnings		
Dividends in arrears (3 years at 6%)	90,000	
Remainder to ordinary*		310,000
	$590,000	$1,060,000
Shares outstanding		750,000
Book value per share ($1,060,000 ÷ 750,000)		$1.41
*Balance in retained earnings ($700,000 – $40,000 – $260,000)		$ 400,000
Less: Dividends to preference		90,000
Available to ordinary		$ 310,000

(b)

	Ordinary	Preference
Equity		
Preference share	$ 500,000	
Liquidating premium	30,000	
Ordinary shares		$ 750,000
Retained earnings		
Dividends in arrears (3 years at 6%)	90,000	
Remainder to ordinary*		280,000
	$ 620,000	$1,030,000
Shares outstanding	750,000	
Book value per share ($1,030,000 ÷ 750,000)	$1.37	
*Balance in retained earnings ($700,000 – $40,000 – $260,000)		$400,000
Less: Liquidating premium to preference		30,000
Dividends to preference		90,000
Available to ordinary		$280,000

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 share transactions. This problem involves such concepts as shares sold for cash, noncash stock transactions, and declaration and distribution of share dividends. The student is required to prepare the respective journal entries and the equity section of the statement of financial position 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 shares and its sale at three different prices. In addition, an equity section of the statement of financial position must be prepared.

Problem 15-3 (Time 25–30 minutes)
Purpose—to provide the student with an opportunity to record seven different transactions involving share 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 share transactions. This problem involves such concepts as a lump-sum sale of capital shares and a non-cash share 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. The student is required to record these treasury share 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 share transactions. This problem involves such concepts as the reacquisition, and reissuance of shares; plus a declaration and payment of a cash dividend. The student is required to prepare the respective journal entries and the equity section of the statement of financial position 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 preference and ordinary shares. This problem also involves a dividend arrearage on preference stock, which will be satisfied by the issuance of treasury shares. 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 share dividends and share splits. The student is required to analyze their effect on total assets, share capital—ordinary, share premium—ordinary, retained earnings, and total 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 ordinary and preference shares, and a share dividend, have on the company's equity accounts. The student is required to prepare the equity section of the statement of financial position 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 share dividend and a share 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 share dividend. The student is required to prepare both the necessary journal entries to record cash and share dividends and the equity section of the statement of financial position, including a note to the financial statements setting forth the basis of the accounting for the share dividend.

Problem 15-12 (Time 35–45 minutes)
Purpose—to provide the student a comprehensive problem involving all facets of the equity section. The student must prepare the equity section of the statement of financial position, 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	
Share Capital—Ordinary (20,000 X $10)		200,000
Share Premium—Ordinary		120,000

February 1

Machinery	50,000	
Buildings	160,000	
Land	270,000	
Share Capital—Preference (4,000 X $100)		400,000
Share Premium—Preference		80,000

July 29

Treasury Shares (1,800 X $17)	30,600	
Cash		30,600

August 10

Cash (1,800 X $14)	25,200	
Retained Earnings (1,800 X $3)	5,400*	
Treasury Shares		30,600

*(The debit is made to Retained Earnings because no Share Premium—Treasury exists.)

	December 31		
Retained Earnings		37,000	
Cash Dividend Payable—Ordinary			5,000*
Cash Dividend Payable—Preference			32,000**

*Ordinary Share Cash Dividend:

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

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

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

(b)

PHELPS CORPORATION
Partial Statement of Financial Position
December 31, 2015

Equity		
Share capital—preference— par value $100 per share, 8% cumulative and nonparticipating, 5,000 shares authorized, 4,000 shares issued and outstanding	$400,000	
Share capital—ordinary— par value $10 per share, 50,000 shares authorized, 20,000 shares issued and outstanding	200,000	$600,000
Share premium—preference	80,000	
Share premium—ordinary	120,000	200,000
Retained earnings		133,300*
Total equity		$933,300

*($175,700 – $5,400 – $37,000)

PROBLEM 15-2

(a)

Feb. 1	Treasury Shares (€19 X 2,000)	38,000	
	Cash...		38,000
Mar. 1	Cash (€17 X 800)	13,600	
	Retained Earnings (€2 X 800)................	1,600	
	Treasury Shares (€19 X 800)		15,200
Mar. 18	Cash (€14 X 500)	7,000	
	Retained Earnings (€5 X 500)................	2,500	
	Treasury Shares (€19 X 500)		9,500
Apr. 22	Cash (€20 X 600)	12,000	
	Treasury Shares (€19 X 600)		11,400
	Share Premium—Treasury...........		600

(b)

CLEMSON COMPANY
Partial Statement of Financial Position
April 30, 2015

Equity		
Share capital—ordinary, €5 par value, 20,000 shares issued, 19,900 shares outstanding		€100,000
Share premium—ordinary	€300,000	
Share premium—treasury..............................	600	300,600
Retained earnings*...		445,900
		846,500
Less: Treasury shares (100 shares)**...........		1,900
Total equity...		€844,600

*Retained earnings (beginning balance)	€320,000
March 1 reissuance.......................................	(1,600)
March 18 reissuance.....................................	(2,500)
Net income for period	130,000
Retained earnings (ending balance).............	€445,900

**Treasury shares (beginning balance)	€ 0
February 1 purchase (2,000 shares)	38,000
March 1 sale (800 shares)..............................	(15,200)
March 18 sale (500 shares)...........................	(9,500)
April 12 sale (600 shares)	(11,400)
Treasury shares (ending balance)	€ 1,900

PROBLEM 15-3

HATCH COMPANY
Partial Statement of Financial Position
December 31, 2015

Equity		
Share capital—preference, £20 par, 8%, 180,000 shares issued and outstanding	£ 3,600,000	
Share capital—ordinary, £2.50 par, 4,100,000 shares issued, 4,080,000 shares outstanding	10,250,000	£13,850,000
Share premium—preference	260,000	
Share premium—ordinary	27,750,000	
Share premium—treasury	10,000	28,020,000
Retained earnings		4,272,000
Less: Treasury shares (20,000 ordinary shares)		200,000
Total equity		£45,942,000

Supporting balances are indicated in the following T-Accounts.

Share Capital—Preference

	Bal.	3,000,000
	1.	600,000
		3,600,000

Share Premium—Ordinary

	Bal.	27,000,000
	4.	750,000
		27,750,000

PROBLEM 15-3 (Continued)

Share Capital—Ordinary

		Bal.	10,000,000
		3.	250,000
			10,250,000

Retained Earnings

		Bal.	4,500,000
8.	288,000	10.	2,100,000
9.	2,040,000		
			4,272,000

Share Premium—Preference

		Bal.	200,000
		2.	60,000
			260,000

Treasury Shares

5.	300,000	6.	100,000
	200,000		

Share Premium—Treasury

		7.	10,000
			10,000

1.	Jan.	1	30,000 X £20
2.	Jan.	1	30,000 X £2
3.	Feb.	1	50,000 X £5
4.	Feb.	1	50,000 X £15
5.	July	1	30,000 X £10
6.	Sept.	15	10,000 X £10
7.	Sept.	15	10,000 X £1
8.	Dec.	31	£3,600,000 X 8%
9.	Dec.	31	4,080,000* X 50 pence
10.	Dec.	31	Net income

*[(2,000,000 + 50,000) X 2] – 30,000 + 10,000

PROBLEM 15-4

-1-

Cash	10,000	
Bonds Payable		9,894
Share Capital—Preference		50
Share Premium—Preference (€106 – €50)		56

-2-

Machinery (500 X €16)	8,000	
Share Capital—Ordinary		5,000
Share Premium—Ordinary		3,000

(Assuming the shares are regularly traded, the value of the shares would be used.) If the shares are not regularly traded, the machinery would be recorded at its estimated fair value.

-3-

Cash	10,800	
Share Capital—Preference		5,000
Share Premium—Preference (€5,974 – €5,000)		974
Share Capital—Ordinary		3,750
Share Premium—Ordinary (€4,826 – €3,750)		1,076

Fair value of ordinary (375 X €14)	€ 5,250
Fair value of preference (100 X €65)	6,500
Aggregate	€11,750

Allocated to ordinary: $\frac{€5,250}{€11,750}$ X €10,800 = € 4,826

Allocated to preference: $\frac{€6,500}{€11,750}$ X €10,800 = 5,974

Total allocated €10,800

PROBLEM 15-4 (Continued)

-4-

Furniture and Fixtures	**6,500**	
Share Capital—Preference......................................		**2,500**
Share Premium—Preference (€3,300 – €2,500)........		**800**
Share Capital—Ordinary		**2,000**
Share Premium—Ordinary (€3,200 – €2,000)		**1,200**

Fair value of furniture and equipment	**€6,500**
Less: Fair value of ordinary shares (200 X €16)	**3,200**
Total value assigned to preference shares	**€3,300**

PROBLEM 15-5

(a)	Treasury Shares (380 X £40)................................	15,200	
	Cash		15,200
(b)	Treasury Shares (300 X £45)................................	13,500	
	Cash		13,500
(c)	Cash (350 X £42)...	14,700	
	Treasury Shares (350 X £40)........................		14,000
	Share Premium—Treasury (350 X £2)		700
(d)	Cash (110 X £38)...	4,180	
	Share Premium—Treasury	620	
	Treasury Shares		4,800*

*30 shares purchased at £40 = £1,200
80 shares purchased at £45 = 3,600
Cost of treasury shares sold using FIFO = £4,800

PROBLEM 15-6

(a)

-1-

Treasury Shares (280 X $97)	27,160	
Cash		27,160

-2-

Retained Earnings	90,400	
Dividends Payable [(4,800 – 280) X $20 = $90,400]		90,400

-3-

Dividends Payable	90,400	
Cash		90,400

-4-

Cash (280 X $102)	28,560	
Treasury Shares		27,160
Share Premium—Treasury (280 X $5)		1,400

-5-

Treasury Shares (500 X $105)	52,500	
Cash		52,500

-6-

Cash (350 X $96)	33,600	
Share Premium—Treasury	1,400	
Retained Earnings	1,750	
Treasury Shares (350 X $105)		36,750

PROBLEM 15-6 (Continued)

(b)

WASHINGTON COMPANY
Partial Statement of Financial Position
December 31, 2016

Equity	
Share capital—ordinary, $100 par value, authorized 8,000 shares; issued 4,800 shares, 4,650 shares outstanding	$480,000
Retained earnings (restricted in the amount of $15,750 by the acquisition of treasury shares)	295,850*
Less: Treasury shares (150 shares)	15,750**
Total equity	$760,100

*($294,000 – $90,400 + $94,000 – $1,750)

**($52,500 – $36,750)

PROBLEM 15-7

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

Retained Earnings...	18,000	
Treasury Shares......................................		18,000*

*1,500 treasury shares issued as dividend
1,500 X R$12 (R$33,600 ÷ 2,800) = R$18,000

For 6% preference current year dividend:

Retained Earnings...	18,000	
Cash..		18,000*

*(6% X R$300,000)

For R$.30 per share ordinary dividend:

Retained Earnings...	89,610	
Cash..		89,610*

*Since all preference dividends must be paid before the ordinary dividend, outstanding ordinary shares include—

As of Dec. 31, 2015 (300,000 – 2,800)................	297,200	shares
Preference distribution	1,500	shares
	298,700	shares
Ordinary dividend...	X .30	/share
Amount of ordinary cash dividend....................	R$ 89,610	

(b) The suggested cash dividend could be paid even if the jurisdiction did restrict the retained earnings balance in the amount of the cost of treasury shares. Total dividends would be R$125,160,* which is adequately covered by the cash balance. The retained earnings balance, after adding the 2016 net income (estimated at R$77,000), is sufficient to cover the dividends.**

PROBLEM 15-7 (Continued)

*Preference dividends in arrears (6% X R$300,000) ...	R$ 18,000
Current preference dividend (6% X R$300,000).........	18,000
Ordinary dividend (R$.30 X 297,200)	89,160
Total cash dividend	R$125,160

**Beginning balance	R$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	R$148,400

PROBLEM 15-8

Transactions:

(a) Assuming Myers Co. declares and pays a €1 per share cash dividend.
- **(1) Total assets—decrease €4,000 [(€20,000 ÷ €5) X €1]**
- **(2) Share capital—ordinary—no effect**
- **(3) Share premium—ordinary—no effect**
- **(4) Retained earnings—decrease €4,000**
- **(5) Total equity—decrease €4,000**

(b) Myers declares and issues a 10% share dividend when the market price of the stock is €14.
- **(1) Total assets—no effect**
- **(2) Share capital—ordinary—increase €2,000 (4,000 X 10%) X €5**
- **(3) Share premium—ordinary—no effect.**
- **(4) Retained earnings—decrease €2,000 (€5 X 400)**
- **(5) Total equity—no effect**

(c) Myers declares and issues a 100% share dividend when the market price of the stock is €15 per share.
- **(1) Total assets—no effect**
- **(2) Share capital—ordinary—increase €20,000 (4,000 X 100%) X €5**
- **(3) Share premium—ordinary—no effect**
- **(4) Retained earnings—decrease €20,000**
- **(5) Total equity—no effect**

(d) Myers declares and distributes a property dividend
- **(1) Total assets—decrease €14,000 (2,000 X €7)— €6,000 gain less €20,000 dividend.**
- **(2) Share capital—ordinary—no effect**
- **(3) Share premium—ordinary—no effect**
- **(4) Retained earnings—decrease €14,000—€6,000 gain less €20,000 dividend.**
- **(5) Total equity—decrease €14,000**

PROBLEM 15-8 (Continued)

<u>Note</u>:

The journal entries made for the above transaction are:

Investments in ABC Shares (€10 – €7) X 2,000....	**6,000**	
Unrealized Holding Gain or Loss-Income....		**6,000**
(To record increase in value of securities to be issued)		
Retained Earnings (€10 X 2,000)..........................	**20,000**	
Investments in ABC Stock		**20,000**
(To record distribution of property dividend)		

(e) Myers declares a 2-for-1 share split

(1) Total assets—no effect

(2) Share capital—ordinary—no effect

(3) Share premium—ordinary—no effect

(4) Retained earnings—no effect

(5) Total equity—no effect

PROBLEM 15-9

VICARIO CORPORATION
Partial Statement of Financial Position
December 31, 2017

Equity		
Share capital—preference, $100 par value		
10,000 shares authorized, 5,000 shares		
issued & outstanding	**$500,000**	
Share capital—ordinary, $50 par value		
15,000 shares authorized,		
8,000 shares issued 7,700 shares outstanding	**400,000**	**$ 900,000**
Share premium—preference	**65,000**	
Share premium—ordinary	**49,000***	
Share premium—treasury (preference)	**4,700**	**118,700**
Retained earnings		**247,400****
Less: Treasury shares (300 shares—ordinary)		**19,200**
Total equity		**$1,246,900**

***[($57 – $50) X 7,000]**
****$610,000 – $312,600 – ($50 X 1,000 shares)**

PROBLEM 15-10

To: Ortago S.A. Board of Directors

From: Good Student, Financial Advisor

Date: Today

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

INTRODUCTION

As financial advisor to the Board of Directors for Ortago S.A., I have been asked to report on the effects of the following options for creating interest in Ortago S.A. shares: a 20% share dividend, a 100% share dividend, and a 2-for-1 share split. The board wishes to avoid adjustments to equity balances, while stimulating interest in the shares. The Board also thinks that a cash dividend at this point would be unwise.

RECOMMENDATION

In order to meet the needs of Ortago S.A. the board should choose a 2-for-1 share split. The share split is the only option which would not change the dollar balances in the equity section of the company's statement of financial position.

DISCUSSION OF OPTIONS

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

PROBLEM 15-10 (Continued)

A 20% SHARE DIVIDEND

This option would increase the shares outstanding by 20 percent, which translates into 800,000 additional shares of €10 par value.

The problem with this type of share dividend is that IFRS requires these shares to be accounted for at their par value.

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

Retained Earnings (€10 X 800,000)	**8,000,000**	
Ordinary Share Dividend Distributable		**8,000,000**

Although the Ordinary Share Dividend Distributable account increases, Retained Earnings also decreases. This reduction in Retained Earnings may hinder Ortago S.A.'s success with the subsequent share offer.

A 100% SHARE DIVIDEND

This option would double the number of €10 par value ordinary shares currently issued and outstanding. While this type of dividend is considered, in substance, a share split, Retained Earnings is nonetheless reduced by the par value of the additional shares, while Ordinary Share Dividend Distributable and, later, Share Capital—Ordinary are increased for that same amount. However, when 4,000,000 shares are already issued and outstanding, the reduction in Retained Earnings reflecting the share dividend is still great: €40,000,000.

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

Retained Earnings (€10 X 4,000,000)	**40,000,000**	
Ordinary Share Dividend Distributable		**40,000,000**

PROBLEM 15-10 (Continued)

A 2-FOR-1 SHARE 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 Share Capital—Ordinary and Share Premium—Ordinary accounts. In addition, the decreased market value will encourage investors who might otherwise consider the shares too expensive.

CONCLUSION

To generate the greatest interest in Ortago S.A. shares while maintaining the present balances in the equity section of the statement of financial position, you should opt for the 2-for-1 share split.

PROBLEM 15-11

(a)

May 5, 2015		
Retained Earnings	1,800,000	
Dividends Payable		1,800,000
(Declaration of cash dividend of $0.60 per share on 3,000,000 shares)		
June 30, 2015		
Dividends Payable	1,800,000	
Cash		1,800,000

(b)

November 30, 2015		
Retained Earnings	1,800,000	
Ordinary Share Dividend Distributable		1,800,000
(Share dividend of 6%, 180,000 shares, at $10 per share)		
December 31, 2015		
Ordinary Share Dividend Distributable..............	1,800,000	
Share Capital—Ordinary..............................		1,800,000

(c)

EARNHART CORPORATION
Partial Statement of Financial Position
December 31, 2015

Equity	
Share capital—ordinary $10 par value, issued 3,180,000 shares	$31,800,000
Share premium—ordinary..	5,000,000
Retained earnings..	25,100,000
Total equity	$61,900,000

PROBLEM 15-11 (Continued)

Statement of Retained Earnings
For the Year Ended December 31, 2015

Balance, January 1		$24,000,000
Add: Net income		4,700,000
		28,700,000
Less: Dividends on ordinary shares:		
Cash	$1,800,000	
Share (see note)	1,800,000	3,600,000
Balance December 31		$25,100,000

Schedule of Share Premium—Ordinary
For the Year Ended December 31, 2015

Balance January 1	$5,000,000
Balance December 31	$5,000,000

Note: The 6% share dividend (180,000 shares) was declared on November 30, 2015. For the purposes of the dividend, the par value of $10 per share ($1,800,000) was credited to Share Capital—Ordinary.

PROBLEM 15-12

PENZI COMPANY
Partial Statement of Financial Position
June 30, 2016

Equity		
8% Share capital—preference, £25 par value, cumulative and non-participating, 100,000 shares authorized, 40,000 shares issued and outstanding—Note A	£1,000,000	
Share capital—ordinary shares, £10 par value, 300,000 shares authorized, 115,400 shares issued with 1,500 shares held in the treasury	1,154,000	£2,154,000
Share premium—preference	760,000	
Share premium—ordinary	2,595,000*	
Share premium—treasury	1,500	3,356,500
Retained earnings		636,000
Less: Treasury shares, (1,500 shares)		58,500
Total equity		£6,088,000

Note A: Penzi Company is in arrears on the preference shares in the amount of £40,000 [(40,000 shares X £25 X .08) – (40,000 shares X £1)].

* See £-accounts below.

PROBLEM 15-12 (Continued)

Account Balances

Share Capital—Ordinary

	850,000
	50,000
	200,000
	54,000
	1,154,000

Share Premium—Ordinary

	1,785,000
	170,000
	640,000
	2,595,000

Share Capital—Preference

	1,000,000

Share Premium—Preference

	760,000

Treasury Shares

78,000	
	19,500
58,500	

Share Premium—T.S.

	1,500

Retained Earnings

	690,000
54,000	
	40,000
40,000	
	636,000

Note that the Penzi Company is authorized to issue 300,000 shares of £10 par value ordinary shares and 100,000 shares of £25 par value, cumulative and non-participating preference shares.

PROBLEM 15-12 (Continued)

Entries supporting the balances.

Entries

1.	Cash	2,635,000	
	Share Capital—Ordinary		850,000
	Share Premium—Ordinary		1,785,000
2.	Land	220,000	
	Share Capital—Ordinary		50,000
	Share Premium—Ordinary		170,000
3.	Cash	840,000	
	Share Capital—Ordinary		200,000
	Share Premium—Ordinary		640,000

At the beginning of the year, Penzi had 110,000 ordinary shares outstanding, of which 85,000 shares were issued at £31 per share, resulting in £850,000 (85,000 shares at £10) of share capital and £1,785,000 of share premium on ordinary shares (85,000 shares at £21). The 5,000 shares exchanged for a plot of land would be recorded at £50,000 of share capital and £170,000 of share premium (use the current fair value of the land on July 24 to value the share issuance). The 20,000 shares issued in 2014 at £42 a share resulted in £200,000 of share capital and £640,000 of share premium.

Preference Shares

Cash	1,760,000	
Share Capital—Preference		1,000,000
Share Premium—Preference		760,000

The issuance of 40,000 preference shares at £44 resulted in £1,000,000 (40,000 shares at £25) of share capital—preference and £760,000 (40,000 shares at £19) of share premium—preference.

Treasury Shares

Nov. 30	Treasury Shares	78,000	
	Cash		78,000
June 30	Cash	21,000	
	Share Premium—Treasury		1,500
	Treasury Shares		19,500

PROBLEM 15-12 (Continued)

The 2,000 treasury shares purchased resulted in a debit balance of treasury shares 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 share premium amount.

Share Dividend

Dec. 15	**Retained Earnings....................................**	**54,000**	
	Share Capital—Ordinary....................		**54,000***

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

The 5% share 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 share dividend, bringing the number of shares outstanding at the time of the dividend (December 2015) to 108,000 shares. The resale of 500 treasury shares occurred after the share dividend.

Retained Earnings

The cash dividends only affect the retained earnings. Note that the preference shares are in arrears for the dividends that should have been declared in June 2016. Ending retained earnings is the beginning balance of £690,000 plus net income of £40,000, less the preference dividend of £40,000 and the ordinary share dividend of £54,000 (5,400 shares at £10), resulting in an ending balance of £636,000.

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 ordinary 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 shareholder 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 shares in exchange for non-monetary assets.

CA 15-3 (Time 25–30 minutes)
Purpose—to provide a five-part theory case on equity based on the IASB conceptual framework. 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 share dividend and a share split. The student is required to explain what a share dividend is, the amount of retained earnings to be capitalized in connection with a share dividend, and how it differs from a share 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 share dividend or a share 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 share dividend. The student is required to discuss the arguments against either considering the share dividend as income to the recipient or issuing share 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 share 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 shareholders.

SOLUTIONS TO CONCEPTS FOR ANALYSIS

CA 15-1

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

(b) Derek Wallace bought an additional £100,000 par value shares. 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. Baker, at par, shares equal to 50% of her present holdings of £25,000 or shares with a par value of £12,500. Other shareholders should also be offered the right to purchase shares equal to 50% of their holdings in order that all shareholders 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 shares. 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. Baker's ordinary shares, June 30, 2015, before issuance of additional shares, 25/250 X £422,000	£42,200
Book value after issuance of additional shares to Derek Wallace, 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 shares are issued for services or property other than cash is that companies should record the shares issued at the fair value of the goods or services received, unless that fair value cannot be measured reliably. If the fair value of the goods or services cannot be measured reliably, use the fair value of the shares issued. If a company cannot readily determine either the fair value of the shares it issues or the property or services it receives, it should employ an appropriate valuation technique. Depending on available data, the valuation may be based on market transactions involving comparable assets or the use of discounted expected future cash flows. Companies should avoid the use of the book, par, or stated values as a basis of valuation for these transactions.

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

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

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

CA 15-3

(a) Equity, or net assets, is the residual interest in the assets of the entity after deducting all its liabilities; in other words, equity equals assets less liabilities. Assets are resources controlled by the entity as the result of past events and from which future economic benefits are expected to flow to the entity. Liabilities are present obligations of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits.

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

(c) Generally, investments by owners cause an increase in assets in addition to the increase in equity.

(d) 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 shares causes a decrease in assets in addition to the decrease in equity.

(e) Some examples of changes within equity that do not change the total amount of equity are retirement of treasury shares, conversion of preference shares into ordinary shares, share dividends, and retained earnings appropriations.

CA 15-4

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

   (1) From the legal standpoint a share split is distinguished from a share 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 share 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 share dividend requires a journal entry to decrease retained earnings and increase paid-in capital, while there is no entry for a share split. Also, from the accounting standpoint the distinction between a share dividend and a share split is dependent upon the intent of the board of directors in making the declaration. If the intent is to give to shareholders some separate evidence of a part of their prorata interests in accumulated corporate earnings, the action results in a share dividend. If the intent is to issue enough shares to reduce the market price per share, the action results in a share split, regardless of the form it may take. In other words, if the action takes the form of a share dividend but reduces the market price markedly, it is more similar a share split.

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

A share dividend that is charged to retained earnings reduces the total accumulated earnings, and all share dividends reduce the per share earnings. Issuing a share 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 share dividend also may be issued for the purpose of obtaining a wider distribution of the shares. Although this is the main consideration in a share split, it may be a secondary consideration in the issuance of a share dividend. The issuance of a series of share dividends will accomplish the same objective as a share split.

A share 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 share dividend (in the accounting sense) is based on the legal minimum (usually par or stated value).

CA 15-5

Instructors who assign this case may wish to assign students additional outside material on the reporting entity at www.ifrs.org.

(a) The case against treating an ordinary share 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 shareholders, the income of the corporation is corporate income and not income to shareholders, although the equity of the shareholders 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 share dividend received merely redistributes each shareholder's equity over a larger number of shares. Selling the share 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, share dividends represent only a reclassification of equity since there is no increase in total proprietorship.

(b) The case against issuing share dividends on treasury shares rests principally upon the argument that shares reacquired by the corporation is a "reduction of equity" 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 shares. The retained earnings are considered divisible only among the owners of outstanding shares and only the outstanding shares are entitled to a share dividend. In those states that permit treasury shares to participate in the distribution accompanying a share dividend or share split, practice is influenced by the planned use of the treasury shares (such as, the issuance of treasury shares in connection with employee share options). Unless there are specific uses for the treasury shares, no useful purpose is served by issuing additional shares to treasury.

CA 15-6

(a) Mask Company should account for the purchase of the treasury shares on August 15, 2015, by debiting Treasury Shares and crediting Cash for the cost of the purchase (1,000 shares X €18 per share). Mask should account for the sale of the treasury shares on September 14, 2015, by debiting Cash for the selling price (500 shares X €20 per share), crediting Treasury Shares for cost (500 shares X €18 per share), and crediting Share Premium—Treasury for the excess of the selling price over the cost (500 shares X €2 per share). The remaining treasury shares (500 shares X €18 per share) should be presented separately in the equity section of Mask's December 31, 2015, statement of financial position as an unallocated reduction of equity. These shares are considered issued but not part of ordinary shares outstanding.

CA 15-6 (Continued)

(b) Mask should account for the share dividend by debiting Retained Earnings for €10 per share (the par value of the shares in October 2015, the date of the share dividend) multiplied by the 1,950 shares distributed. Mask should then credit Share Capital—Ordinary for the par value of the ordinary shares (€10 per share) multiplied by the 1,950 shares distributed. Total equity does not change, but, because, recognition has been made of capitalization of retained earnings equivalent to the par value of the additional shares resulting from the share dividend.

(c) Mask should account for the cash dividend on December 20, 2015, 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 (20,000 – 1,000 + 500 + 1,950). A cash dividend is a distribution to the corporation's shareholders. 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, 2016). The effect of the cash dividend on Mask's statement of financial position at December 31, 2015, is an increase in current liabilities and a decrease in retained earnings.

CA 15-7

(a) The stakeholders are the dissident shareholders, the other shareholders, potential investors, creditors, and Kenseth.

(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 Kenseth to consider what is good for the corporation, not just for her (in finance terminology, an *agency issue*). Kenseth 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) **M&S does not have any preference shares.**

(b) **M&S's ordinary shares have a par value of 25p per share. Like many companies, the par value of M&S's ordinary shares is small relative to its market value.**

(c) **At fiscal year end 2013, M&S had 1,613.8 million ordinary shares issued. This represents 50.4 percent (3,200,000) of M&S's authorized ordinary shares.**

(d) **At fiscal year end 2013 and 2012, M&S had 1,613.8 million and 1,605.5 million ordinary shares outstanding, respectively.**

There is no indication of treasury shares.

(e) **The cash dividends caused M&S's Retained Earnings to decrease by £271.3 million.**

(f) **Return on ordinary share equity:**

2013: **£458/[£2,486.4 + £2,778.8/2] = 17.4%**

2012: **£489.6/[£2,778.8 + £2,677.4/2] = 17.9%**

(g) **Payout ratio:**

2013: **£271.3/£458 = 59.2%**

2012: **£267.8/£489.6 = 54.7%**

COMPARATIVE ANALYSIS CASE

(a) Par value:

adidas, No par.
Puma, No par.

(b) Number of authorized shares issued:

adidas, 209.2 million.
Puma, 15.082 million.

(c) Treasury shares, year-end 2012:

adidas, None.
Puma, 143.2 million shares.

(d) Ordinary shares outstanding, year-end 2012:

adidas, 209.2 (No treasury shares).
Puma, 15.082 – 143 = 14.939.

(e) adidas declared cash dividends in 2012, reducing equity by €209 million.

Puma declared cash dividends in 2012, reducing equity by €31 million.

(f) Rate of return on ordinary share equity.

2012 (€000,000):

adidas

$$\frac{€526}{\frac{€5{,}291 + €5{,}128}{2}} = 10.1\%$$

Puma

$$\frac{€70.2}{\frac{€1{,}597.4 + €1{,}605.2}{2}} = 4.4\%$$

2011:

adidas $\dfrac{€613}{\dfrac{€4{,}461 + €5{,}128}{2}} = 12.8\%$

Puma $\dfrac{€230.1}{\dfrac{€1605.2 + €1{,}386.2}{2}} = 15.4\%$

During 2011, Puma earned a significantly higher return on its ordinary share equity. In 2012, adidas performed better.

(g) Payout ratios for 2012 (€000,000).

adidas $\dfrac{€209}{€526} = 39.7\%$

Puma $\dfrac{€31^{*}}{€70.2} = 44.2\%$

***Based on dividends paid.**

FINANCIAL STATEMENT ANALYSIS CASES

CASE 1

(a) Management might purchase treasury shares to provide to shareholders 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 shares, or management might purchase treasury shares because it feels that its share price is too low. It may believe that by purchasing shares it is signaling to the market that the price is too low. Management might also use excess cash to purchase shares to ward off a hostile takeover. Finally, management might purchase shares in an effort to change its capital structure. If it purchases shares 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 share 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 the purchase of the treasury shares, 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 2013 and 2012, this can be calculated as follows:

2013	2012
($66,074 ÷ $138,109) = .48	($62,188 ÷ $129,273) = .48

This represents a stable level in the ratio of debt to assets. It may be determined that BHP Billiton's solvency is unchanged, but it should definitely be watched, and in comparison to industry averages.

FINANCIAL STATEMENT ANALYSIS CASES

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 share dividend. This date is also used when a share split occurs. The date of distribution is when the additional shares are distributed (issued) to shareholders.**

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

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

ACCOUNTING, ANALYSIS, AND PRINCIPLES

ACCOUNTING

January 15, 2015		
Retained Earnings (€1.05 X 60,000)	63,000	
Cash		63,000
April 15, 2015		
Retained Earnings [(10% X 60,000) X €10]	60,000	
Share Capital—Ordinary		60,000
May 15, 2015		
Treasury Shares (2,000 X €15)	30,000	
Cash		30,000
November 15, 2015		
Cash (€18 X 1,000)	18,000	
Share Premium—Treasury		3,000
Treasury Shares		15,000
December 31, 2015		
Income Summary	370,000	
Retained Earnings		370,000

The balances are indicated in the following partial statement of financial position:

NADAL CORPORATION
Statement of Financial Position (partial)
December 31, 2015

Equity	
Share capital—ordinary, €10 par value, 66,000 shares issued and outstanding[(1)]	€ 660,000
Share premium—ordinary[(2)]	500,000
Share premium—treasury	3,000
Retained earnings[(3)]	867,000
Less: Treasury shares[(4)]	15,000
Total equity	€2,015,000

(1) €600,000 + €60,000
(2) €500,000
(3) €620,000 – €63,000 – €60,000 + €370,000
(4) €30,000 – €15,000

ANALYSIS

Payout ratio: €63,000 ÷ €370,000 = 17%

Return on ordinary share equity: €370,000 ÷ [(€1,720,000 + €2,015,000) ÷ 2] = 19.8%.

PRINCIPLES

Treasury shares sold above or below cost do not result in gains or losses because treasury shares do not meet the definition of an asset. Rather, they are unissued equity. Furthermore, gains or losses should not be recorded, because share repurchases and reissues are transactions with its own shareholders; the effects of such transactions should not be recorded in income.

PROFESSIONAL RESEARCH

(a) IAS 1 addresses disclosure of information about capital structure.

(b) An entity shall disclose the following, either in the statement of financial position or the statement of changes in equity, or in the notes:

(a) for each class of share capital:
- **(i) the number of shares authorised;**
- **(ii) the number of shares issued and fully paid, and issued but not fully paid;**
- **(iii) par value per share, or that the shares have no par value;**
- **(iv) a reconciliation of the number of shares outstanding at the beginning and at the end of the period;**
- **(v) the rights, preferences and restrictions attaching to that class including restrictions on the distribution of dividends and the repayment of capital;**
- **(vi) shares in the entity held by the entity or by its subsidiaries or associates; and**
- **(vii) shares reserved for issue under options and contracts for the sale of shares, including terms and amounts; and**

(b) a description of the nature and purpose of each reserve within equity (para. 79).

An entity shall present, either in the statement of changes in equity or in the notes, the amount of dividends recognised as distributions to owners during the period, and the related amount per share (para. 107).

In paragraph 106, the components of equity include, for example, each class of contributed equity, the accumulated balance of each class of other comprehensive income and retained earnings (para. 108).

PROFESSIONAL RESEARCH (Continued)

Changes in an entity's equity between the beginning and the end of the reporting period reflect the increase or decrease in its net assets during the period. Except for changes resulting from transactions with owners in their capacity as owners (such as equity contributions, reacquisitions of the entity's own equity instruments and dividends) and transaction costs directly related to such transactions, the overall change in equity during a period represents the total amount of income and expense, including gains and losses, generated by the entity's activities during that period (para. 109).

IAS 8 requires retrospective adjustments to effect changes in accounting policies, to the extent practicable, except when the transition provisions in another IFRS require otherwise. IAS 8 also requires restatements to correct errors to be made retrospectively, to the extent practicable. Retrospective adjustments and retrospective restatements are not changes in equity but they are adjustments to the opening balance of retained earnings, except when an IFRS requires retrospective adjustment of another component of equity. Paragraph 106(b) requires disclosure in the statement of changes in equity of the total adjustment to each component of equity resulting from changes in accounting policies and, separately, from corrections of errors. These adjustments are disclosed for each prior period and the beginning of the period.

PROFESSIONAL SIMULATION

EXPLANATION

(a) **Share capital-ordinary 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 equity.**

(b) **Treasury shares are not an asset. When treasury shares are purchased, a reduction occurs in both assets (cash) and equity. It is inappropriate to imply that a corporation can own part of itself. Treasury shares 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 shares, 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 non-trading equity investments and others.**

(d) **The accumulated deficit is larger in the current year because Bank Santana, like many other major banks, reported a net loss of R$761 million. (R$1,312 – R$551) Bank Santana did not pay dividends in the current year, which would reduce retained earnings.**

ANALYSIS

R$(581) ÷ 161.156* = R$(3.61)

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

Thus, Bank Santana's net worth is negative due to Treasury shares and Accumulated losses.