CHAPTER 4

Income Statement and Related Information

ASSIGNMENT CLASSIFICATION TABLE (BY TOPIC)

Topics	Questions	Brief Exercises	Exercises	Problems	Concepts for Analysis
1. Income measurement concepts.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 32, 35				3, 4, 5, 7
2. Computation of net income from balance sheets and selected accounts.		1, 3, 4, 5	1, 2, 3, 4, 8		
3. Condensed income statements; earnings per share.	12, 13, 14, 23, 25	1, 2, 4, 10	4, 5, 7, 8, 10, 11, 13, 17	3, 4, 6	1, 2, 6
4. Detailed income statements.	12, 14, 15, 16, 19, 20	3, 6	1, 5, 6, 7, 9	1, 2, 5	7
5. Accounting changes; discontinued operations; prior period adjustments; errors.	16, 17, 18, 19, 24, 25, 27, 28, 29, 30, 36	7, 8, 9	6, 8, 10, 11, 13, 14	4, 6, 7, 8	3, 5, 6, 7
6. Retained earnings statement.	31	11, 12	9, 12, 16, 17	1, 2, 3, 5, 6, 7	
7. Intraperiod tax allocation.	21, 22, 26, 27		9, 11, 13, 14, 16	2, 4, 7, 8	
8. Comprehensive income.	33, 34, 37	13	15, 16, 17, 18		8
9. Convergence.	35, 36, 37		1		

ASSIGNMENT CLASSIFICATION TABLE (BY LEARNING OBJECTIVE)

Learning Objectives	Brief Exercises	Exercises	Problems
1. Understand the uses and limitations of an income statement.			
2. Understand the content and format of the income statement.	1, 2	1, 2, 3, 4, 8	3
3. Prepare an income statement.	1, 2, 3, 4, 5, 6, 7	5, 6, 7, 8, 9, 11, 17	2, 3, 4, 5
4. Explain how to report items in the income statement.	3, 4, 5, 6, 7, 8, 9	4, 5, 6, 7, 8, 9, 11, 13, 14, 15, 17	1, 2, 3, 4, 5, 6, 7, 8
5. Identify where to report earnings per share information.	10	8, 9, 10, 11, 13, 17	2, 4, 5, 6, 8
6. Explain intraperiod tax allocation.		8, 9, 11, 13, 14, 17	2, 3, 4, 5, 6, 7, 8
7. Understand the reporting of accounting changes and errors.	8, 9, 12	14	4, 7
8. Prepare a retained earnings statement.	11, 12	1, 9, 12, 16, 17	1, 2, 3, 5, 6, 7
9. Explain how to report other comprehensive income.	13	1, 7, 15, 16, 17, 18	1

ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E4-1	Compute income measures.	Simple	10–15
E4-2	Computation of net income.	Simple	18–20
E4-3	Income statement items.	Simple	25–35
E4-4	Income statement presentation.	Moderate	20–25
E4-5	Income statement.	Simple	20–25
E4-6	Income statement, items.	Moderate	30–35
E4-7	Income statement.	Moderate	30–40
E4-8	Income statement, EPS.	Simple	15–20
E4-9	Income statement with retained earnings.	Simple	30–35
E4-10	Earnings per share.	Simple	20–25
E4-11	Condensed income statement—periodic inventory method.	Moderate	20–25
E4-12	Retained earnings statement.	Simple	20–25
E4-13	Earnings per share.	Moderate	15–20
E4-14	Change in accounting principle.	Moderate	15–20
E4-15	Comprehensive income.	Simple	15–20
E4-16	Comprehensive income.	Moderate	15–20
E4-17	Various reporting formats.	Moderate	30–35
E4-18	Changes in equity.	Simple	10–15
P4-1	Income components.	Simple	5–10
P4-2	Income statement, retained earnings.	Moderate	30–35
P4-3	Income statement, retained earnings, periodic inventory.	Simple	25–30
P4-4	Income statement items.	Moderate	30–40
P4-5	Income statement retained earnings.	Moderate	30–40
P4-6	Statement presentation.	Moderate	20–25
P4-7	Retained earnings statement, prior period adjustment.	Moderate	25–35
P4-8	Income statement.	Moderate	25–35
CA4-1	Identification of income statement deficiencies.	Simple	20–25
CA4-2	Income reporting deficiencies.	Simple	10–15
CA4-3	Earnings management.	Moderate	20–25
CA4-4	Earnings management	Simple	15–20
CA4-5	Income reporting items.	Moderate	30–35
CA4-6	Identification of income statement weaknesses.	Moderate	30–40
CA4-7	Classification of income statement items.	Moderate	20–25
CA4-8	Comprehensive income.	Simple	10–15

ANSWERS TO QUESTIONS

1. The income statement is important because it provides investors and creditors with information that helps them predict the amount, timing, and uncertainty of future cash flows. It helps investors and creditors predict future cash flows in a number of different ways. First, investors and creditors can use the information on the income statement to evaluate the past performance of the enterprise. Second, the income statement helps users of the financial statements to determine the risk (level of uncertainty) of income—revenues, expenses, gains, and losses—and highlights the relationship among these various components.

It should be emphasized that the income statement is used by parties other than investors and creditors. For example, customers can use the income statement to determine a company's ability to provide needed goods or services, unions examine earnings closely as a basis for salary discussions, and the government uses the income statements of companies as a basis for formulating tax and economic policy.

2. Information on past transactions can be used to identify important trends that, if continued, provide information about future performance. If a reasonable correlation exists between past and future performance, predictions about future earnings and cash flows can be made. For example, a loan analyst can develop a prediction of future performance by estimating the rate of growth of past income over the past several periods and project this into the next period. Additional information about current economic and industry factors can be used to adjust the trend rate based on historical information.

3. Some situations in which changes in value are not recorded in income are:
(a) Unrealized gains or losses on available-for-sale investments,
(b) Changes in the market values of long-term liabilities, such as bonds payable,
(c) Changes (increases) in value of property, plant and equipment, such as land, natural resources, or equipment,
(d) Changes (increases) in the values of intangible assets such as customer goodwill, brand value, or intellectual capital.

Note that some of these omissions arise because the items (e.g., brand value) are not recognized in financial statements, while others (value of land) are recorded in financial statements but measurement is at historical cost.

4. Some situations in which application of different accounting methods or estimates lead to comparison problems include:
(a) Inventory methods—weighted average vs. FIFO,
(b) Depreciation Methods—straight-line vs. accelerated,
(c) Accounting for long-term contracts—percentage-of-completion vs. completed-contract,
(d) Estimates of useful lives or salvage values for depreciable assets,
(e) Estimates of bad debts,
(f) Estimates of warranty costs.

5. The transaction approach focuses on the activities that have occurred during a given period and instead of presenting only a net change, a description of the components that comprise the change is included. In the capital maintenance approach, only the net change (income) is reflected whereas the transaction approach not only provides the net change (income) but the components of income (revenues and expenses). The final net income figure should be the same under either approach given the same valuation base.

6. Earnings management is often defined as the planned timing of revenues, expenses, gains and losses to smooth out bumps in earnings. In most cases, earnings management is used to increase income in the current year at the expense of income in future years. For example, companies prematurely recognize sales before they are complete in order to boost earnings. Earnings management can also be used to decrease current earnings in order to increase income in the future. The classic case is the use of "cookie jar" reserves, which are established by using unrealistic assumptions to estimate liabilities for such items as sales returns, loan losses, and warranty costs.

7. Earnings management has a negative effect on the quality of earnings if it distorts the information in a way that is less useful for predicting future cash flows. Within the Conceptual Framework, useful information is both relevant and a faithful representation. However, earnings management reduces the reliability of income, because the income measure is biased (up or down) and/or the reported income is not representationally faithful to that which it is supposed to report (e.g., volatile earnings are made to look more smooth).

8. Caution should be exercised because many assumptions and estimates are made in accounting and the net income figure is a reflection of these assumptions. If for any reason the assumptions are not well-founded, distortions will appear in the income reported. The objectives of the application of IFRS to the income statement are to measure and report the performance for a specified period without recognizing any artificial exclusions or modifications.

9. The term "quality of earnings" refers to the credibility of the earnings number reported. Companies that use aggressive accounting policies report higher income numbers in the short-run. In such cases, we say that the quality of earnings is low. Similarly, if higher expenses are recorded in the current period, in order to report higher income in the future, then the quality of earnings is also considered low.

10. Income is increases in economic benefits during the accounting period in the form of inflows or enhancements of assets or decreases of liabilities that result in increases in equity, other than those relating to contributions from shareholders.

    Expenses are decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or incurrences of liabilities that result in decreases in equity, other than those relating to distributions to shareholders.

11. The definition of income includes both revenues and gains. Gains represent items that meet the definition of income and may or may not arise in the ordinary activities of a company.

    The definition of expenses includes both expenses and losses. Losses represent items that meet the definition of expenses and may or may not arise in the ordinary activities of a company.

12. (1) Gross profit is the difference between revenue and cost of goods sold and is reported in the cost of goods sold section of the income statement.
    (2) Income from operations is reported on the income statement between the other income and expense section and financing costs.

13. Ahold would report the "settlement of securities class action" loss in the other income and expense section of its income statement.

14. (1) Interest expense is reported on the income statement between income from operations and income before income taxes.
(2) Income tax expense is reported between income before income tax and income from continuing operations on the income statement.

15. The "nature of expense" classification uses a natural expense approach (such as direct labor incurred, advertising expense, depreciation expense) without having to make arbitrary allocations.

The "function of expense" classification identifies the major cost drivers of a company (such as cost of goods sold and administrative expenses).

16. (a) A loss on discontinued operations is reported net of tax in the income statement between income from continuing operations and net income.
(b) Non-controlling interest allocation is reported in the income statement after the net income.
(c) Earnings per share are shown in the income statement after the non-controlling interest allocation.
(d) A gain on sale of equipment in shown under other income and expense in the income statement.

17. (a) The write-down of plant assets due to impairment should be shown as an other income and expense item.
(b) The delivery expense on goods sold should be shown as a selling expense in the income statement. It is an ordinary expense to the company and represents a cost of selling goods.
(c) If the amount is immaterial, it may be combined with the depreciation expense for the year and included as a part of the depreciation expense appearing in the income statement. If the amount is material, it should be shown in the retained earnings statement as an adjustment to the beginning balance of retained earnings.
(d) This should be shown in the income statement. One treatment would be to show it in the statement as a deduction from the rent expense, as it reduces an expense and therefore is directly related to operations. Another treatment is to show it in the other income and expense section of the income statement.
(e) Assuming that a provision for the loss had not been made at the time the patent infringement suit was instituted, the loss should be recognized in the current period in computing net income. It is reported as other income and expense.
(f) This should be reported in the income statement because it relates to usual business operations of the firm.

18. (a) The remaining book value of the equipment should be depreciated over the remainder of the five-year period. The additional depreciation (£425,000) is not a correction of an error and is not shown as an adjustment to retained earnings. The change is considered a change in estimate.
(b) The loss should be shown as an other income and expense item.
(c) The write-off should be shown as an other income and expense item.
(d) Interest expense should be shown as a deduction from Income from operations.
(e) A correction of an error should be considered a prior period adjustment and the beginning balance of Retained Earnings should be restated, if material.
(f) The cumulative effect of the change is reported as an adjustment to beginning retained earnings. Prior years' statements are recast on a basis consistent with the new standard.

19. (a) Other income and expense section.
(b) Expense section or other income and expense.
(c) Expense section, as a selling expense, but sometimes reflected as an administrative expense.
(d) Separate section after income from continuing operations, entitled discontinued operations.
(e) Other income and expense section.
(f) Financing cost section.
(g) Operating expense section.
(h) Other income and expense section.

20. Both formats are acceptable. The amount of detail reported in the income statement is left to the judgment of the company, whose goal in making this decision should be to present financial statements which are most useful to decision makers. We want to present a simple, understand-able statement so that a reader can easily discover the facts of importance; therefore, a single amount for selling expenses might be preferable. However, we also want to fully disclose the results of all activities; thus, a separate listing of expenses may be preferred. Note that if the condensed version is used, it should be accompanied by a supporting schedule of the eight components in the notes to the financial statements.

21. Intraperiod tax allocation should not affect the reporting of an unusual gain. The IASB reserves "net-of-tax" treatment for discontinued operations and prior period adjustments.

22. Intraperiod tax allocation has no effect on reported net income, although it does affect the amounts reported for various components of income. The effects on these components offset each other so net income remains the same. Intraperiod tax allocation merely takes the total tax expense and allocates it to the various items which affect the tax amount.

23. If Neumann has preference shares outstanding, the numerator in its computation may be incorrect. A better description of "earnings per share" is "earnings per ordinary share." The numerator should include only the earnings available to ordinary shareholders. Therefore, the numerator should be: net income less preference dividends.

The denominator is also incorrect if Neumann had any common stock transactions during the year. Since the numerator represents the results for the entire year, the denominator should reflect the weighted-average number of common shares outstanding during the year, not the shares outstanding at one point in time (year-end).

24. A loss on the disposal of a component of a business is reported separately from continuing operations. It is shown net of tax after the income from continuing operations line in the income statement.

25. The earnings per share trend is not negative. A loss on discontinued operations is a one-time occurrence which is not expected to be reported in the future. Therefore, earnings per share on income from continuing operations is more useful because it represents the results of usual business activity. Considering this EPS amount, EPS has increased from $7.12 to $8.00.

26. Tax allocation within a period is the practice of allocating the income tax for a period to such items as income before income tax, discontinued operations, and prior period adjustments.

The justification for tax allocation within a period is to produce financial statements which disclose an appropriate relationship, for example, between income tax expense and (a) income before income tax, (b) discontinued operations, and (c) prior period adjustments (or of the opening balance of retained earnings).

27. Tax allocation within a period (intraperiod) becomes necessary when a firm encounters such items as discontinued operations or corrections of errors. Such allocation is necessary to bring about an appropriate relationship between income tax expense and income from continuing operations, discontinued operations etc.

Tax allocation within a period is handled by first computing the tax expense attributable to income before income tax, assuming no discontinued operations. This is simply computed by ascertaining the income tax expense related to revenue and expense transactions entering into the determination of such income. Next, the remaining income tax expense attributable to other items is determined by the tax consequences of transactions involving these items. The applicable tax effect of these items (prior period adjustments) should be disclosed separately because of their materiality.

28. The assets, cash flows, results of operations, and activities of the plants closed would not appear to be clearly distinguishable, operationally or for financial reporting purposes, from the assets, results of operations, or activities of the Linus Paper Company. Therefore, disposal of these assets is not considered to be a disposal of a component of a business that would receive special reporting.

29. Companies report corrections of errors as an adjustment to the beginning balance of retained earnings. If a company prepares comparative financial statements, it should restate the prior statements for the effects of the error.

30. A change in accounting principle has no effect on the current year's net income because it is recognized as a retrospective adjustment to the financial statements. It is reported as an adjustment to beginning retained earnings of the earliest year presented.

31. The major items reported in the retained earnings statement are: (1) adjustments of the beginning balance for corrections of errors or changes in accounting principle, (2) the net income or loss for the period, (3) dividends for the year, and (4) restrictions (appropriations) of retained earnings. It should be noted that the retained earnings statement is sometimes composed of two parts, unappropriated and appropriated.

32. IFRS are ordinarily concerned only with a "fair presentation" of business income. In contrast, taxable income is a statutory concept which defines the base for raising tax revenues by the government, and any method of accounting which meets the statutory definition will "clearly reflect" taxable income as defined by relevant tax laws. It should be noted that many tax systems prohibits use of the cash receipts and disbursements method as a method which will clearly reflect income in accounting for purchases and sales if inventories are involved.

The cash receipts and disbursements method will not usually fairly present income because:

(1) The completed transaction, not receipt or disbursement of cash, increases or diminishes income. Thus, a sale on account produces revenue and increases income, and the incurrence of expense reduces income without regard to the time of payment of cash.

(2) The expense recognition principle generally results in costs being matched against related revenues produced. In most situations the cash receipts and disbursements method will violate this principle.

(3) Consistency requires that accountable events receive the same accounting treatment from accounting period to accounting period. The cash receipts and disbursements method permits manipulation of the timing of revenues and expenses and may result in treatments which are not consistent, detracting from the usefulness of comparative statements.

33. Other comprehensive income may be displayed (reported) in one of two ways: (1) a second income statement or (2) a combined statement of comprehensive income.

34.

GRIBBLE COMPANY
Comprehensive Income Statement
For the Year Ended 2010
(in thousands of Euros)

Net income	€150
Unrealized gain related to revaluation of buildings	10
Unrealized loss related to available-for-sale securities	(35)
Items not recognized on the income statement	(25)
Total comprehensive income	€125

35. There is no U.S. GAAP in this area, except the SEC does require public companies to report their expenses by function.

36. Bradshaw should report this item as an extraordinary item similar to discontinued operations. While under U.S. GAAP, companies are required to report an item as extraordinary if it is unusual in nature and infrequent in occurrence. Extraordinary item reporting is prohibited under IFRS.

37. U.S. GAAP provides for three possible reporting formats for comprehensive income items: (1) a single income statement (2) a combined statement of comprehensive income, or (3) as a part of the statement of shareholders' equity.

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 4-1

STARR CO.
Income Statement
For the Year 2010

Sales		£540,000
Cost of goods sold		330,000
Gross profit		210,000
Selling expenses	£120,000	
Administrative expenses	10,000	130,000
Income before income tax		80,000
Income tax		25,000
Net income		£ 55,000
Earnings per share		£0.55*

*£55,000 ÷ 100,000 shares.

Note: The increase in value of employees is not reported.

BRIEF EXERCISE 4-2

BRISKY CORPORATION
Income Statement
For the Year Ended December 31, 2010

Net sales		$2,400,000
Cost of goods sold		1,450,000
Gross profit		950,000
Selling expenses	$280,000	
Administrative expenses	212,000	492,000
		458,000
Other income and expense		
Interest revenue		31,000
Income from operations		489,000
Interest expense		45,000
Income before income tax		444,000
Income tax ($444,000 X 30%)		133,200
Net income		$ 310,800
Earnings per share		$4.44*

*$310,800 ÷ 70,000 shares.

BRIEF EXERCISE 4-3

(a) Other income and expense = €800,000 – €500,000 – €220,000 = €80,000

(b) Financing costs = €220,000 – €200,000 = €20,000

(c) Income tax = €200,000 – €100,000 = €100,000

(d) Discontinued operations = €100,000 – €90,000 = (€10,000)

(e) Other comprehensive income = €120,000 – €90,000 = €30,000

BRIEF EXERCISE 4-4

1. Income from operations = HK$100,000 – HK$55,000 – HK$10,000 + HK$30,000 = HK$65,000

2. Income before income tax = HK$65,000 – HK$5,000 = HK$60,000

3. Net income = HK$60,000 – (HK$60,000 X 20%) = HK$48,000

BRIEF EXERCISE 4-5

Income before income tax = $430,000 – $20,000 = $410,000
Net income = $410,000 – ($410,000 X 30%) = $287,000

BRIEF EXERCISE 4-6

1. Income from operations
2. Income before income tax
3. Income from operations
4. Gross profit
5. Income from operations

BRIEF EXERCISE 4-7

Income from continuing operations		$10,600,000
Discontinued operations		
Loss from operation of discontinued restaurant division (net of tax)	$315,000	
Loss from disposal of restaurant division (net of tax)	189,000	(504,000)
Net income		$10,096,000
Earnings per share		
Income from continuing operations		$1.06
Discontinued operations, net of tax		(0.05)*
Net income		$1.01

*Rounded

BRIEF EXERCISE 4-8

	2010	2009	2008
Income before income tax	$180,000	$145,000	$170,000
Income tax (30%)	54,000	43,500	51,000
Net Income	$126,000	$101,500	$119,000

BRIEF EXERCISE 4-9

Vandross would not report any cumulative effect because a change in estimate is not handled retrospectively. Vandross would report bad debt expense of €120,000 in 2010.

BRIEF EXERCISE 4-10

$$\frac{\$1,000,000 - \$250,000}{190,000} = \underline{\underline{\$3.95}} \text{ per share}$$

BRIEF EXERCISE 4-11

PORTMAN CORPORATION
Retained Earnings Statement
For the Year Ended December 31, 2010

Retained earnings, January 1	$ 675,000
Add: Net income	1,400,000
	2,075,000
Less: Cash dividends	75,000
Retained earnings, December 31	$2,000,000

BRIEF EXERCISE 4-12

PORTMAN CORPORATION
Retained Earnings Statement
For the Year Ended December 31, 2010

Retained earnings, January 1, as reported	$ 675,000
Correction for overstatement of expenses in prior period (net of tax)	80,000
Retained earnings, January 1, as adjusted	755,000
Add: Net income	1,400,000
	2,155,000
Less: Cash dividends	75,000
Retained earnings, December 31	$2,080,000

BRIEF EXERCISE 4-13

(a)	Net income (Dividend revenue)	¥3,000,000
(b)	Net income	¥3,000,000
	Unrealized holding gain	4,000,000
	Comprehensive income	¥7,000,000
(c)	Unrealized holding gain (Other comprehensive income)	¥4,000,000
(d)	Accumulated other comprehensive income, January 1, 2010	¥ 0
	Unrealized holding gain	4,000,000
	Accumulated other comprehensive income, December 31, 2010	¥4,000,000

SOLUTIONS TO EXERCISES

EXERCISE 4-1 (10–15 minutes)

Sales revenue	€310,000
Cost of goods sold	140,000
Gross profit	170,000
Selling and administrative expenses	50,000
	120,000
Other income and expense	
Gain on sale of plant assets	30,000
Income from operations	150,000(a)
Interest expense	6,000
Income from continuing operations	144,000
Loss on discontinued operations	(12,000)
Net income	132,000(b)
Allocation to non-controlling interest	(40,000)
Net income attributable to controlling shareholders	€ 92,000(c)

Net income	€132,000
Unrealized gain on available-for-sale financial assets	10,000
Comprehensive income	€142,000(d)

Net income	€132,000
Dividends declared and paid	5,000
Retained earnings December 31, 2010	€127,000(e)

EXERCISE 4-2 (15–20 minutes)

Computation of net income

Change in assets:	£69,000 + £45,000 + £127,000 – £47,000 = £194,000 Increase
Change in liabilities:	£ 82,000 – £51,000 = 31,000 Increase
Change in equity:	£163,000 Increase

EXERCISE 4-2 (Continued)

Change in equity accounted for as follows:		
Net increase		**£163,000**
Increase in shares	**£138,000**	
Decrease in retained earnings due to dividend declaration	**(24,000)**	
Net increase accounted for		**114,000**
Increase in retained earnings due to net income		**£ 49,000**

EXERCISE 4-3 (25–35 minutes)

(a) Total net revenue:

Sales		**$400,000**
Less: Sales discounts	**$ 7,800**	
Sales returns	**12,400**	**20,200**
Net sales		**379,800**
Dividend revenue		**71,000**
Rental revenue		**6,500**
Total net revenue		**$457,300**

(b) Net income:

Total net revenue (from a)		**$457,300**
Expenses:		
Cost of goods sold	**$184,400**	
Selling expenses	**99,400**	
Administrative expenses	**82,500**	
Interest expense	**12,700**	
Total expenses		**379,000**
Income before income tax		**78,300**
Income tax		**26,600**
Net income		**$ 51,700**

EXERCISE 4-3 (Continued)

(c) Dividends declared:

Ending retained earnings	$134,000
Beginning retained earnings	(114,400)
Net increase	19,600
Less: Net income (from (b))	51,700
Dividends declared	$ 32,100

ALTERNATE SOLUTION (for (c))

Beginning retained earnings	$114,400
Add: Net income	51,700
	166,100
Less: Dividends declared	?
Ending retained earnings	$134,000

Dividends declared must be $32,100
($166,100 – $134,000)

EXERCISE 4-4 (20–25 minutes)

DUNBAR INC.
Income Statement
For Year Ended December 31, 2010

Net sales ($1,125,000[b] – $17,000)		$1,108,000
Cost of goods sold		500,000
Gross profit		608,000
Selling expenses	$360,000[c]	
Administrative expenses	90,000[a]	450,000
Income from operations		158,000
Interest expense		20,000
Income before income tax		138,000
Income tax		41,400
Net income		$ 96,600
Earnings per share (d)		$3.22*

*Rounded

EXERCISE 4-4 (Continued)

Determination of amounts

(a)	**Administrative expenses**	**=**	**18% of cost of good sold**
		=	**18% of $500,000**
		=	**$90,000**
(b)	**Gross sales X 8%**	**=**	**administrative expenses**
		=	**$90,000 ÷ 8%**
		=	**$1,125,000**
(c)	**Selling expenses**	**=**	**four times administrative expenses. (since selling expenses are 4/5 of selling and administrative expenses, selling expenses are 4 times administrative expenses.)**
		=	**4 X $90,000**
		=	**$360,000**

(d) Earnings per share $3.22 ($96,600 ÷ 30,000)

EXERCISE 4-5 (20–25 minutes)

WEBSTER COMPANY
Income Statement
For the Year Ended December 31, 2010
(In thousands, except earnings per share)

Sales			$96,500
Cost of goods sold			63,570
Gross profit			32,930
Selling expenses			
Sales commissions	$7,980		
Depr. of sales equipment	6,480		
Transportation-out	2,690	$17,150	
Administrative expenses			
Officers' salaries	4,900		
Depr. of office furn. and equip.	3,960	8,860	26,010
			6,920
Other income and expense			
Rental revenue			17,230
Income from operations			24,150
Interest expense			1,860
Income before income tax			22,290
Income tax			7,580
Net income			$14,710
Earnings per capital share ($14,710 ÷ 40,550)			$.36

EXERCISE 4-6 (30–35 minutes)

PARNEVIK CORP.
Income Statement
For the Year Ended December 31, 2010

Sales Revenue		
Sales		$1,280,000
Less: Sales returns and allowances	$150,000	
Sales discounts	45,000	195,000
Net sales revenue		1,085,000
Cost of goods sold		621,000
Gross profit		464,000
Selling expenses	194,000	
Admin. and general expenses	97,000	291,000
		173,000
Other Income and Expense		
Loss from impairment of plant assets	(120,000)	
Interest revenue	86,000	34,000
Income from operations		139,000
Interest expense		60,000
Income before income tax		79,000
Income tax ($79,000 X .34)		26,860
Net income		$ 52,140
Earnings per share ($52,140 ÷ 100,000)		$52*

*Rounded

EXERCISE 4-7 (30–40 minutes)

(a)

WEATHERSPOON SHOE CO.
Income Statement
For the Year Ended December 31, 2010

Net sales		$980,000
Cost of goods sold		516,000
Gross profit		464,000
Selling expenses	$140,000	
Administrative expenses	181,000	321,000
		143,000
Other income and expense		
Rental revenue	29,000	
Loss on sale of plant assets	(15,000)	14,000
Income from operations		157,000
Interest expense		18,000
Income before income tax		139,000
Income tax		30,600
Net income		108,400
Other Comprehensive Income		
Unrealized gain on securities, net of tax		31,000
Comprehensive income		$139,400
Earnings per share ($108,400 ÷ 20,000)		$.92

(b)

WEATHERSPOON SHOE CO.
Income Statement
For the Year Ended December 31, 2010

Net sales		$980,000
Cost of goods sold		516,000
Gross profit		464,000
Selling expenses	$140,000	
Administrative expenses	181,000	321,000
		143,000
Other income and expense		
Rental revenue	29,000	
Loss on sale of plant assets	(15,000)	14,000
Income from operations		157,000
Interest expense		18,000
Income before income tax		139,000
Income tax		30,600
Net income		$108,400
Earnings per share ($108,400 ÷ 20,000)		$.92

WEATHERSPOON SHOE CO.
Comprehensive Income Statement
For the Year Ended December 31, 2010

Net income	$108,400
Other comprehensive income	
Unrealized gain on securities, net of tax	31,000
Comprehensive income	$139,400

(c) The combined statement has the advantage of not requiring the creation of a new financial statement. However, burying net income as a subtotal on the statement is considered a disadvantage.

EXERCISE 4-8 (15–20 minutes)

(a)

Net sales	€ 540,000
Less: Cost of goods sold	(260,000)
Administrative expenses	(100,000)
Selling expenses	(80,000)
Discontinued operations-loss	(40,000)
Income before income tax	60,000
Income tax (€60,000 X .30)	18,000
Net income	€ 42,000

(b)

Income before income tax	€100,000*
Income tax (€100,000 X .30)	30,000
Income from continuing operations	70,000
Discontinued operations, less applicable income tax of €12,000	(28,000)
Net income	€ 42,000

*€60,000 + €40,000

Earnings per share:

Income from continuing operations (€70,000 ÷ 20,000)	€ 3.50
Loss on discontinued operations, net of tax	(1.40)
Net Income (€42,000 ÷ 20,000)	€ 2.10

EXERCISE 4-9 (30–35 minutes)

(a)

BROKAW CORP.
Income Statement
For the Year Ended December 31, 2010

Sales Revenue		
Net sales		$1,200,000
Cost of goods sold		780,000
Gross profit		420,000
Selling expenses	$65,000	
Administrative expenses	48,000	113,000
		307,000
Other income and expense		
Dividend revenue	20,000	
Interest revenue	7,000	
Write-off of inventory due to obsolescence	(80,000)	(53,000)
Income from operations		254,000
Interest expense		50,000
Income before income tax		204,000
Income tax		69,360
Net income		$ 134,640
Earnings per share		
Net income ($134,640 ÷ 60,000)		$2.24*

*Rounded

EXERCISE 4-9 (Continued)

(b) **BROKAW CORP.**
Retained Earnings Statement
For the Year Ended December 31, 2010

Retained earnings, Jan. 1, as reported	$ 980,000
Correction for overstatement of net income in prior period (depreciation error) (net of $13,600 tax)	(26,400)
Retained earnings, Jan. 1, as adjusted	953,600
Add: Net income	134,640
	1,088,240
Less: Dividends declared	45,000
Retained earnings, Dec. 31	$1,043,240

EXERCISE 4-10 (20–25 minutes)

Computation of net income:		
2010 net income after tax		R$33,000,000
2010 net income before tax [R$33,000,000 ÷ (1 – .20)]		41,250,000
Add back discontinued operations loss		12,000,000
Income before income tax		53,250,000
Income taxes (20% X R$53,250,000)		10,650,000
Income from continuing operations		42,600,000
Discontinued operations:		
Loss from discontinued operations	R$12,000,000	
Less: Applicable income tax reduction	2,400,000	9,600,000
Net income		R$33,000,000

EXERCISE 4-10 (Continued)

Net income	**R$33,000,000**
Less: Provision for preference dividends (6% of R$4,500,000)	**270,000**
Income available to capital shareholders	**32,730,000**
Capital shares	**÷ 10,000,000**
Earnings per share	**R$3.27***

Income statement presentation

Earnings per share:	
Income from continuing operations	**R$4.23**[a]
Discontinued operations, net of tax	**(0.96)**[b]
Net income	**R$3.27**

[a] $\frac{\text{R\$42,600,000} - \text{R\$270,000}}{10{,}000{,}000} = \text{R\$4.23*}$

[b] $\frac{\text{R\$9,600,000}}{10{,}000{,}000} = \text{R\$0.96*}$

***Rounded**

EXERCISE 4-11 (20–25 minutes)

WOODS CORPORATION
Income Statement
For the Year Ended December 31, 2010

Net sales[a]		$4,062,000
Cost of goods sold[b]		2,665,000
Gross profit		1,397,000
Selling expenses[c]	$636,000	
Administrative expenses[d]	491,000	1,127,000
Other income and expense		240,000
Rent revenue		270,000
Income from operations (interest)		510,000
Interest expense		176,000
Income before income tax		334,000
Income tax ($334,000 X .30)		100,200
Income from continuing operations		233,800
Discontinued operation		
Loss on sale of division	$ 60,000	
Less: Applicable income tax	18,000	(42,000)
Net income		$ 191,800

Earnings per share
($900,000 ÷ $10 par value = 90,000 shares)

Income from continuing operations ($233,800 ÷ 90,000)	$2.60*
Discontinued operations, net of tax	(0.47)*
Net income	$2.13

*Rounded

Supporting computations

(a) Net sales:
$4,175,000 – $34,000 – $79,000 = $4,062,000

(b) Cost of goods sold:
$535,000 + ($2,786,000 + $72,000 – $27,000 – $15,000) – $686,000 = $2,665,000

EXERCISE 4-11 (Continued)

(c) Selling expenses:
$284,000 + $83,000 + $69,000 + $54,000 + $93,000 + $36,000 + $17,000 = $636,000

(d) Administrative expenses:
$346,000 + $33,000 + $24,000 + $48,000 + $32,000 + $8,000 = $491,000

EXERCISE 4-12 (20–25 minutes)

(a)

McENTIRE CORPORATION
Retained Earnings Statement
For the Year Ended December 31, 2010

Balance, January 1, as reported	$225,000*
Correction for depreciation error (net of $5,000 tax)	(20,000)
Cumulative decrease in income from change in inventory methods (net of $9,000 tax)	(36,000)
Balance, January 1, as adjusted	169,000
Add: Net income	176,000**
	345,000
Less: Dividends declared	100,000
Balance, December 31	$245,000

*($40,000 + $125,000 + $160,000) – ($50,000 + $50,000)
**[$220,000 – (20% X $220,000)]

(b) Total retained earnings would still be reported as $245,000. A restriction does not affect total retained earnings; it merely labels part of the retained earnings as being unavailable for dividend distribution. Retained earnings would be reported as follows:

Retained earnings:	
Appropriated	$ 70,000
Unappropriated	175,000
Total	$245,000

EXERCISE 4-13 (15–20 minutes)

Net income:

Income before income tax		€21,650,000
Income tax (35% X €21,650,000)		7,577,500
Income from continuing operations		14,072,500
Discontinued operations		
Loss before income tax	€3,225,000	
Less: Applicable income tax (35%)	1,128,750	(2,096,250)
Net income		€11,976,250

Preference dividends declared:	€ 860,000

Weighted average shares outstanding	4,000,000

Earnings per share

Income from continuing operations	€3.30*
Discontinued operations, net of tax	(0.52)**
Net income	€2.78***

*(€14,072,500 – €860,000) ÷ 4,000,000. (Rounded)
**€2,096,250 ÷ 4,000,000. (Rounded)
***(€11,976,250 – €860,000) ÷ 4,000,000.

EXERCISE 4-14 (15–20 minutes)

(a)

	2010
Income before income tax	$460,000
Income tax (35%)	161,000
Net Income	$299,000

(b) Cumulative effect for years prior to 2010:

Year	Weighted Average	FIFO	Difference	Tax Rate (35%)	Net Effect
2008	$370,000	$395,000	$25,000		
2009	390,000	420,000	30,000		
		Total	$55,000	$19,250	$35,750

(c)

	2010	2009	2008
Income before income tax	$460,000	$420,000	$395,000
Income tax (35%)	161,000	147,000	138,250
Net income	$299,000	$273,000	$256,750

EXERCISE 4-15 (15–20 minutes)

ARMSTRONG CORPORATION
Income Statement and Comprehensive Income Statement
For the Year Ended December 31, 2010

Sales	$1,200,000
Cost of goods sold	720,000
Gross profit	480,000
Selling and administrative expenses	320,000
Net income	$ 160,000
Net income	$ 160,000
Unrealized holding gain	15,000
Comprehensive income	$ 175,000

EXERCISE 4-16 (15–20 minutes)

	Share Capital—Ordinary	Retained Earnings	Unrealized Gains on Available-for-Sale Financial Assets	Total Equity
Beginning balance	$350,000	$ 90,000	$80,000	$520,000
Total comprehensive income		170,000*	(50,000)	120,000
Dividends		(10,000)		(10,000)
Ending balance	$350,000	$250,000	$30,000	$630,000

*($750,000 – $500,000 – $80,000).

EXERCISE 4-17 (30–35 minutes)

(a)

GIBSON INC.
Income Statement
For the Year Ended December 31, 2010

Sales		$1,700,000
Cost of goods sold		850,000
Gross profit		850,000
Selling expenses	$300,000	
Administrative expenses	240,000	540,000
		310,000
Other income and expense		
Gain on sale of plant assets	95,000	
Rent revenue	40,000	
Loss on impairment of land	(60,000)	75,000

EXERCISE 4-17 (Continued)

Income before income tax		385,000
Income tax		119,000
Income from continuing operations		266,000
Discontinued operations		
Loss on discontinued operations	$ 75,000	
Less: Applicable income tax reduction	25,500	(49,500)
Net income		216,500
Other comprehensive income		
Unrealized holding gain		15,000
Comprehensive income		$231,500

Earnings per share:	
Income from continuing operations ($266,000 ÷ 100,000)	$2.66
Loss on discontinued operations, net of tax	(0.49)
Net income ($216,500 ÷ 100,000)	$2.17

(b)

GIBSON INC.
Retained Earnings Statement
For the Year Ended December 31, 2010

Retained earnings, January 1	$600,000
Add: Net income	216,500
	816,500
Less: Dividends declared	150,000
Retained earnings, December 31	$666,500

EXERCISE 4-18 (10–15 minutes)

HASBRO INC.
Statement of Changes in Equity
For the year ended December 31, 2010

	Share Capital—Ordinary	Retained Earnings	Unrealized gains on Available-for-Sale Financial Assets	Total Equity
Beginning balance	$300,000	$20,000	$50,000	$370,000
Capital shares	30,000			30,000
Total comprehensive income		100,000	(5,000)	95,000
Dividends		(9,000)		(9,000)
Ending balance	$330,000	$111,000	$45,000	$486,000

TIME AND PURPOSE OF PROBLEMS

Problem 4-1 (Time 5–10 minutes)
Purpose—to provide the student with an opportunity to indicate where various transactions would be reported on the Statement of Comprehensive income or the Statement of Retained Earnings.

Problem 4-2 (Time 30–35 minutes)
Purpose—to provide the student with an opportunity to prepare an income statement and a retained earnings statement. A number of special items such as loss from discontinued operations, unusual items, and ordinary gains and losses are presented in the problem for analysis purposes.

Problem 4-3 (Time 25–30 minutes)
Purpose—to provide the student with an opportunity to prepare an income statement and a retained earnings statement. The student must determine through analysis the ending balance in retained earnings.

Problem 4-4 (Time 30–40 minutes)
Purpose—to provide the student with an opportunity to analyze a number of transactions and to prepare a partial income statement. The problem includes discontinued operations and the cumulative effect of a change in accounting principle.

Problem 4-5 (Time 30–40 minutes)
Purpose—to provide the student with the opportunity to prepare an income statement and a retained earnings statement from the same underlying information. A substantial number of operating expenses must be reported in this problem unlike Problem 4-1. As a consequence, the problem is time-consuming.

Problem 4-6 (Time 20–25 minutes)
Purpose—to provide the student with a problem on the income statement treatment of (1) an impairment of intangibles, (2) a loss on sale of equipment, (3) a correction of an error, and (4) earnings per share. The student is required not only to identify the proper income statement treatment but also to provide the rationale for such treatment.

Problem 4-7 (Time 25–35 minutes)
Purpose—to provide the student with an opportunity to prepare a retained earnings statement. A number of special items must be reclassified and reported in the income statement. This problem illustrates the fact that ending retained earnings is unaffected by the choice of disclosing items in the income statement or the retained earnings statement, although the income reported would be different.

Problem 4-8 (Time 25–35 minutes)
Purpose—to provide the student with a problem to determine the reporting of several items, which may get special treatment as irregular items. This is a good problem for a group assignment.

SOLUTIONS TO PROBLEMS

PROBLEM 4-1

1. E
2. C
3. A
4. C
5. B
6. G
7. C
8. B
9. H
10. F
11. C
12. D

PROBLEM 4-2

DICKINSON COMPANY
Income Statement
For the Year Ended December 31, 2010

Sales		$25,000,000
Cost of goods sold		16,000,000
Gross profit		9,000,000
Selling and administrative expenses		4,700,000
		4,300,000
Other income and expense		
Gain on the sale of investments	$ 110,000	
Loss due to flood damage	(390,000)	
Write-off of goodwill	(820,000)	(1,100,000)
Income from operations		3,200,000
Interest expense		70,000
Income before income tax		3,130,000
Income tax		1,244,000
Income from continuing operations		1,886,000
Discontinued operations		
Loss on operations, net of tax	90,000	
Loss on disposal, net of tax	440,000	(530,000)
Net income		$ 1,356,000

PROBLEM 4-2 (Continued)

Earnings per share:

Income from continuing operations		$3.61[a]
Discontinued operations		
Loss on operations, net of tax	$(0.18)	
Loss on disposal, net of tax	(0.88)	(1.06)
Net income..		$2.55[b]

$$^{a}\frac{\$1,886,000 - \$80,000}{500,000\text{ shares}} = \$3.61$$

$$^{b}\frac{\$1,356,000 - \$80,000}{500,000\text{ shares}} = \$2.55$$

DICKINSON COMPANY
Retained Earnings Statement
For the Year Ended December 31, 2010

Retained earnings, January 1................................		$ 980,000
Add: Net income		1,356,000
		2,336,000
Less: Dividends		
Preference shares	$ 80,000	
Ordinary shares..	250,000	330,000
Retained earnings, December 31		$2,006,000

PROBLEM 4-3

THOMPSON CORPORATION
Income Statement
For the Year Ended December 31, 2010

Net sales (£1,100,000 – £14,500 – £17,500)		£1,068,000
Cost of goods sold*		645,000
Gross profit		423,000
Selling expenses	£232,000	
Administrative expenses	99,000	331,000
		92,000
Other income and expense		
Gain on sale of land	30,000	
Rent revenue	18,000	48,000
Income before income tax		140,000
Income tax		53,900
Net income		£ 86,100
Earnings per share (£86,100 ÷ 30,000)		$2.87

*Cost of goods sold: Can be verified as follows:

Merchandise inventory, Jan. 1		£ 89,000
Purchases	£610,000	
Less: Purchase discounts	10,000	
Net purchases	600,000	
Add: Freight-in	20,000	620,000
Merchandise available for sale		709,000
Less: Merchandise inventory, Dec. 31		64,000
Cost of goods sold		£ 645,000

PROBLEM 4-3 (Continued)

THOMPSON CORPORATION
Retained Earnings Statement
For the Year Ended December 31, 2010

Retained earnings, January 1	**£160,000**
Add: Net income	**86,100**
	246,100
Less: Cash dividends	**45,000**
Retained earnings, December 31	**£201,100**

PROBLEM 4-4

MAHER INC.
Income Statement (Partial)
For the Year Ended December 31, 2010

Income before income tax		**$748,500[a]**
Income tax ($748,500 X .30)		**224,550**
Income from continuing operations		**523,950**
Discontinued operations		
Loss from disposal of recreational division	**$115,000**	
Less: Applicable income tax reduction	**34,500**	**(80,500)**
Net income		**$443,450**

Earnings per share:	
Income from operations	**$4.37***
Discontinued operations, net of tax	**(0.67)***
Net income ($443,450 ÷ 120,000)	**$3.70**

***Rounded**

PROBLEM 4-4 (Continued)

[a]Computation of income before income tax:

As previously stated		**$790,000**
Uninsured flood loss............................		**(90,000)**
Gain on sale of securities		**47,000**
Error in computation of depreciation		
As computed ($54,000 ÷ 6)	**$9,000**	
Corrected ($54,000 – $9,000) ÷ 6	**(7,500)**	**1,500**
As restated..		**$748,500**

Note: No adjustment is needed for the inventory method change, since the new method is reported in 2010 income. The cumulative effect on prior years of retroactive application of the new inventory method will be recorded in retained earnings.

PROBLEM 4-5

TWAIN CORPORATION
Income Statement
For the Year Ended June 30, 2010

Sales Revenue			
Sales			$1,578,500
Less: Sales discounts		$31,150	
Sales returns		62,300	93,450
Net sales			1,485,050
Cost of goods sold			896,770
Gross profit			588,280
Selling expenses			
Sales commissions	$97,600		
Sales salaries	56,260		
Travel expense	28,930		
Freight-out	21,400		
Entertainment expense	14,820		
Telephone and internet exp.	9,030		
Building expense	6,200		
Depr. of sales equipment	4,980		
Bad debt expense	4,850		
Misc. selling expenses	4,715	248,785	

PROBLEM 4-5 (Continued)

Administrative Expenses			
Building expense	9,130		
Real estate and other local taxes...........	7,320		
Depreciation of office furniture			
and equipment	7,250		
Office supplies used..............................	3,450		
Telephone and internet expense	2,820		
Miscellaneous office expenses.............	6,000	35,970	284,755
			303,525
Other income and expense			
Dividend revenue			
			38,000
Income from operations			341,525
Bond interest expense...........................			
			18,000
Income before income tax...........................			323,525
Income tax			
			102,000
Net income			$
			221,525
Earnings per share			
[($221,525 – $9,000) ÷ 80,000]			$2.66*

*Rounded

TWAIN CORPORATION
Retained Earnings Statement
For the Year Ended June 30, 2010

Retained earnings, July 1, 2009, as reported		$337,000
Correction of depreciation understatement, net of tax		(17,700)
Retained earnings, July 1, 2009, as adjusted		319,300
Add: Net income		221,525
		540,825
Less:		
Dividends declared on preference shares	9,000	
Dividends declared on ordinary shares	37,000	46,000
Retained earnings, June 30, 2010		$494,825

PROBLEM 4-6

1. The impairment of intangibles charge of ¥8,500,000 should be disclosed separately, assuming it is material. This charge is shown above income before income tax and would not be reported net of tax. This item should be separately disclosed to inform the users of the financial statements that this item is nonrecurring and therefore may not impact next year's results. Furthermore, trend comparisons may be misleading if such an item is not highlighted and adjustments made.

2. The loss on sale of equipment of ¥17,000,000 should be reported in the other income and expense section of the income statement. The reason for the separate disclosure is much the same as that given above for the separate disclosure of the impairment of intangibles charge.

3. The adjustment required for correction of an error is inappropriately labeled and also should not be reported in the retained earnings statement. Changes in estimate should be handled in current and future periods through the income statement. Catch-up adjustments are not permitted. To restate financial statements every time a change in estimate occurred would be extremely costly. In addition, adjusting the beginning balance of retained earnings is inappropriate as the increased charge in this case affects current and future income statements.

4. Earnings per share should be reported on the face of the income statement and not in the notes to the financial statements. Because such importance is ascribed to this statistic, the profession believes it necessary to highlight the earnings per share figure.

PROBLEM 4-7

(a)

ACADIAN CORP.
Retained Earnings Statement
For the Year Ended December 31, 2010

Retained earnings, January 1, as reported	$257,600
Correction of error from prior period	25,400
Adjustment for change in accounting principle	(23,200)
Retained earnings, January 1, as adjusted	259,800
Add: Net income	52,300*
Less: Cash dividends declared	32,000
Retained earnings, December 31	$280,100

*$52,300 = ($84,500 + $41,200 + $21,600 – $35,000 – $60,000)

(b)

1. Gain on sale of investments—body of income statement. This gain should be shown under other income and expense on the income statement.
2. Refund on litigation with government—body of income statement. This refund should be shown under other income and expense on the income statement.
3. Loss on discontinued operations—body of the income statement, following the caption, "Income from continuing operations."
4. Write-off of goodwill—body of income statement. The write-off should be shown under other income and expense on the income statement.

PROBLEM 4-8

WADE CORP.
Income Statement (Partial)
For the Year Ended December 31, 2010

Income before income tax			€1,325,000*
Income tax			265,000**
Income from continuing operations			1,060,000
Discontinued operations			
Loss from operations of discontinued subsidiary	€ 90,000		
Less: Applicable income tax reduction........................	18,000	€72,000	
Loss from disposal of subsidiary......	100,000		
Less: Applicable income tax reduction	20,000	80,000	(152,000)
Net income..			€ 908,000

Earnings per share:

Income from continuing operations	€7.06
Discontinued operations, net of tax...................................	(1.01)
Net income (€908,000 ÷ 150,000)	€6.05

PROBLEM 4-8 (Continued)

***Computation of income before income tax:**

As previously stated	**€1,210,000**
Loss on sale of equipment [€40,000 – (€80,000 – €30,000)]	**(10,000)**
Gain on condemnation of property	**125,000**
Restated	**€1,325,000**

****Computation of income tax expense:**

€1,325,000 X .20 = €265,000

Note: The error related to the intangible asset was correctly charged to retained earnings.

TIME AND PURPOSE OF CONCEPTS FOR ANALYSIS

CA 4-1 (Time 20–25 minutes)
Purpose—to provide the student with the opportunity to comment on deficiencies in an income statement format. The student is required to comment on such items as inappropriate heading, incorrect classification of unusual items, proper net of tax treatment, and presentation of per share data.

CA 4-2 (Time 10–15 minutes)
Purpose—to provide the student a real company context to identify factors that make income statement information useful. The focus is on overly-aggregated information in a condensed income statement. Additional detail would seem to be warranted either on the face of the statement or with reference to the notes.

CA 4-3 (Time 20–25 minutes)
Purpose—to provide the student an illustration of how earnings can be managed. The case allows students to see the effects of warranty expense timing on the trend of income and illustrates the potential use of accruals to smooth earnings.

CA 4-4 (Time 15–20 minutes)
Purpose—to provide the student an illustration of how earnings can be managed by how losses are reported, including ethical issues.

CA 4-5 (Time 30–35 minutes)
Purpose—to provide the student with an unstructured case to comment on the reporting of discontinued operations. In addition, the student is asked to comment on materiality considerations and earnings per share implications.

CA 4-6 (Time 30–40 minutes)
Purpose—to provide the student with the opportunity to comment on deficiencies in an income statement. This case includes discussion of discontinued items, and ordinary gains and losses. The case is complete and therefore provides a broad overview to a number of items discussed in the textbook.

CA 4-7 (Time 20–25 minutes)
Purpose—to provide the student with a variety of situations involving classification of unusual items. This case is different from CA 4-6 in that an income statement is not presented. Instead, short factual situations are described. A good comprehensive case for discussing the presentation of unusual items.

CA 4-8 (Time 10–15 minutes)
Purpose—to provide the student with an opportunity to show how comprehensive income should be reported.

SOLUTIONS TO CONCEPTS FOR ANALYSIS

CA 4-1

The deficiencies of O'Malley Corporation's income statement are as follows:

1. The heading is inappropriate. The heading should include the name of the company and the period of time for which the income statement is presented.

2. Dividends and gain on recovery of insurance proceeds should be classified as other income and expense items.

3. Cost of goods sold is usually listed as the first expense, followed by selling, administrative, and other expenses.

4. Loss on obsolescence of inventories should be classified as an other income and expense item.

5. Loss on discontinued operations requires a separate classification after income from continuing operations and before presentation of net income.

6. Intraperiod income tax allocation is required to relate income tax expense to income from continuing operations, and loss on discontinued operations.

7. Interest expense should be shown as a deduction from income from operations in determining income before income tax.

8. Per share data is a required presentation for income from continuing operations, discontinued operations, and net income.

CA 4-2

(a) The main deficiency in the Boeing income statement is that important information is being aggregated, particularly in the "Costs and expenses" line item. More detail likely could be found in Boeing's notes. However, the condensed income statement may be the one that investors and creditors rely upon. Also, earnings per share should be reported.

(b) Boeing could provide additional details on the expenses included in "Costs and expenses" on the face of the income statement. Alternatively, the company could provide the information in the notes to the financial statements, which could be referenced on the face of the income statement.

CA 4-3

(a) Earnings management is often defined as the planned timing of revenues, expenses, gains and losses to smooth out bumps in earnings. In most cases, earnings management is used to increase income in the current year at the expense of income in future years. For example, companies prematurely recognize sales before they are complete in order to boost earnings. Earnings management can also be used to decrease current earnings in order to increase income in the future. The classic case is the use of "cookie jar" reserves, which are established, by using unrealistic assumptions to estimate liabilities for such items as sales returns, loan losses, and warranty costs.

(b)

Proposed Accounting	2007	2008	2009	2010	2011
Income before warranty expense				€43,000	€43,000
Warranty expense				7,000	3,000
Income	€20,000	€25,000	€30,000	€36,000	€40,000

Assuming the same income before warranty expense for both 2010 and 2011 and total warranty expense over the 2-year period of €10,000, this proposed accounting results in steadily increasing income over the two-year period.

(c)

Appropriate Accounting	2007	2008	2009	2010	2011
Income before warranty expense				€43,000	€43,000
Warranty expense				5,000	5,000
Income	€20,000	€25,000	€30,000	€38,000	€38,000

The appropriate accounting would be to record €5,000 of warranty expense in 2010, resulting in income of €38,000. However, with the same amount of warranty expense in 2011, Bobek no longer shows an increasing trend in income. Thus, by taking more expense in 2010, Bobek can save some income (a classic case of "cookie-jar" reserves) and maintain growth in income.

CA 4-4

(a) The ethical issues involved are integrity and honesty in financial reporting, full disclosure, accountant's professionalism, and job security for Charlie.

(b) If Charlie believes the losses are relevant information important to users of the income statement, he should disclose the losses separately. If they are considered incidental to the company's normal activities—i.e., the major activities of the Kelly Corporation do not include selling equipment—the transactions should be reported among any gains and losses that occurred during the year.

CA 4-5

(a) It appears that the sale of the Casino Knights Division would qualify as a discontinued operation. The operation of gambling facilities appears to meet the criteria for discontinued operations for Simpson Corp. and, therefore, the accounting requirements related to discontinued operations should be followed. Although the financial vice-president might be correct theoretically, professional pronouncements require that such a segregation be made. The controller is correct in stating that the disposal of the Casino Knights Division should be reported separately as gain on discontinued operations. A separate classification is required for disposals meeting the requirements of discontinued operations.

CA 4-5 (Continued)

(b) The "walkout" or strike should be reported as an other income and expense item. Events of this nature are a general risk that any business enterprise takes and should not warrant special treatment.

(c) The financial vice president is incorrect in his/her observations concerning the materiality of discontinued operations items. The materiality of each discontinued operations item must be considered individually. It is not appropriate to consider only the materiality of the net effect. Each discontinued operations item must be reported separately on the income statement.

(d) Earnings per share for income from continuing operations, discontinued operations, and net income must be reported on the face of the income statement.

CA 4-6

The income statement of Walters Corporation contains the following weaknesses in classification and disclosure:

1. **Sales taxes.** Sales taxes have been erroneously included in both gross sales and cost of goods sold on the income statement of Walters Corporation. Failure to deduct these taxes directly from customer billings results in a deceptive inflation of the amount of sales. These taxes should be deducted from gross sales because the corporation acts as an agent in collecting and remitting such taxes to the government.

2. **Purchase discounts.** Purchase discounts should not be treated as revenue by being lumped with other revenues such as dividends and interest. A purchase discount is more logically a reduction of the cost of purchases because revenue is not created by purchasing goods and paying for them. In a cash transaction, cost is measured by the amount of the cash consideration. In a credit transaction, however, cost is measured by the amount of cash required to settle immediately the obligation incurred. The discount should reduce the cost of goods sold to the amount of cash that would be required to settle the obligation immediately.

3. **Recoveries of accounts written off in prior years.** These collections should be credited to the allowance for doubtful accounts unless the direct write-off method was used in accounting for bad debt expense. Generally, the direct write-off method is not allowed.

4. **Freight-in and freight-out.** Although freight-out is an expense of selling and is therefore reported properly in the statement, freight-in is an inventoriable cost and should have been included in the computation of cost of goods sold. The value assigned to inventory should represent the value of the economic resources given up in obtaining goods and readying them for sale.

5. **Loss on discontinued styles.** This type of loss, though often substantial, should not be treated as unusual item because it is apparently typical of the customary business activity of the corporation (and it is not a discontinued component). It should be reported in "Costs and expenses" as an operating expense.

6. **Loss on sale of marketable securities.** This item should be reported as a separate component of income from continuing operations and not as an unusual item.

CA 4-6 (Continued)

7. **Loss on sale of warehouse.** This item should be reported as a separate component of income from continuing operations and not as an unusual item.

8. **Income taxes.** The provision for income taxes and intraperiod tax allocation are not presented in the income statement. This omission implies that the income tax is a distribution of net income instead of an operating expense and a determinant of net income. This assumption is not as relevant to the majority of financial statement users as the concept of net income to investors, shareholders, or residual equity holders.

9. Other items (dividends, interest) should be classified as "other income and expense."

CA 4-7

	Classification	Rationale
1.	No disclosure.	Error has "washed out"; that is, subsequent income statement compensated for the error. However, prior year income statements should be restated.
2.	Other income and expense section.	Material, unusual in nature, and non-recurring.
3.	Depreciation expense in body of income statement, based on new useful life.	Material item, but change in estimated useful life is considered part of normal business activity.
4.	No separate disclosure unless material.	Change in estimate, considered part of normal business activity.
5.	Discontinued operations section.	Sale meet the criteria for the disposal of a component of a business.
6.	Adjustment to the beginning balance of retained earnings.	A change in inventory methods is a change in accounting principle and prior periods are adjusted.
7.	Other income and expense section.	Material, unusual in nature, and non-recurring.
8.	Other income and expense section.	Material, unusual in nature, and non-recurring.
9.	Prior period adjustment, adjust beginning retained earnings.	Corrections of errors are shown as prior period adjustments.
10.	Other income and expense section.	Material, unusual in nature, and non-recurring.
11.	Discontinued operations section.	Division's assets, results of operations, and activities are clearly distinguishable physically, operationally, and for financial reporting purposes.

CA 4-8

(a) **Separate Statement**

	Current Year	Prior Year
. . . income components . . .		
Net income	$400,000	$410,000
Statement of Comprehensive Income		
Net income	$400,000	$410,000
Unrealized gains	15,000	
Comprehensive income	$415,000	$410,000

(b) **Combined Format**

	Current Year	Prior Year
. . . income components . . .		
Net income	$400,000	$410,000
Other comprehensive income		
Unrealized gains	15,000	
Comprehensive income	$415,000	$410,000

(c) Nelson can choose either approach, according to IFRS. The method chosen should be based on which one provides the most useful information. For example, Nelson should not choose the combined format because the gains result in an increasing trend in comprehensive income, while net income is declining.

FINANCIAL REPORTING PROBLEM

(a) M&S uses a condensed format income statement. This format provides highlights of a company's performance without presenting unnecessary detailed computations.

(b) M&S's primary revenue sources are from General merchandise (£4,551.0m) and from Food (£4,471.0m).

(c) M&S's gross profit was £3,341.2m in 2007 and increased to £3,486.8m in 2008. Gross profit increased in 2008 because Revenue increased £433.9m while cost of sales increased only £288.3m.

(d) M&S reports operating profit separately from nonoperating profit because nonoperating profit is non-recurring and not expected to arise in the future. In order to make valid comparisons between companies and years, nonoperating must be reported separately from operating profit.

(e) M&S did report Non-GAAP measures. The adjusted profit and earnings per share measures provide additional useful information for share-holders on the underlying performance of the business. The adjustments made to reported profit before tax are to exclude the (1) exceptional income and charges and (2) profits and losses on the disposal of properties.

COMPARATIVE ANALYSIS CASE

(a) Cadbury's 14.6% increase in revenues from 2007 to 2008 was substantially greater than Nestlé's 2.2% increase.

(b) Cadbury reported a loss from discontinued operations of £4 million. Since discontinued operations are considered non-recurring in nature, using the gain (loss) from discontinued operations in comparisons between two companies could cause distorted conclusions. Comparisons between companies should be based on income from continuing operations rather than net income.

(c) Cadbury's depreciation and amortization expense was 41.8% (£196 ÷ £469) of its 2008 operating cash flow and was significantly higher than Nestlé's 30.2% (CHF3,249 ÷ CHF10,763). One reason for this difference is the substantial difference in depreciable amortizable assets (38.7% of assets for Cadbury vs. 84.6% of assets for Nestlé).

(d) Both companies reported profit attributed to minority interests. Nestlé has a minority interest of 5.3% (CHF1,012 ÷ CHF19,051) while Cadbury's minority interest is only .5% (£2 ÷ £366).

FINANCIAL STATEMENT ANALYSIS CASE 1

(a) Depending on the company chosen, student answers will vary. Given the ready availability, the analysis for Nokia is provided below:

Z-Score Analysis

$$Z = \frac{\text{Working Capital}}{\text{Total Assets}} \times 1.2 + \frac{\text{Retained Earnings}}{\text{Total Assets}} \times 1.4 + \frac{\text{EBIT}}{\text{Total Assets}} \times 3.3 + \frac{\text{Sales}}{\text{Total Assets}} \times .99 + \frac{\text{MV Equity}}{\text{Total Liabilities}} \times 0.6$$

Nokia ($000,000)

	2008	Weights	Z-Score 2008	2007	Weights	Z-Score 2007
Total Assets	€39,582			€37,599		
Current Assets	24,470			29,294		
Current Liabilities	20,355			18,976		
Working Capital	4,115			10,318		
Working Capital/Assets	0.104	X 1.2 =	0.125	0.274	X 1.2 =	0.329
Retained Earnings	€11,692			€13,870		
Retained Earnings/ Assets	0.295	X 1.4 =	0.413	0.369	X 1.4 =	0.517
EBIT	€5,155			€8,311		
EBIT/Assets	0.130	X 3.3 =	0.429	0.221	X 3.3 =	0.729
Sales	€50,710			€51,058		
Sales/Assets	1.281	X 0.99 =	1.268	1.358	X 0.99 =	1.344
MV Equity*	€41,048			€101,996		
Total Liabilities	23,072			20,261		
MV Equity/Total Liabilities	1.779	X 0.6 =	1.067	5.034	X 0.6 =	3.020
		Total =	3.302		Total =	5.939
*Market Price X Shares Outstanding						
Market Price (year-end)	€11.10			€26.52		
Shares Outstanding	3,698			3,846		
Total Equity	€41,048			€101,996		

(b) Nokia's Z-score in 2008 has declined significantly but is still above the cutoff score for companies that are unlikely to fail. The company has declined in all areas in 2008, compared to 2007.

Note to instructors—as an extension, students could be asked to conduct the analysis on companies which are in financial distress to examine whether their financial distress could have been predicted in advance.

(c) EBIT is an operating income measure. By adding back items less relevant to predicting future operating results (interest, taxes), it is viewed as a better indicator of future profitability.

FINANCIAL STATEMENT ANALYSIS CASE 2

(a) **Assumptions and estimates related to items such as bad debt expense, warranties, or the useful lives or residual values for fixed assets could result in income being overstated.**

(b) **See the table below.**

December 31, 2008	Price	EPS	Sales per Share	P/E	PSR
Addidas	€ 27.14	€3.25	€55.79	8.35	.49
JJB sports	112.50P	4.07P	3.43	27.64	32.80

(c) **JJB sports has a higher P/E relative to addidas by 330%. But JJB's PSR is 67 times higher than that for JJB sports. Thus, it would appear that JJB's stock is overpriced, and by a bigger margin when using the sales-based PSR. This may suggest a lower quality of earnings for JJB sports.**

INTERNATIONAL REPORTING CASE

(a) Some of the differences are:

1. **Units of currency—Campbell and all U.S. companies report in dollars and earnings per share in dollars and cents. International companies using IFRS report in a variety of currencies.**
2. **Terminology—Finance costs are referred to as interest expense by Campbell and income is replaced with earnings.**
3. **Campbell does not report either gross profit or income from operations in its Statement of Earnings. These items would be reported by Campbell if it prepared a detailed income statement.**

Some similarities are:

1. **Campbell appears to use a function-of-expense approach. It may provide additional nature-of-expense information in the notes.**
2. **Campbell classifies separately non-operations items (finance revenues and costs and discontinued operations.**
3. **Campbell reports EPS information on the face of the income statement.**

(b) The “Earnings from discontinued operations” is an example of a non-recurring item. As in IFRS companies’ income statements, these items are included in the measurement of income but they are separate from income from continuing operations, likely due to their non-recurring nature. U.S. companies also report interest expense under a separate heading in the income statement. This distinguishes income from the operating and financing activities of the company.

ACCOUNTING

COUNTING CROWS, INC.
Statement for the Income
Year Ended December 31, 2010

Sales		$1,900,000
Cost of goods sold		850,000
Gross profit		1,050,000
Selling expenses	$300,000	
Administrative expenses	240,000	540,000
		510,000
Other Income and expense		
Gain on sale of investments	62,700	
Rent revenue	40,000	102,700
Income before income tax		612,700
Income tax		187,000
Income from continuing operations		425,700
Discontinued operations		
Loss on discontinued operations	$ 75,000	
Less: Applicable income tax reduction	25,500	(49,500)
Net income		$ 376,200
Per share:		
Income from continuing operations ($425,700 ÷ 100,000)		4.26
Loss on discontinued operations, net of tax		(0.50)
Net income ($376,200 ÷ 100,000)		$3.76

COUNTING CROWS, INC.
Statement of Retained Earnings
Year Ended December 31, 2010

Retained earnings, January 1	$600,000
Net income	376,200
	976,200
Dividends declared	(80,000)
Retained earnings, December 31	$896,200

COUNTING CROWS, INC.
Statement of Comprehensive Income
Year Ended December 31, 2010

Net income	**$376,200**
Other comprehensive income:	
Unrealized holding gain, net of tax	**15,000**
Comprehensive income	**$391,200**

ANALYSIS

The detailed income statement recognizes important relationships between income statement elements. For example, by separating operating transactions from nonoperating transactions, the statement user can distinguish between elements with differing implications for future operating results. In addition, the detailed format generally groups costs and expenses with related revenues (e.g., cost of goods sold with sales to yield a gross profit measure). Finally, the detailed format highlights certain intermediate components of income that analysts use to compute ratios for assessing the performance of the company.

PRINCIPLES

Pro forma reporting is inconsistent with the conceptual framework's qualitative characteristic of comparability. For example, similar to the discussion in the opening story, if Counting Crows Inc. classifies some items in a pro forma manner but other companies do not, investors and creditors will not be able to compare the reported incomes.

Note to instructor: This is the reason the U.S. SEC issued Regulation G, which requires companies that list securities in U.S. markets and that issue pro forma income reports to provide reconciliation to income measured under U.S. GAAP, which interested parties can then compare across companies.

PROFESSIONAL RESEARCH

(a) International Accounting Standard 1, Presentation of Financial Statements addresses the statement of comprehensive income reporting. This standard was issued in September 2007 and includes subsequent amendments resulting from IFRSs issued up to 30 November 2008. Its effective date is 1 January 2009.

(b) Total comprehensive income is the change in equity during a period resulting from transactions and other events, other than those changes resulting from transactions with owners in their capacity as owners. Total comprehensive income comprises all components of 'profit or loss' and of 'other comprehensive income' (Paragraph 7).

(c) Paragraphs 85 and 86 provide the rationale for presenting additional information: An entity shall present additional line items, headings and subtotals in the statement of comprehensive income and the separate income statement (if presented), when such presentation is relevant to an understanding of the entity's financial performance (Para. 85).

Because the effects of an entity's various activities, transactions and other events differ in frequency, potential for gain or loss and predictability, disclosing the components of financial performance assists users in understanding the financial performance achieved and in making projections of future financial performance. An entity includes additional line items in the statement of comprehensive income and in the separate income statement (if presented), and it amends the descriptions used and the ordering of items when this is necessary to explain the elements of financial performance. An entity considers factors including materiality and the nature and function of the items of income and expense. For example, a financial institution may amend the descriptions to provide information that is relevant to the operations of a financial institution. An entity does not offset income and expense items unless the criteria in paragraph 32 are met (Para. 86).

(d) When items of income or expense are material, an entity shall disclose their nature and amount separately (Para. 97).

Circumstances that would give rise to the separate disclosure of items of income and expense include:

- **a. write-downs of inventories to net realisable value or of property, plant and equipment to recoverable amount, as well as reversals of such write-downs;**
- **b. restructurings of the activities of an entity and reversals of any provisions for the costs of restructuring;**
- **c. disposals of items of property, plant and equipment;**
- **d. disposals of investments;**
- **e. discontinued operations;**
- **f. litigation settlements; and**
- **g. other reversals of provisions.**
  (Para. 98).

PROFESSIONAL SIMULATION

Explanation

As indicated in the income statement below, the loss on abandonment is reported as an "other income and expense." The gain on disposal of a business component is reported as part of discontinued operations, net of tax. The change in inventory costing from FIFO to average cost is a change in accounting principle. The cumulative effect of a change in accounting principle is adjusted through the beginning balance of retained earnings. Gross profit is €1,280,000, income from operations is €660,000; income before income taxes is €590,000; net income is €476,000; and earnings per share (on net income) is €4.76.

Measurement

JUDE LAW CORPORATION
Income Statement
For the Year Ended December 31, 2010

Sales		€3,200,000
Cost of goods sold		1,920,000
Gross profit		1,280,000 (a)
Selling expenses	€340,000	
Administrative expenses	280,000	620,000
		660,000 (b)
Other income and expense		
Interest revenue	10,000	
Loss from earthquake	(40,000)	
Loss from plant abandonment	(40,000)	(70,000)
Income before income tax		590,000 (c)
Income tax (30% X $590,000)		177,000
Income from continuing operations		413,000
Discontinued operations		
Gain on disposal of component of business	90,000	
Less: Applicable income tax	27,000	63,000
Net income		€ 476,000 (d)

PROFESSIONAL SIMULATION (Continued)

Per capital share		
Income from continuing operations	**€4.13**	
Discontinued operations, net of tax..........................	**0.63**	
Net income...	**€4.76**	**(e)**

Note to instructor: The change for inventory costing is reflected in the current year's cost of goods sold. If comparative statements are presented, prior year's income statements would be recast as under the new method. The cumulative effect of the change in accounting principle is shown as an adjustment to beginning retained earnings.