

# 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, 18, 28, 31, 32, 33				3, 4, 5, 6, 8
2. Computation of net income from balance sheets and selected accounts.		1	1, 2, 7		
3. Single-step income statements; earnings per share.	11, 19, 23, 24	2, 8	3, 4, 6, 7, 10, 15, 16	2, 3, 4, 5	1, 2, 7
4. Multiple-step income statements.	17, 18, 19	3	4, 5, 6, 8	1, 4	
5. Extraordinary items; accounting changes; discontinued operations; prior period adjustments; errors.	13, 14, 15, 16, 27, 29	4, 5, 6, 7	5, 7, 9, 10, 12, 13	3, 4, 5, 6, 7	4, 6, 7, 8
6. Retained earnings statement.	30	9, 10	8, 10, 11, 12, 16	1, 2, 4, 5, 6	
7. Intraproduct tax allocation.	21, 22, 25, 26, 27		8		
8. Comprehensive income.	34	11	14, 15, 16		9
9. Disposal of a component (discontinued operations).	29, 35				

## ASSIGNMENT CLASSIFICATION TABLE (BY LEARNING OBJECTIVE)

<b>Learning Objectives</b>	<b>Brief Exercises</b>	<b>Exercises</b>	<b>Problems</b>
1. Understand the uses and limitations of an income statement.			
2. Prepare a single-step income statement.	1, 2	1, 2, 3, 4, 6, 7, 16	2
3. Prepare a multiple-step income statement.	3, 4	4, 5, 6, 8, 10, 14	1, 4
4. Explain how to report irregular items.	4, 5, 6, 7, 10	5, 7, 8, 10, 12, 13, 16	1, 3, 4, 5, 6, 7
5. Explain intraperiod tax allocation.	5, 6, 7	8, 12, 13, 16	1, 3, 5, 6, 7
6. Identify where to report earnings per share information.	8	7, 8, 9, 10, 12, 13, 16	1, 2, 3, 4, 5, 7
7. Prepare a retained earnings statement.	9, 10	8, 11, 15, 16	1, 2, 4, 5, 6
8. Explain how to report other comprehensive income.	11	14, 15, 16	

## ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E4-1	Computation of net income.	Simple	18–20
E4-2	Income statement items.	Simple	25–35
E4-3	Single-step income statement.	Moderate	20–25
E4-4	Multiple-step and single-step.	Simple	30–35
E4-5	Multiple-step and extraordinary items.	Moderate	30–35
E4-6	Multiple-step and single-step.	Moderate	30–40
E4-7	Income Statement, EPS.	Simple	15–20
E4-8	Multiple-step statement with retained earnings.	Simple	30–35
E4-9	Earnings per share.	Simple	20–25
E4-10	Condensed income statement—periodic inventory method.	Moderate	20–25
E4-11	Retained earnings statement.	Simple	20–25
E4-12	Earnings per share.	Moderate	15–20
E4-13	Change in accounting principle.	Moderate	15–20
E4-14	Comprehensive income.	Simple	15–20
E4-15	Comprehensive income.	Moderate	15–20
E4-16	Various reporting formats.	Moderate	30–35
P4-1	Multi-step income, retained earnings.	Moderate	30–35
P4-2	Single-step income, retained earnings, periodic inventory.	Simple	25–30
P4-3	Irregular items.	Moderate	30–40
P4-4	Multiple- and single-step income, retained earnings.	Moderate	45–55
P4-5	Irregular items.	Moderate	20–25
P4-6	Retained earnings statement, prior period adjustments.	Moderate	25–35
P4-7	Income statement, irregular items.	Moderate	25–35
C4-1	Identification of income statement deficiencies.	Simple	20–25
C4-2	Income reporting deficiencies.	Simple	10–15
C4-3	Extraordinary items.	Moderate	25–35
C4-4	Earnings management.	Moderate	20–25
C4-5	Earnings management	Simple	15–20
C4-6	Income reporting items.	Moderate	30–35
C4-7	Identification of income statement weaknesses.	Moderate	30–40
C4-8	Classification of income statement items.	Moderate	20–25
C4-9	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—LIFO 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 returns.
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.

#### Questions Chapter 4 (Continued)

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 returns.
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 reliable. 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 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 generally accepted accounting principles to the income statement are to measure and report the results of operations as they occur 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 considered low.
10. The major distinction between revenues and gains (or expenses and losses) depends on the typical activities of the enterprise. Revenues can occur from a variety of different sources, but these sources constitute the entity’s ongoing major or central operations. Gains also can arise from many different sources, but these sources occur from peripheral or incidental transactions of an entity. The same type of distinction is made between an expense and a loss.
11. The advantages of the single-step income statement are: (1) simplicity and conciseness, (2) probably better understood by the layperson, (3) emphasis on total costs and expenses, and net income, and (4) does not imply priority of one revenue or expense over another. The disadvantages are that it does not show the relationship between sales and cost of goods sold and it does not show other important relationships and information, such as income from operations, income before taxes, etc.
12. Operating items are the expenses and revenues which relate directly to the principal activity of the concern; they are revenues realized from, or expenses which contribute to, the sale of goods or services for which the company was organized. The nonoperating items result from secondary activities of the company. They are not directly related to the principal activity of the company but arise from incidental activities.
13. The current operating performance income statement contains only the revenues and usual expenses of the current year, with all unusual gains or losses or material corrections of prior periods’ revenues and expenses appearing in the retained earnings statement. The modified all-inclusive income statement includes most items including irregular ones, as part of net income. The retained earnings statement then would include only the beginning balance (adjusted for the effects of errors and changes in accounting principles), the net amount transferred from income summary, dividends, and transfers to and from appropriated retained earnings.

## Questions Chapter 4 (Continued)

In **APB Opinion No. 9**, the APB recommended a modified all-inclusive income statement, excluding from the income statement only those items, few in number, which meet the criteria for prior period adjustments and which would thus appear as adjustments to the beginning balance in the retained earnings statement. Subsequently a number of pronouncements have reinforced this position. Recently, changes in accounting principle are also adjusted through the beginning retained earnings balance.

14. Items considered corrections of errors should be charged or credited to the opening balance of retained earnings.
15.
  - (a) This might be shown in the income statement as an extraordinary item if it is a material, unusual, and infrequent gain realized during the year. However, in general and in accordance with **APB Opinion No. 30**, this transaction would normally not be considered extraordinary, but would be shown in the nonoperating section of a multiple-step income statement. If unusual or infrequent but not both, it should be separately disclosed in the income statement.
  - (b) The bonus should be shown as an operating expense in the income statement. Although the basis of computation is a percentage of net income, it is an ordinary operating expense to the company and represents a cost of the service received from employees.
  - (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 operating expense and therefore is directly related to operations. Another treatment is to show it in the other revenues and gains 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 may be reported as an unusual loss.
  - (f) This should be reported in the income statement, but not as an extraordinary item because it relates to usual business operations of the firm.
16.
  - (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. It is considered a change in estimate.
  - (b) The loss should be shown as an extraordinary item, assuming that it is unusual and infrequent.
  - (c) Should be shown either as other expenses or losses or in a separate section, appropriately labeled as an unusual item, if unusual or infrequent but not both. It should not be shown as an extraordinary item.
  - (d) Assuming that a receivable had not been recorded in the previous period, the gain should be recognized in the current period in computing net income, but not as an extraordinary item.
  - (e) A correction of an error should be considered a prior period adjustment and the beginning balance of Retained Earnings should be restated.
  - (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.
17.
  - (a) Other expenses or losses section or in a separate section, appropriately labeled as an unusual item, if unusual or infrequent but not both.
  - (b) Operating expense section or other expenses and losses section or in a separate section, appropriately labeled as an unusual item, if unusual or infrequent but not both. **APB Opinion No. 30** specifically states that the effect of a strike does not constitute an extraordinary item.
  - (c) Operating 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 revenues and gains section or in a separate section, appropriately labeled as an unusual item, if unusual or infrequent but not both.
  - (f) Other revenues and gains section.

#### Questions Chapter 4 (Continued)

- (g) Operating expense section, normally administrative. If a manufacturing concern, may be included in cost of goods sold.
- (h) Other expenses or losses section or in separate section, appropriately labeled as an unusual item, if unusual or infrequent but not both.
18. Bonds and Glavine should not report the sales in a similar manner. This type of transaction appears to be typical of Bonds' central operations. Therefore, Bonds should report revenues of \$160,000 and expenses of \$100,000 (\$70,000 + \$30,000). However, Glavine's transaction appears to be a peripheral or incidental activity not related to its central operations. Thus, Glavine should report a gain of \$60,000 (\$160,000 – \$100,000). Note that although the classification is different, the effect on net income is the same (\$60,000 increase).
19. You should tell Rex that a company's reported net income is the same whether the single-step or multiple-step format is used. Either way, the company has the same revenues, gains, expenses, and losses; they are simply organized in a different format.
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, understandable 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 FASB specifically prohibits a "net-of-tax" treatment for such items to insure that users of financial statements can easily differentiate extraordinary items from material items that are unusual or infrequent, but not both. "Net-of-tax" treatment is reserved for discontinued operations, extraordinary items, 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 Letterman has preferred stock outstanding, the numerator in its computation may be incorrect. A better description of "earnings per share" is "earnings per **common** share." The numerator should include only the earnings available to common shareholders. Therefore, the numerator should be: net income less preferred dividends.
- The denominator is also incorrect if Letterman 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. The earnings per share trend is not favorable. Extraordinary items are one-time occurrences which are not expected to be reported in the future. Therefore, earnings per share on income before extraordinary items is more useful because it represents the results of ordinary business activity. Considering this EPS amount, EPS has decreased from \$7.21 to \$6.40.
25. Tax allocation within a period is the practice of allocating the income tax for a period to such items as income before extraordinary items, extraordinary items, 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 extraordinary items, (b) extraordinary items, and (c) prior period adjustments (or of the opening balance of retained earnings).

**Questions Chapter 4 (Continued)**

26. Tax allocation within a period (intraproduct) becomes necessary when a firm encounters such items as discontinued operations, extraordinary items, 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, income before extraordinary items, extraordinary items, etc.

Tax allocation within a period is handled by first computing the tax expense attributable to income before extraordinary items, 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 (extraordinary, prior period adjustments) should be disclosed separately because of their materiality.

27.

Natsume Sozeki Company  
Partial Income Statement  
For the Year Ended December 31, 2007

Income before taxes and extraordinary item		\$1,000,000
Income taxes		<u>340,000</u>
Income before extraordinary item		660,000
Extraordinary item—gain on sale of plant (condemnation)	\$450,000	
Less: Applicable income tax	<u>135,000</u>	<u>315,000</u>
Net income		<u>\$ 975,000</u>

28. The damages would probably be reported in Pierogi Corporation’s financial statements in the other expenses or losses section. If the damages are unusual in nature, the damage settlement might be reported as an unusual item. The damages would not be reported as a correction of an error (prior period adjustment).
29. 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 Tiger 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.
30. 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.
31. Generally accepted accounting principles 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 the Internal Revenue Code. It should be noted that the Code 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 matching principle requires that costs be matched against related revenues produced. In most situations the cash receipts and disbursements method will violate the matching principle.

## Questions Chapter 4 (Continued)

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.
32. Problems arise both from the revenue side and from the expense side. There sometimes may be doubt as to the amount of revenue under our common rules of revenue recognition. However, the more difficult problem is the determination of costs expired in the production of revenue. During a single fiscal period it often is difficult to determine the expiration of certain costs which may benefit several periods. Business is continuous and estimates have to be made of the future if we are to systematically apportion costs to fiscal periods. Examples of items which present serious obstacles include such items as institutional advertising costs.

Accountants have established certain rules for handling revenues and costs which are applied consistently and in a systematic manner. From period to period, application of these rules generally results in a satisfactory matching of costs and revenues unless there are large changes from one period to another. These rules, influenced by conservatism in the face of the uncertainties involved, tend to charge costs to expense earlier than might be ideally desirable if we had more knowledge of the future.

Costs or expenses of the types mentioned above, by their very nature, defy any attempt to relate them to revenues of a specific period or periods. Although it is known that institutional advertising will yield benefits beyond the present, both the amount of such benefits and when they will be enjoyed are shrouded in uncertainty. The degree of certainty with which their time distribution can be forecast is so small and the results, therefore, so unreliable that the accountant writes them off as applicable to the period or periods in which the expense was incurred.

33. Elements are the basic ingredients which comprise the income statement; that is, revenues, gains, expenses, and losses. Items are descriptions of the elements such as rent revenue, rent expense, etc.

In order to predict the future, the amounts of individual items may have to be reported. For example, if "income from continuing operations" is significantly lower this year and is reported as a single amount, users would not know whether to attribute the decrease to a temporary increase in an expense item (for example, an unusually large bad debt), a structural change (for example, a change in the relationship between variable and fixed expenses), or some other factor. Another example is income data that are distorted because of large discretionary expenses.

34. Other comprehensive income must be displayed (reported) in one of three ways: (1) a second separate income statement, (2) a combined income statement of comprehensive income, or (3) as part (separate columns) of the statement of stockholders' equity.
35. The results of continuing operations should be reported separately from discontinued operations, and any gain or loss from disposal of a component of a business should be reported with the related results of discontinued operations and not as an extraordinary item. The following format illustrates the proper disclosure:

Income from continuing operations before income tax	\$XXX
Income tax	<u>XXX</u>
Income from continuing operations	XXX
Discontinued operations	
Gain (loss) on disposal of Division X	
less applicable income taxes of \$—	<u>XXX</u>
Net income	<u>\$XXX</u>

# SOLUTIONS TO BRIEF EXERCISES

## BRIEF EXERCISE 4-1

**Tim Allen Co.  
Income Statement  
For the Year 2007**

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### Revenues

Sales ..... \$540,000

### Expenses

Cost of goods sold ..... \$320,000

Wage expense ..... 120,000

Other operating expenses ..... 10,000

Income tax expense ..... 25,000

Total expenses ..... 475,000

Net income ..... \$65,000

Earnings per share ..... \$0.65\*

\*\$65,000 ÷ 100,000 shares.

**Note:** The increase in value of the company reputation and the unrealized gain on the value of patents are not reported.

**BRIEF EXERCISE 4-2**

**Turner Corporation  
Income Statement  
For the Year Ended December 31, 2007**

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**Revenues**

Net sales .....	<b>\$2,400,000</b>
Interest revenue .....	<u>31,000</u>
<b>Total revenues .....</b>	<u><b>2,431,000</b></u>

**Expenses**

Cost of goods sold .....	<b>\$1,250,000</b>
Selling expenses .....	<b>280,000</b>
Administrative expenses .....	<b>212,000</b>
Interest expense .....	<b>45,000</b>
Income tax expense* .....	<u>193,200</u>
<b>Total expenses .....</b>	<u><b>1,980,200</b></u>

**Net income.....** **\$ 450,800**

**Earnings per share\*\* .....** **\$6.44**

**\*(\$2,431,000 – \$1,250,000 – \$280,000 – \$212,000 – \$45,000) X 30% =  
\$193,200.**

**\*\*\$450,800 ÷ 70,000 shares.**

**BRIEF EXERCISE 4-3**

**Turner Corporation**  
**Income Statement**  
**For the Year Ended December 31, 2007**

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Net sales .....		<b>\$2,400,000</b>
Cost of goods sold.....		<u><b>1,250,000</b></u>
Gross profit .....		<b>1,150,000</b>
Selling expenses.....	<b>\$280,000</b>	
Administrative expenses .....	<u><b>212,000</b></u>	<u><b>492,000</b></u>
Income from operations .....		<b>658,000</b>
Other revenue and gains		
Interest revenue.....	<b>31,000</b>	
Other expenses and losses		
Interest expense .....	<u><b>45,000</b></u>	<u><b>14,000</b></u>
Income before income tax .....		<b>644,000</b>
Income tax.....		<u><b>193,200</b></u>
Net income.....		<u><b>\$ 450,800</b></u>
Earnings per share.....		<u><b>\$6.44*</b></u>

\*\$450,800 ÷ 70,000 shares.

#### BRIEF EXERCISE 4-4

Income from continuing operations		\$12,600,000
Discontinued operations		
Loss from operation of discontinued restaurant division (net of tax)	\$315,000	
Loss from disposal of restaurant division (net of tax)	<u>189,000</u>	<u>504,000</u>
Net income		<u>\$12,096,000</u>
Earnings per share		
Income from continuing operations		\$1.26
Discontinued operations, net of tax		<u>(.05)*</u>
Net income		<u>\$1.21</u>

\*Rounded

#### BRIEF EXERCISE 4-5

Income before income tax and extraordinary item		\$7,300,000
Income tax		<u>2,190,000</u>
Income before extraordinary item		5,110,000
Extraordinary item—loss from casualty	\$770,000	
Less: Applicable income tax	<u>231,000</u>	<u>539,000</u>
Net income		<u>\$4,571,000</u>
Earnings per share		
Income before extraordinary item		\$1.02*
Extraordinary loss, net of tax		<u>(.11)*</u>
Net income		<u>\$ .91</u>

\*Rounded

#### BRIEF EXERCISE 4-6

	<u>2007</u>	<u>2006</u>	<u>2005</u>
Income before income tax	\$190,000	\$145,000	\$170,000
Income tax (30%)	<u>57,000</u>	<u>43,500</u>	<u>51,000</u>
Net Income	<u>\$133,000</u>	<u>\$101,500</u>	<u>\$119,000</u>

#### BRIEF EXERCISE 4-7

Kingston would not report any cumulative effect because a change in estimate is not handled retroactively. Kingston would report bad debt expense of \$120,000 in 2007.

#### BRIEF EXERCISE 4-8

$$\frac{\$1,200,000 - \$250,000}{190,000} = \underline{\$5.00} \text{ per share}$$

**BRIEF EXERCISE 4-9**

**Lincoln Corporation  
Retained Earnings Statement  
For the Year Ended December 31, 2007**

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Retained earnings, January 1 .....	\$ 675,000
Add: Net income .....	<u>2,400,000</u>
	3,075,000
Less: Cash dividends .....	<u>75,000</u>
Retained earnings, December 31 .....	<u><u>\$3,000,000</u></u>

**BRIEF EXERCISE 4-10**

**Lincoln Corporation  
Retained Earnings Statement  
For the Year Ended December 31, 2007**

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Retained earnings, January 1, as reported .....	\$ 675,000
Correction for overstatement of expenses in prior period (net of tax) .....	<u>80,000</u>
Retained earnings, January 1, as adjusted .....	755,000
Add: Net income .....	<u>2,400,000</u>
	3,155,000
Less: Cash dividends .....	<u>75,000</u>
Retained earnings, December 31 .....	<u><u>\$3,080,000</u></u>

## BRIEF EXERCISE 4-11

(a)	Net income (Dividend revenue)	<u>\$3,000</u>
(b)	Net income	\$3,000
	Unrealized holding gain	<u>5,000</u>
	Comprehensive income	<u>\$8,000</u>
(c)	Unrealized holding gain (Other comprehensive income)	<u>\$5,000</u>
(d)	Accumulated other comprehensive income, January 1, 2007	\$ 0
	Unrealized holding gain	<u>5,000</u>
	Accumulated other comprehensive income, December 31, 2007	<u>\$5,000</u>

# SOLUTIONS TO EXERCISES

## EXERCISE 4-1 (18–20 minutes)

### Computation of net income

Change in assets:  $\$79,000 + \$45,000 + \$127,000 - \$47,000 = \$204,000$  Increase

Change in liabilities:  $\$82,000 - \$51,000 = \underline{\$31,000}$  Increase

Change in stockholders' equity:  $\$173,000$  Increase

### Change in stockholders' equity accounted

for as follows:

Net increase		<b>\$173,000</b>
Increase in common stock	<b>\$125,000</b>	
Increase in additional paid-in capital	<b>13,000</b>	
Decrease in retained earnings due to dividend declaration	<u><b>(19,000)</b></u>	
Net increase accounted for		<u><b>119,000</b></u>
Increase in retained earnings due to net income		<u><b>\$ 54,000</b></u>

**EXERCISE 4-2 (25–35 minutes)****(a) Total net revenue:**

<b>Sales</b>		<b>\$390,000</b>
<b>Less: Sales discounts</b>	<b>\$ 7,800</b>	
<b>    Sales returns</b>	<b><u>12,400</u></b>	<b><u>20,200</u></b>
<b>Net sales</b>		<b>369,800</b>
<b>Dividend revenue</b>		<b>71,000</b>
<b>Rental revenue</b>		<b><u>6,500</u></b>
<b>    Total net revenue</b>		<b><u>\$447,300</u></b>

**(b) Net income:**

<b>Total net revenue (from a)</b>		<b><u>\$447,300</u></b>
<b>Expenses:</b>		
<b>    Cost of goods sold</b>		<b>184,400</b>
<b>    Selling expenses</b>		<b>99,400</b>
<b>    Administrative expenses</b>		<b>82,500</b>
<b>    Interest expense</b>		<b><u>12,700</u></b>
<b>        Total expenses</b>		<b><u>379,000</u></b>
<b>Income before income tax</b>		<b>68,300</b>
<b>Income tax</b>		<b><u>31,000</u></b>
<b>    Net income</b>		<b><u>\$ 37,300</u></b>

**(c) Dividends declared:**

<b>Ending retained earnings</b>	<b>\$134,000</b>
<b>Beginning retained earnings</b>	<b><u>114,400</u></b>
<b>Net increase</b>	<b>19,600</b>
<b>Less: Net income</b>	<b><u>(37,300)</u></b>
<b>Dividends declared</b>	<b><u>\$ 17,700</u></b>

## EXERCISE 4-2 (Continued)

### ALTERNATE SOLUTION

Beginning retained earnings	\$114,400
Add: Net income	<u>37,300</u>
	151,700
Less: Dividends declared	<u>?</u>
Ending retained earnings	<u>\$134,000</u>

Dividends declared must be \$17,700  
(\$151,700 – \$134,000)

## EXERCISE 4-3 (20–25 minutes)

**LeRoi Jones Inc.**  
**Income Statement**  
**For Year Ended December 31, 2007**

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<b>Revenues</b>	
Net sales (\$1,250,000 <sup>(b)</sup> – \$17,000).....	\$1,233,000
<b>Expenses</b>	
Cost of goods sold.....	500,000
Selling expenses.....	400,000 <sup>(c)</sup>
Administrative expenses.....	100,000 <sup>(a)</sup>
Interest expense.....	<u>20,000</u>
Total expenses .....	<u>1,020,000</u>
Income before income tax.....	213,000
Income tax.....	<u>63,900</u>
Net income .....	<u>\$ 149,100</u>
Earnings per share .....	<u>\$ 7.46*</u>

\*Rounded

## **EXERCISE 4-3 (Continued)**

### **Determination of amounts**

- (a) **Administrative expenses** = **20% of cost of good sold**  
= **20% of \$500,000**  
= **\$100,000**
- (b) **Gross sales X 8%** = **administrative expenses**  
= **\$100,000 ÷ 8%**  
= **\$1,250,000**
- (c) **Selling expenses** = **four times administrative expenses.**  
**(operating expenses consist of selling and administrative expenses; since selling expenses are 4/5 of operating expenses, selling expenses are 4 times administrative expenses.)**  
= **4 X \$100,000**  
= **\$400,000**

**Earnings per share \$7.46 (\$149,100 ÷ 20,000)**

**Note:** An alternative income statement format is to show income tax a part of expenses, and not as a separate item. In this case, total expenses are \$1,083,900.

**EXERCISE 4-4 (30–35 minutes)****(a)****Multiple-Step Form****P. Bride Company****Income Statement****For the Year Ended December 31, 2007****(In thousands, except earnings per share)**

---

<b>Sales .....</b>				<b>\$96,500</b>
<b>Cost of goods sold .....</b>				<b><u>60,570</u></b>
<b>Gross profit on sales .....</b>				<b>35,930</b>
 <b><u>Operating Expenses</u></b>				
<b>Selling expenses</b>				
<b>Sales commissions.....</b>	<b>\$7,980</b>			
<b>Depr. of sales equipment.....</b>	<b>6,480</b>			
<b>Transportation-out.....</b>	<b><u>2,690</u></b>	<b>\$17,150</b>		
<b>Administrative expenses</b>				
<b>Officers' salaries.....</b>	<b>4,900</b>			
<b>Depr. of office furn. and equip.....</b>	<b><u>3,960</u></b>	<b><u>8,860</u></b>		<b><u>26,010</u></b>
<b>Income from operations.....</b>				<b>9,920</b>
 <b><u>Other Revenues and Gains</u></b>				
<b>Rental revenue .....</b>				<b><u>17,230</u></b>
				<b>27,150</b>
 <b><u>Other Expenses and Losses</u></b>				
<b>Interest expense .....</b>				<b><u>1,860</u></b>
<b>Income before income tax.....</b>				<b>25,290</b>
<b>Income tax .....</b>				<b><u>9,070</u></b>
<b>Net income .....</b>				<b><u>\$16,220</u></b>
 <b>Earnings per share (\$16,220 ÷ 40,550).....</b>				
				<b><u>\$ .40</u></b>

## EXERCISE 4-4 (Continued)

(b) **Single-Step Form**  
**P. Bride Company**  
**Income Statement**  
**For the Year Ended December 31, 2007**  
**(In thousands, except earnings per share)**

---

<b>Revenues</b>	
Net sales .....	\$ 96,500
Rental revenue.....	<u>17,230</u>
Total revenues .....	<u>113,730</u>
<b>Expenses</b>	
Cost of goods sold.....	60,570
Selling expenses.....	17,150
Administrative expenses.....	8,860
Interest expense.....	<u>1,860</u>
Total expenses.....	<u>88,440</u>
Income before income tax .....	25,290
Income tax.....	<u>9,070</u>
Net income .....	<u>\$ 16,220</u>
Earnings per share.....	<u>\$ .40</u>

**Note:** An alternative income statement format for the single-step form is to show income tax a part of expenses, and not as a separate item.

(c) **Single-step:**

1. **Simplicity and conciseness.**
2. **Probably better understood by users.**
3. **Emphasis on total costs and expenses and net income.**
4. **Does not imply priority of one revenue or expense over another.**

## EXERCISE 4-4 (Continued)

### Multiple-step:

1. Provides more information through segregation of operating and nonoperating items.
2. Expenses are matched with related revenue.

Note to instructor: Students' answers will vary due to the nature of the question; i.e., it asks for an opinion. However, the discussion supporting the answer should include the above points.

## EXERCISE 4-5 (30–35 minutes)

**Maria Conchita Alonzo Corp.**  
**Income Statement**  
**For the Year Ended December 31, 2007**

### Sales Revenue

Sales .....		\$1,380,000
Less: Sales returns and allowances .....	\$150,000	
Sales discounts .....	<u>45,000</u>	<u>195,000</u>
Net sales revenue .....		1,185,000
Cost of goods sold .....		<u>621,000</u>
Gross profit on sales .....		564,000

### Operating Expenses

Selling expenses .....	194,000	
Admin. and general expenses .....	<u>97,000</u>	<u>291,000</u>
Income from operations .....		273,000

## EXERCISE 4-5 (Continued)

### Other Revenues and Gains

Interest revenue .....	<u>86,000</u>
	359,000

### Other Expenses and Losses

Interest expense .....	<u>60,000</u>
------------------------	---------------

Income before tax and extraordinary item .....	299,000
Income tax (\$299,000 X .34) .....	<u>101,660</u>
Income before extraordinary item.....	197,340
Extraordinary item—loss from earthquake damage .....	150,000
Less: Applicable tax reduction (\$150,000 X .34).....	<u>51,000</u>
	<u>99,000</u>
Net income.....	<u>\$ 98,340</u>

### Per share of common stock:

Income before extraordinary item	
(\$197,340 ÷ 100,000) .....	\$1.97*
Extraordinary item (net of tax) .....	<u>(.99)</u>
Net income (\$98,340 ÷ 100,000) .....	<u>\$ .98</u>

\*Rounded

**EXERCISE 4-6 (30–40 minutes)**

(a)

**Multiple-Step Form**  
**Whitney Houston Shoe Co.**  
**Income Statement**  
**For the Year Ended December 31, 2007**

Net sales.....			\$980,000
Cost of goods sold .....			<u>496,000</u>
Gross profit on sales .....			484,000
 <b><u>Operating Expenses</u></b>			
<b>Selling expenses</b>			
Wages and salaries.....	\$114,800		
Depr. exp. (70% X \$65,000).....	45,500		
Materials and supplies.....	<u>17,600</u>	\$177,900	
<b>Administrative expenses</b>			
Wages and salaries.....	135,900		
Other admin. expenses .....	51,700		
Depr. exp. (30% X \$65,000).....	<u>19,500</u>	<u>207,100</u>	<u>385,000</u>
Income from operations.....			99,000
 <b><u>Other Revenues and Gains</u></b>			
Rental revenue .....			<u>29,000</u>
			128,000
 <b><u>Other Expenses and Losses</u></b>			
Interest expense .....			<u>18,000</u>
 Income before income tax.....			
			110,000
Income tax .....			<u>37,400</u>
Net income .....			<u>\$ 72,600</u>
 Earnings per share (\$72,600 ÷ 20,000).....			
			<u>\$3.63</u>



## EXERCISE 4-6 (Continued)

### Multiple-step:

1. Provides more information through segregation of operating and nonoperating items.
2. Expenses are matched with related revenue.

Note to instructor: Students' answers will vary due to the nature of the question, i.e., it asks for an opinion. However, the discussion supporting the answer should include the above points.

## EXERCISE 4-7 (15–20 minutes)

(a) Net sales	\$ 540,000
Less: Cost of goods sold	(210,000)
Administrative expenses	(100,000)
Selling expenses	(80,000)
Discontinued operations-loss	<u>(40,000)</u>
Income before income tax	110,000
Income tax (\$110,000 X .30)	<u>33,000</u>
Net income	<u>\$ 77,000</u>
(b) Income from continuing operations before income tax	\$150,000*
Income tax (\$150,000 X .30)	<u>45,000</u>
Income from continuing operations	105,000
Discontinued operations, less applicable income tax of \$12,000	<u>(28,000)</u>
Net income	<u>\$ 77,000</u>

\*\$110,000 + \$40,000

### Earnings per share:

Income from continuing operations (\$105,000 ÷ 10,000)	\$10.50
Loss on discontinued operations, net of tax	<u>(2.80)</u>
Net Income (\$77,000 ÷ 10,000)	<u>\$ 7.70</u>

**EXERCISE 4-8 (30–35 minutes)**

(a) **Ivan Calderon Corp.**  
**Income Statement**  
**For the Year Ended December 31, 2007**

**Sales Revenue**

Net sales .....		<b>\$1,300,000</b>
Cost of goods sold.....		<u><b>780,000</b></u>
Gross profit on sales .....		<b>520,000</b>

**Operating Expenses**

Selling expenses .....	<b>\$65,000</b>	
Administrative expenses .....	<u><b>48,000</b></u>	<u><b>113,000</b></u>
Income from operations .....		<b>407,000</b>

**Other Revenues and Gains**

Dividend revenue .....	<b>20,000</b>	
Interest revenue.....	<u><b>7,000</b></u>	<u><b>27,000</b></u>
		<b>434,000</b>

**Other Expenses and Losses**

Write-off of inventory due to obsolescence.....		<u><b>80,000</b></u>
Income before income tax and extraordinary item.....		<b>354,000</b>
Income tax .....		<u><b>120,360</b></u>
Income before extraordinary item.....		<b>233,640</b>
Extraordinary item		
Casualty loss.....	<b>50,000</b>	
Less: Applicable tax reduction .....	<u><b>17,000</b></u>	<u><b>33,000</b></u>
Net income.....		<u><b>\$ 200,640</b></u>

**Per share of common stock:**

Income before extraordinary item		
(\$233,640 ÷ 60,000) .....		<b>\$3.89*</b>
Extraordinary item, net of tax.....		<u><b>(.55)</b></u>
Net income (\$200,640 ÷ 60,000).....		<u><b>\$3.34</b></u>

**\*Rounded**

**EXERCISE 4-8 (Continued)**

(b)

**Ivan Calderon Corp.  
Retained Earnings Statement  
For the Year Ended December 31, 2007**

Retained earnings, Jan. 1, as reported .....	\$		980,000
Correction for overstatement of net income in prior period (depreciation error) (net of \$18,700 tax).....			<u>(36,300)</u>
Retained earnings, Jan. 1, as adjusted.....			943,700
Add: Net income.....			<u>200,640</u>
			1,144,340
Less: Dividends declared.....			<u>45,000</u>
Retained earnings, Dec. 31 .....			<u><u>\$1,099,340</u></u>

**EXERCISE 4-9 (20–25 minutes)**

**Computation of net income:**

2007 net income after tax .....			\$33,000,000
2007 net income before tax			
[\$33,000,000 ÷ (1 – .34)] .....			50,000,000
Add back major casualty loss.....			<u>18,000,000</u>
Income from operations.....			68,000,000
Income taxes (34% X \$68,000,000) .....			<u>23,120,000</u>
Income before extraordinary item .....			44,880,000
Extraordinary item:			
Casualty loss .....	\$18,000,000		
Less: Applicable income tax reduction .....	<u>6,120,000</u>		<u>11,880,000</u>
Net income.....			<u><u>\$33,000,000</u></u>

## EXERCISE 4-9 (Continued)

Net income.....	\$33,000,000
Less: Provision for preferred dividends (8% of \$4,500,000).....	<u>360,000</u>
Income available to common stockholders.....	32,640,000
Common stock shares.....	<u>÷10,000,000</u>
Earnings per share.....	<u>\$3.26*</u>

### Income statement presentation

#### Per share of common stock:

Income before extraordinary item.....	\$4.45 <sup>a</sup>
Extraordinary item, net of tax.....	<u>(1.19)<sup>b</sup></u>
Net income.....	<u>\$3.26</u>

$$^a \frac{\$44,880,000 - \$360,000}{10,000,000} = \$4.45^*$$

$$^b \frac{\$11,880,000}{10,000,000} = \$1.19^*$$

\*Rounded

**EXERCISE 4-10 (20–25 minutes)**

**Spock Corporation  
Income Statement  
For the Year Ended December 31, 2007**

Net sales <sup>(a)</sup> .....		\$4,162,000
Cost of goods sold <sup>(b)</sup> .....		<u>2,665,000</u>
Gross profit .....		1,497,000
Selling expenses <sup>(c)</sup> .....	\$636,000	
Administrative expenses <sup>(d)</sup> .....	<u>491,000</u>	<u>1,127,000</u>
Income from operations.....		370,000
Other revenue.....	240,000	
Other expense .....	<u>(176,000)</u>	<u>64,000</u>
Income before income tax.....		434,000
Income tax (\$434,000 X .34) .....		<u>147,560</u>
Income before extraordinary item .....		286,440
Extraordinary loss .....	\$ 70,000	
Less: Applicable income tax .....	<u>23,800</u>	<u>46,200</u>
Net income .....		<u>\$ 240,240</u>

Earnings per share (\$900,000 ÷ \$10 par value = 90,000 shares)	
Income before extraordinary item (\$286,440 ÷ 90,000).....	\$3.18*
Extraordinary item, net of tax.....	<u>(.51)*</u>
Net income.....	<u>\$2.67</u>

\*Rounded

**Supporting computations**

(a) Net sales:

$$\$4,275,000 - \$34,000 - \$79,000 = \underline{\underline{\$4,162,000}}$$

(b) Cost of goods sold:

$$\$535,000 + (\$2,786,000 + \$72,000 - \$27,000 - \$15,000) - \$686,000 = \underline{\underline{\$2,665,000}}$$

(c) Selling expenses:

$$\$284,000 + \$83,000 + \$69,000 + \$54,000 + \$93,000 + \$36,000 + \$17,000 = \underline{\underline{\$636,000}}$$

(d) Administrative expenses:

$$\$346,000 + \$33,000 + \$24,000 + \$48,000 + \$32,000 + \$8,000 = \underline{\underline{\$491,000}}$$

**EXERCISE 4-11 (20–25 minutes)**

**(a) Eddie Zambrano Corporation  
Retained Earnings Statement  
For the Year Ended December 31, 2007**

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Balance, January 1, as reported.....	\$225,000*
Correction for depreciation error (net of \$10,000 tax).....	(15,000)
Cumulative decrease in income from change in inventory methods (net of \$14,000 tax) .....	<u>(21,000)</u>
Balance, January 1, as adjusted.....	189,000
Add: Net income .....	<u>144,000**</u>
	333,000
Less: Dividends declared .....	<u>100,000</u>
Balance, December 31 .....	<u>\$233,000</u>

\*(\$40,000 + \$125,000 + \$160,000) – (\$50,000 + \$50,000)

\*\*[\$240,000 – (40% X \$240,000)]

**(b) Total retained earnings would still be reported as \$233,000. 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	<u>163,000</u>
Total	<u>\$233,000</u>

**EXERCISE 4-12 (15–20 minutes)**

**Net income:**

<b>Income from continuing operations</b>		
before income tax .....		<b>\$23,650,000</b>
Income tax (35% X \$23,650,000) .....		<u><b>8,277,500</b></u>
<b>Income from continuing operations .....</b>		<b>15,372,500</b>
<b>Discontinued operations</b>		
Loss before income tax .....	<b>\$3,225,000</b>	
Less: Applicable income tax (35%) .....	<u><b>1,128,750</b></u>	<u><b>2,096,250</b></u>
<b>Net income .....</b>		<u><b>\$13,276,250</b></u>

**Preferred dividends declared: .....** **\$ 1,075,000**

**Weighted average common shares outstanding .....** **4,000,000**

**Earnings per share**

Income from continuing operations .....	<b>\$3.57*</b>
Discontinued operations, net of tax .....	<u><b>(.52)**</b></u>
<b>Net income .....</b>	<u><b>\$3.05***</b></u>

\* $(\$15,372,500 - \$1,075,000) \div 4,000,000$ . (Rounded)

\*\* $\$2,096,250 \div 4,000,000$ . (Rounded)

\*\*\* $(\$13,276,250 - \$1,075,000) \div 4,000,000$ .

**EXERCISE 4-13 (15–20 minutes)**

(a)		<u>2007</u>
	Income before income tax	\$450,000
	Income tax (35%)	<u>157,500</u>
	Net Income	<u>\$292,500</u>

(b) Cumulative effect for years prior to 2007.

<u>Year</u>	<u>Weighted Average</u>	<u>FIFO</u>	<u>Difference</u>	<u>Tax Rate (35%)</u>	<u>Net Effect</u>
2005	\$370,000	\$395,000	\$25,000		
2006	390,000	430,000	<u>40,000</u>		
		Total	\$65,000	\$22,750	\$42,250

(c)		<u>2007</u>	<u>2006</u>	<u>2005</u>
	Income before income tax	\$450,000	\$430,000	\$395,000
	Income tax (35%)	<u>157,500</u>	<u>150,500</u>	<u>138,250</u>
	Net income	<u>\$292,500</u>	<u>\$279,500</u>	<u>\$256,750</u>

**EXERCISE 4-14 (15–20 minutes)**

**Roxanne Carter Corporation  
Income Statement and Comprehensive Income Statement  
For the Year Ended December 31, 2007**

Sales .....	\$1,200,000
Cost of goods sold.....	<u>750,000</u>
Gross profit .....	450,000
Selling and administrative expenses.....	<u>320,000</u>
Net income.....	<u>\$ 130,000</u>
Net income.....	\$ 130,000
Unrealized holding gain .....	<u>18,000</u>
Comprehensive income .....	<u>\$ 148,000</u>

**EXERCISE 4-15 (15–20 minutes)**

**C. Reither Co.  
Statement of Stockholders' Equity  
For the Year Ended December 31, 2007**

	<u>Total</u>	<u>Compre- hensive Income</u>	<u>Retained Earnings</u>	<u>Accumulated Other Comprehensive Income</u>	<u>Common Stock</u>
Beginning balance	\$520,000		\$ 90,000	\$80,000	\$350,000
Comprehensive income					
Net income*	120,000	\$120,000	120,000		
Other comprehensive income					
Unrealized holding loss	(60,000)	(60,000)		(60,000)	
Comprehensive income		<u>\$ 60,000</u>			
Dividends	(10,000)		(10,000)		
Ending balance	<u>\$570,000</u>		<u>\$200,000</u>	<u>\$20,000</u>	<u>\$350,000</u>

\*(\$700,000 – \$500,000 – \$80,000).

**EXERCISE 4-16 (30–35 minutes)**

(a) **Roland Carlson Inc.  
Income Statement  
For the Year Ended December 31, 2007**

<b>Revenues</b>	
Sales .....	\$1,900,000
Rent revenue.....	40,000
<b>Total revenues .....</b>	<b><u>1,940,000</u></b>
<b>Expenses</b>	
Cost of goods sold.....	850,000
Selling expenses.....	300,000
Administrative expenses.....	240,000
<b>Total expenses .....</b>	<b><u>\$1,390,000</u></b>

**EXERCISE 4-16 (Continued)**

<b>Income from continuing operations before</b>		
<b>income tax</b> .....		<b>550,000</b>
<b>Income tax</b> .....		<u><b>187,000</b></u>
<b>Income from continuing operations</b> .....		<b>363,000</b>
<b>Discontinued operations</b>		
<b>Loss on discontinued operations</b> .....	<b>\$75,000</b>	
<b>Less: Applicable income tax reduction</b> .....	<u><b>25,500</b></u>	<u><b>49,500</b></u>
<b>Income before extraordinary items</b> .....		<b>313,500</b>
<b>Extraordinary items:</b>		
<b>Extraordinary gain</b> .....	<b>95,000</b>	
<b>Less: Applicable income tax</b> .....	<u><b>32,300</b></u>	<u><b>62,700</b></u>
		<b>376,200</b>
<b>Extraordinary loss</b> .....	<b>60,000</b>	
<b>Less: Applicable income tax reduction</b> .....	<u><b>20,400</b></u>	<u><b>39,600</b></u>
<b>Net income</b> .....		<u><b>\$ 336,600</b></u>

**Per share of common stock:**

<b>Income from continuing operations</b> ( $\$363,000 \div 100,000$ ) .....	<b>\$3.63</b>
<b>Loss on discontinued operations, net of tax</b> .....	<u><b>(.49)</b></u>
<b>Income before extraordinary items</b> ( $\$313,500 \div 100,000$ ) .....	<b>3.14</b>
<b>Extraordinary gain, net of tax</b> .....	<b>.63</b>
<b>Extraordinary loss, net of tax</b> .....	<u><b>(.40)</b></u>
<b>Net income</b> ( $\$336,600 \div 100,000$ ) .....	<u><b>\$3.37</b></u>

**(b) Roland Carlson Inc.  
Retained Earnings Statement  
For the Year Ended December 31, 2007**

<b>Retained earnings, January 1</b> .....	<b>\$600,000</b>
<b>Add: Net income</b> .....	<u><b>336,600</b></u>
	<b>\$936,600</b>
<b>Less: Dividends declared</b> .....	<u><b>150,000</b></u>
<b>Retained earnings, December 31</b> .....	<u><b>\$786,600</b></u>

**EXERCISE 4-16 (Continued)**

(c)

**Roland Carlson Inc.  
Comprehensive Income Statement  
For the Year Ended December 31, 2007**

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<b>Net income .....</b>	<b>\$336,600</b>
<b>Other comprehensive income</b>	
<b>Unrealized holding gain .....</b>	<b><u>15,000</u></b>
<b>Comprehensive income .....</b>	<b><u>\$351,600</u></b>

# TIME AND PURPOSE OF PROBLEMS

**Problem 4-1** (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 4-2** (Time 25–30 minutes)

Purpose—to provide the student with an opportunity to prepare a single-step income statement and a retained earnings statement. The student must determine through analysis the ending balance in retained earnings.

**Problem 4-3** (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, an extraordinary item, and the cumulative effect of a change in accounting principle.

**Problem 4-4** (Time 45–55 minutes)

Purpose—to provide the student with the opportunity to prepare a multiple-step and single-step 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 and emphasizes the differences between the multiple-step and single-step income statement.

**Problem 4-5** (Time 20–25 minutes)

Purpose—to provide the student with a problem on the income statement treatment of (1) a usual but infrequently occurring charge, (2) an extraordinary item and its related tax effect, (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 4-6** (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 4-7** (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

**American Horse Company**  
**Income Statement**  
**For the Year Ended December 31, 2007**

<b>Sales .....</b>		<b>\$25,000,000</b>
<b>Cost of goods sold .....</b>		<b><u>17,000,000</u></b>
<b>Gross profit .....</b>		<b>8,000,000</b>
<b>Selling and administrative expenses .....</b>		<b><u>4,700,000</u></b>
<b>Income from operations.....</b>		<b>3,300,000</b>
<b>Other revenues and gains</b>		
<b>Interest revenue .....</b>	<b>\$ 70,000</b>	
<b>Gain on the sale of investments .....</b>	<b><u>110,000</u></b>	<b>180,000</b>
<b>Other expenses and losses</b>		
<b>Write-off of goodwill .....</b>		<b><u>820,000</u></b>
<b>Income from continuing operations before</b>		
<b>income tax.....</b>		<b>2,660,000</b>
<b>Income tax .....</b>		<b><u>905,000</u></b>
<b>Income from continuing operations .....</b>		<b>1,755,000</b>
<b>Discontinued operations</b>		
<b>Loss on operations, net of tax .....</b>	<b>90,000</b>	
<b>Loss on disposal, net of tax.....</b>	<b><u>440,000</u></b>	<b><u>530,000</u></b>
<b>Income before extraordinary item .....</b>		<b>1,225,000</b>
<b>Extraordinary item—loss from flood damage,</b>		
<b>net of tax.....</b>		<b><u>390,000</u></b>
<b>Net income .....</b>		<b><u>\$ 835,000</u></b>

**PROBLEM 4-1 (Continued)**

**Earnings per share:**

Income from continuing operations .....		<b>\$ 5.62<sup>a</sup></b>
<b>Discontinued operations</b>		
Loss on operations, net of tax .....	<b>\$( .30)</b>	
Loss on disposal, net of tax .....	<b><u>(1.47)</u></b>	<b><u>(1.77)</u></b>
Income before extraordinary item .....		<b>3.85<sup>b</sup></b>
Extraordinary loss, net of tax .....		<b><u>(1.30)</u></b>
Net income .....		<b><u>\$ 2.55<sup>c</sup></u></b>

**American Horse Company  
Retained Earnings Statement  
For the Year Ended December 31, 2007**

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Retained earnings, January 1 .....		<b>980,000</b>
Add: Net income .....		<b><u>835,000</u></b>
		<b>1,815,000</b>
<b>Less: Dividends</b>		
Preferred stock .....	<b>\$ 70,000</b>	
Common stock .....	<b><u>250,000</u></b>	<b><u>320,000</u></b>
Retained earnings, December 31 .....		<b><u>\$ 1,495,000</u></b>

$$^a \frac{\$1,755,000 - \$70,000}{300,000 \text{ shares}} = \$5.62$$

$$^b \frac{\$1,225,000 - \$70,000}{300,000 \text{ shares}} = \$3.85$$

$$^c \frac{\$835,000 - \$70,000}{300,000 \text{ shares}} = \$2.55$$

<b>PROBLEM 4-2</b>
--------------------

**Mary J. Blige Corporation**  
**Income Statement**  
**For the Year Ended December 31, 2007**

**Revenues**

Net sales (\$1,000,000 – \$14,500 – \$17,500).....	\$ 968,000
Gain on sale of land .....	30,000
Rent revenue .....	<u>18,000</u>
Total revenues .....	<u>1,016,000</u>

**Expenses**

Cost of goods sold* .....	585,000
Selling expenses.....	232,000
Administrative expenses.....	<u>99,000</u>
Total expenses.....	<u>916,000</u>

Income before income tax.....	100,000
Income tax.....	<u>38,500</u>
Net income (per common share \$2.05).....	<u>\$ 61,500</u>
Earnings per share (\$61,500 ÷ 30,000).....	<u>\$2.05</u>

**\*Cost of goods sold:**

Merchandise inventory, Jan. 1 .....		\$ 89,000
Purchases .....	\$610,000	
Less: Purchase discounts.....	<u>10,000</u>	
Net purchases .....	600,000	
Add: Freight-in .....	<u>20,000</u>	<u>620,000</u>
Merchandise available for sale .....		709,000
Less: Merchandise inventory, Dec. 31 .....		<u>124,000</u>
Cost of goods sold .....		<u>\$585,000</u>

**PROBLEM 4-2 (Continued)**

**Mary J. Blige Corporation  
Retained Earnings Statement  
For the Year Ended December 31, 2007**

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<b>Retained earnings, January 1</b> .....	<b>\$260,000</b>
<b>Add: Net income</b> .....	<b><u>61,500</u></b>
	<b>321,500</b>
<b>Less: Cash dividends</b> .....	<b><u>45,000</u></b>
<b>Retained earnings, December 31</b> .....	<b><u>\$276,500</u></b>

<b>PROBLEM 4-3</b>
--------------------

**Tony Rich Inc.**  
**Income Statement (Partial)**  
**For the Year Ended December 31, 2007**

<b>Income from continuing operations</b>		
before income tax .....		<b>\$798,500*</b>
Income tax .....		<u><b>220,350**</b></u>
<b>Income from continuing operations .....</b>		<b>578,150</b>
<b>Discontinued operations</b>		
Loss from disposal of recreational division .....	<b>\$115,000</b>	
Less: Applicable income tax reduction .....	<u><b>34,500</b></u>	<u><b>80,500</b></u>
<b>Income before extraordinary item .....</b>		<b>497,650</b>
<b>Extraordinary item:</b>		
Major casualty loss .....	<b>80,000</b>	
Less: Applicable income tax reduction .....	<u><b>36,800</b></u>	<u><b>43,200</b></u>
<b>Net income .....</b>		<u><b>\$454,450</b></u>
 <b>Per share of common stock:</b>		
Income from continuing operations .....		<b>\$7.23*</b>
Discontinued operations, net of tax .....		<u><b>(1.01)*</b></u>
Income before extraordinary items .....		<b>6.22</b>
Extraordinary item, net of tax .....		<u><b>(.54)</b></u>
Net income (\$454,450 ÷ 80,000) .....		<u><b>\$5.68</b></u>

\*Rounded

## PROBLEM 4-3 (Continued)

### \*Computation of income from cont. operations before taxes:

As previously stated		\$790,000
Loss on sale of securities		(57,000)
Gain on proceeds of life insurance policy (\$110,000 – \$46,000)		64,000
Error in computation of depreciation		
As computed ( $\$54,000 \div 6$ )	\$9,000	
Corrected ( $\$54,000 - \$9,000 \div 6$ )	<u>(7,500)</u>	<u>1,500</u>
As restated		<u>\$798,500</u>

### \*\*Computation of income tax:

Income from continuing operations before taxes		\$798,500
Nontaxable income (gain on life insurance)		<u>(64,000)</u>
Taxable income		734,500
Tax rate		<u>X .30</u>
Income tax expense		<u>\$220,350</u>

**Note:** No adjustment is needed for the inventory method change, since the new method is reported in 2007 income. The cumulative effect on prior years of retroactive application of new inventory method will be recorded in retained earnings.

<b>PROBLEM 4-4</b>
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(a)

**J. R. Reid Corporation  
Income Statement  
For the Year Ended June 30, 2007**

**Sales Revenue**

Sales .....		\$1,678,500
Less: Sales discounts .....	\$31,150	
Sales returns .....	<u>62,300</u>	<u>93,450</u>
Net sales.....		1,585,050
Cost of goods sold .....		<u>896,770</u>
Gross profit .....		688,280

**Operating Expenses**

**Selling expenses**

Sales commissions.....	\$97,600	
Sales salaries.....	56,260	
Travel expense .....	28,930	
Entertainment expense.....	14,820	
Freight-out .....	21,400	
Telephone and internet exp. ....	9,030	
Depr. of sales equipment.....	4,980	
Building expense .....	6,200	
Bad debt expense.....	4,850	
Misc. selling expense.....	<u>4,715</u>	248,785

**PROBLEM 4-4 (Continued)**

**Administrative Expenses**

Real estate and other local taxes .....	7,320		
Building expense .....	9,130		
Depreciation of office furniture and equipment .....	7,250		
Office supplies used .....	3,450		
Telephone and internet expense .....	2,820		
Miscellaneous office expenses .....	<u>6,000</u>	<u>35,970</u>	<u>284,755</u>
Income from operations .....			403,525

**Other Revenues and Gains**

Dividend revenue .....			<u>38,000</u>
			441,525

**Other Expenses and Losses**

Bond interest expense .....			<u>18,000</u>
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Income before income tax .....			423,525
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Income tax .....			<u>133,000</u>
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Net income .....			<u>\$ 290,525</u>
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**Earnings per common share**

[( $\$290,525 - \$9,000$ ) $\div$ 80,000] .....			<u>\$3.52*</u>
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\*Rounded

**PROBLEM 4-4 (Continued)**

**J. R. Reid Corporation  
Retained Earnings Statement  
For the Year Ended June 30, 2007**

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Retained earnings, July 1, 2006, as reported .....		<b>\$337,000</b>
Correction of depreciation understatement, net of tax .....		<u>17,700</u>
Retained earnings, July 1, 2006, as adjusted .....		<b>319,300</b>
Add: Net income .....		<u>290,525</u>
		<b>609,825</b>
<b>Less:</b>		
Dividends declared on preferred stock .....	<b>9,000</b>	
Dividends declared on common stock .....	<u>32,000</u>	<u>41,000</u>
Retained earnings, June 30, 2007 .....		<u><b>\$568,825</b></u>

**PROBLEM 4-4 (Continued)**

**(b) J. R. Reid Corporation  
Income Statement  
For the Year Ended June 30, 2007**

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**Revenues**

Net sales.....	\$1,585,050
Dividend revenue .....	<u>38,000</u>
Total revenues .....	<u>1,623,050</u>

**Expenses**

Cost of goods sold .....	896,770
Selling expenses .....	248,785
Administrative expenses .....	35,970
Bond interest expense .....	<u>18,000</u>
Total expenses .....	<u>1,199,525</u>

Income before income tax .....	423,525
Income tax .....	<u>133,000</u>
Net income .....	<u>\$ 290,525</u>
Earnings per common share .....	<u>\$3.52</u>

**PROBLEM 4-4 (Continued)**

**J. R. Reid Corporation  
Retained Earnings Statement  
For the Year Ended June 30, 2007**

---

Retained earnings, July 1, 2006, as reported .....	\$337,000	
Correction of depreciation understatement (net of tax) .....	<u>17,700</u>	
Retained earnings, July 1, 2006 as adjusted .....		\$319,300
Add: Net income .....		<u>290,525</u>
		609,825
Less:		
Dividends declared on preferred stock .....	9,000	
Dividends declared on common stock .....	<u>32,000</u>	<u>41,000</u>
Retained earnings, June 30, 2007 .....		<u>\$568,825</u>

## PROBLEM 4-5

- 1. The usual but infrequently occurring charge of \$10,500,000 should be disclosed separately, assuming it is material. This charge is shown above income before extraordinary items 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. The item should not be considered extraordinary because it is usual in nature.**
- 2. The extraordinary item of \$9,000,000 should be reported net of tax in a separate section for extraordinary items. An adjustment should be made to income taxes to report this amount at \$22,400,000. The \$3,000,000 tax effect of this extraordinary item should be reported with the extraordinary item. The reason for the separate disclosure is much the same as that given above for the separate disclosure of the usual, but infrequently occurring item. Readers must be informed that certain revenue and expense items may be unusual and infrequent, and that their likelihood for affecting operations again in the future is unlikely.**
- 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.**

#### **PROBLEM 4-5 (Continued)**

- 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. In this case the company should report both income before extraordinary item and net income on a per share basis.**

<b>PROBLEM 4-6</b>
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(a) **LeClair Corp.**  
**Retained Earnings Statement**  
**For the Year Ended December 31, 2007**

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Retained earnings, January 1, as reported.....	\$257,600
Correction of error from prior period (net of tax) .....	25,400
Adjust for change in accounting principle (net of tax) .....	<u>(18,200)</u>
Retained earnings, January 1, as adjusted.....	264,800
Add: Net income .....	62,300*
Less: Cash dividends declared .....	<u>32,000</u>
Retained earnings, December 31 .....	<u>\$295,100</u>

\*\$62,300 = (\$84,500 + \$41,200 + \$21,600 – \$25,000 – \$60,000)

- (b)
1. Gain on sale of investments—body of income statement. This gain should not be shown net of tax on the income statement.
  2. Refund on litigation with government—body of income statement, possibly unusual item. This refund should not be shown net of tax 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, possibly unusual item. The write-off should not be shown net of tax on the income statement.

<b>PROBLEM 4-7</b>
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**Rap Corp.**  
**Income Statement (Partial)**  
**For the Year Ended December 31, 2007**

<b>Income from continuing operations</b>			
before income tax .....			<b>\$1,206,000*</b>
Income tax .....			<u><b>458,280**</b></u>
<b>Income from continuing operations .....</b>			<b>747,720</b>
<b>Discontinued operations</b>			
Loss from operations of			
discontinued subsidiary .....	<b>\$ 90,000</b>		
Less: Applicable income tax			
reduction .....	<u><b>34,200</b></u>	<b>\$ 55,800</b>	
Loss from disposal of subsidiary .....	<b>100,000</b>		
Less: Applicable income tax			
reduction .....	<u><b>38,000</b></u>	<u><b>62,000</b></u>	<u><b>117,800</b></u>
<b>Income before extraordinary item .....</b>			<b>629,920</b>
<b>Extraordinary item:</b>			
Gain on condemnation .....		<b>145,000</b>	
Less: Applicable income tax .....		<u><b>58,000</b></u>	<u><b>87,000</b></u>
<b>Net income .....</b>			<u><b>\$ 716,920</b></u>
 <b>Per share of common stock:</b>			
Income from continuing operations .....			<b>\$7.48*</b>
Discontinued operations, net of tax .....			<u><b>(1.18)*</b></u>
Income before extraordinary item .....			<b>6.30</b>
Extraordinary item, net of tax .....			<u><b>.87</b></u>
Net income (\$716,920 ÷ 100,000) .....			<u><b>\$7.17</b></u>

\*Rounded

**PROBLEM 4-7 (Continued)**

**\*Computation of income from continuing operations**

**before income tax:**

<b>As previously stated</b>	<b>\$1,210,000</b>
<b>Loss on sale of equipment [\$40,000 – (\$80,000 – \$36,000)]</b>	<b><u>(4,000)</u></b>
<b>Restated</b>	<b><u>\$1,206,000</u></b>

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

$$\mathbf{\$1,206,000 \times .38 = \underline{\underline{\$458,280}}}$$

**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 special 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 with an understanding of conditions where extraordinary item classification is appropriate. In this case, it should be emphasized that in situations where extraordinary item classification is not permitted, a classification as an unusual item may still be employed.

## **CA 4-4** (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 4-5** (Time 20–25 minutes)

Purpose—to provide the student an illustration of how earnings can be managed by how losses are reported, including ethical issues.

## **CA 4-6** (Time 25–30 minutes)

Purpose—to provide the student with an unstructured case to comment on the reporting of discontinued operations and extraordinary items. In addition, the student is asked to comment on materiality considerations and earnings per share implications.

## **CA 4-7** (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 extraordinary items, 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 4-8** (Time 20–25 minutes)

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

## **CA 4-9** (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 John Amos 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. Gain on recovery of insurance proceeds should be classified as an extraordinary item in a separate section of the income statement.
3. Cost of goods sold is usually listed as the first expense, followed by selling, administrative, and other expenses.
4. Advertising expense is a selling expense and should usually be classified as such, unless this expense is unusually different from previous periods.
5. Loss on obsolescence of inventories might be classified as an unusual item and separately disclosed if it is unusual or infrequent but not both.
6. Loss on discontinued operations requires a separate classification after income from continuing operations and before presentation of income before extraordinary items.
7. Intraproduct income tax allocation is required to relate income tax expense to income from continuing operations, loss on discontinued operations, and the extraordinary item.
8. Per share data is a required presentation for income from continuing operations, discontinued operations, income before extraordinary item, extraordinary item, 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 SEC Form 10K. 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

1. Classify as an extraordinary item because the two conditions of an extraordinary item, unusual in nature and infrequent in occurrence, are met.
2. Classify as a loss, but not extraordinary. Such losses would not be considered unusual for a business enterprise.
3. Classify as an extraordinary loss because the two conditions of an extraordinary item, unusual in nature and infrequent in occurrence, are met.
4. Classify as gain or loss, but not extraordinary. Because the company maintains a portfolio of such securities, the gain or loss would not be considered unusual in nature.
5. Classify as a gain or loss, but not extraordinary. Company practices indicate such sales are not unusual or infrequent in occurrence.

### CA 4-3 (Continued)

6. Material losses on extinguishment of debt should not be classified as extraordinary items.
7. Classify as a loss, but not extraordinary. The loss is not an infrequent occurrence taking into account the environment in which the entity operates.
8. Classify as an extraordinary item if the two conditions of an extraordinary item, unusual in nature and infrequent in occurrence, are met. Conditions do not appear met in this case.

### CA 4-4

- (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 returns.

(b) <b>Proposed Accounting</b>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Income before warranty expense				\$43,000	\$43,000
Warranty expense				<u>8,000</u>	<u>2,000</u>
Income	<u>\$20,000</u>	<u>\$25,000</u>	<u>\$30,000</u>	<u>\$35,000</u>	<u>\$41,000</u>

Assuming the same income before warranty expense for both 2007 and 2008 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) <b>Appropriate Accounting</b>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Income before warranty expense				\$43,000	\$43,000
Warranty expense				<u>5,000</u>	<u>5,000</u>
Income	<u>\$20,000</u>	<u>\$25,000</u>	<u>\$30,000</u>	<u>\$38,000</u>	<u>\$38,000</u>

The appropriate accounting would be to record \$5,000 of warranty expense in 2007, resulting in income of \$38,000. However, with the same amount of warranty expense in 2008, Grace no longer shows an increasing trend in income. Thus, by taking more expense in 2007, Grace can save some income (a classic case of “cookie-jar” reserves) and maintain growth in income.

## CA 4-5

- (a) The ethical issues involved are integrity and honesty in financial reporting, full disclosure, accountant's professionalism, and job security for Arthur.
- (b) If Arthur 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 Salem Corporation do not include selling equipment—the transactions should be reported among any gains and losses that occurred during the year.

## CA 4-6

- (a) It appears that the sale of the Casino Royale Division would qualify as a discontinued operation. The operation of gambling facilities appears to meet the criteria for discontinued operations for Woody Allen 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 incorrect in stating that the disposal of the Casino Royale Division should be reported as an extraordinary item. A separate classification is required for disposals meeting the requirements of discontinued operations. If this disposal did not meet the requirements for disposal of a component of a business, extraordinary item treatment might be considered appropriate.
- (b) The “walkout” or strike should not be reported as an extraordinary item. Events of this nature are a general risk that any business enterprise takes and should not warrant extraordinary item treatment. **APB Opinion No. 30** specifically indicates that the effects of a strike should not be reported as an extraordinary item.
- (c) The financial vice-president is incorrect in his/her observations concerning the materiality of extraordinary items. The materiality of each extraordinary item must be considered individually. It is not appropriate to consider only the materiality of the net effect. Each extraordinary item must be reported separately on the income statement.
- (d) Earnings per share for income from continuing operations, discontinued operations, income before extraordinary items, extraordinary items, and net income must be reported on the face of the income statement.

## CA 4-7

The income statement of Cynthia Taylor 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 Cynthia Taylor 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 state 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 amounts 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 an extraordinary item because it is apparently typical of the customary business activity of the corporation. 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 extraordinary item. The conditions of unusual in nature and infrequent in occurrence are not met.
7. **Loss on sale of warehouse.** This type of item is specifically excluded by **APB Opinion No. 30** from treatment as an extraordinary item unless such a loss is the direct result of a major casualty, an expropriation, or a prohibition under a newly enacted law or regulation. This item should be separately disclosed as an unusual item, if either unusual in nature or infrequent in occurrence.
8. **Federal income taxes.** The provision for federal income taxes and intraperiod tax allocation are not presented in the income statement.

This omission implies that the federal 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, stockholders, or residual equity holders. Also, by law the corporation must pay federal income taxes whether the benefits it receives from the government are direct or indirect. Finally, those who base their decisions upon financial statements are thought to look to net income as being a more relevant measure of income than income before taxes.

## CA 4-8

	<u>Classification</u>	<u>Rationale</u>
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.	Extraordinary item section.	Material, unusual in nature, and infrequent in occurrence.
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.	Reported in body of the income statement, possibly as an unusual item.	Sale does not meet criteria for either the disposal of a component of the business or an extraordinary item.
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.	Reported in body of the income statement, possibly as an unusual item.	Loss on preparation of such proposals is not considered extraordinary in nature.
8.	Reported in body of the income statement, possibly as an unusual item.	Strikes are not considered extraordinary in nature.
9.	Prior period adjustment, adjust beginning retained earnings.	Corrections of errors are shown as prior period adjustments.
10.	Extraordinary item section.	Material, unusual in nature, and infrequent in occurrence.
11.	Discontinued operations section.	Division’s assets, results of operations, and activities are clearly distinguishable physically, operationally, and for financial reporting purposes.

## CA 4-9

(a) <b>Separate Statement</b>	<b>Current Year</b>	<b>Prior Year</b>
Net income.....	<u>\$400,000</u>	<u>\$410,000</u>
Statement of Comprehensive Income		
Net income.....	\$400,000	\$410,000
Unrealized gains.....	<u>20,000</u>	<u>          </u>
Comprehensive income .....	<u>\$420,000</u>	<u>\$410,000</u>

(b) <b>Combined Format</b>		
...income components...		
Net income.....	\$400,000	\$410,000
Other comprehensive income		
Unrealized gains.....	<u>20,000</u>	<u>          </u>
Comprehensive income .....	<u>\$420,000</u>	<u>\$410,000</u>

- (c) Arthur can choose either approach, according to SFAS No. 130 or report the unrealized gains in stockholders' equity. The method chosen should be based on which one provides the most useful information. For example, Arthur 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) P&G uses the multiple-step income statement because it separates operating from nonoperating activities. A multiple-step income statement is used to recognize additional relationships related to revenues and expenses. P&G recognizes a separation of operating transactions from nonoperating transactions. As a result, trends in income from continuing operations should be easier to understand and analyze. Disclosure of operating income may assist in comparing different companies and assessing operating efficiencies.
- (b) P&G operates in the consumer products market. The company separates its operations into five segments: (sales by segment)
- Fabric and Home Care, 27%
  - Beauty Care, 33%
  - Baby and Family Care, 20%
  - Health Care, 13%
  - Snacks and Beverages, 7%
- (c) P&G's gross profit (Net Sales – Cost of Products Sold) was \$26,331 million in 2004, \$21,236 million in 2003, and \$19,249 million in 2002. P&G's gross profit increased by 24% in 2004 compared to 2003. The increase in the gross profit in 2004 is due primarily to increased sales from growth in market share (see MD&A).
- (d) P&G probably makes a distinction between operating and nonoperating revenue for the reasons mentioned in the solution to Part (a). Interest expense increased in 2004 compared to 2003. By separating out these revenue and expense items, the statement reader can see the separate impacts of operating and financing activities.
- (e) P&G reports the following ratios in its 9-year "Financial Summary" section: Net earnings margin and Earnings and Dividends per share. The Financial Summary also reports income statement items, such as advertising and research and development expenses and operating income.

# FINANCIAL STATEMENT ANALYSIS CASE 1

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

## Z-Score Analysis

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

### Walgreens (\$000,000)

	<u>2004</u>	<u>Weights</u>	<u>Z-Score</u>		<u>Z-Score</u>	
			<u>2004</u>	<u>2003</u>	<u>Weights</u>	<u>2003</u>
<b>Total Assets</b>	<b>\$13,342.10</b>			<b>\$11,656.80</b>		
<b>Current Assets</b>	<b>7,764.40</b>			<b>6,609.00</b>		
<b>Current Liabilities</b>	<b><u>4,077.90</u></b>			<b><u>3,671.40</u></b>		
Working Capital	3,686.50			2,937.60		
Working Capital/Assets	0.276	X 1.2 =	0.332	0.252	X 1.2 =	0.302
<b>Retained Earnings</b>	<b>\$7,503.30</b>			<b>\$6,339.90</b>		
Retained Earnings/ Assets	0.562	X 1.4 =	0.787	0.544	X 1.4 =	0.761
<b>EBIT</b>	<b>\$2,159.70</b>			<b>\$1,871.70</b>		
EBIT/Assets	0.162	X 3.3 =	0.534	0.161	X 3.3 =	0.530
<b>Sales</b>	<b>\$37,508.20</b>			<b>\$32,505.40</b>		
Sales/Assets	2.811	X 0.99 =	2.783	2.789	X 0.99 =	2.761
<b>MV Equity</b>	<b>\$37,288.35</b>			<b>\$33,384.25</b>		
<b>Total Liabilities</b>	<b>5,202.40</b>			<b>4,539.00</b>		
MV Equity*/Total Liabilities	7.175	X 0.6 =	<u>4.301</u>	7.355	X 0.6 =	<u>4.413</u>
		<b>Total =</b>	<b><u>8.736</u></b>		<b>Total =</b>	<b><u>8.768</u></b>
<b>*Market Price X Shares Outstanding</b>						
Market Price	\$36.45			\$32.57		
Shares Outstanding	1,023			1025		
<b>Total Equity</b>	<b>\$8,139.70</b>			<b>\$7,117.80</b>		

## **FINANCIAL STATEMENT ANALYSIS CASE 1 (Continued)**

- (b) Walgreens' Z-score in 2004 has declined slightly but is still above the cutoff score for companies that are unlikely to fail. The company has improved in just about all areas in 2004, compared to 2003.**

**Note to instructors—as an extension, students could be asked to conduct the analysis on companies which are in financial distress (e.g., Xerox, Enron) 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

### Earnings (loss) per common share

#### Earnings from continuing operations

(\$97,700,000 ÷ 177,636,000).....	\$0.55
Discontinued operations, net of tax .....	<u>(0.20)</u>
Earnings before extraordinary item .....	0.35
Extraordinary items, net of tax .....	<u>(0.03)*</u>
Net earnings (\$56,100,000 ÷ 177,636,000).....	<u>\$ .32</u>

\*\$.01 rounding difference.

## FINANCIAL STATEMENT ANALYSIS CASE 3

(a) Assumptions, 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.

<u>December 31, 2004</u>	<u>Average Price</u>	<u>EPS</u>	<u>Sales per Share</u>	<u>P/E</u>	<u>PSR</u>
Tootsie Roll	\$34.63	\$1.23	\$ 8.06	28.15	4.30
Hershey	55.54	2.38	17.45	23.34	3.18

(c) Tootsie Roll has a higher P/E relative to Hershey by 21%. But Tootsie's PSR is 35% higher than that for Hershey. Thus, it would appear that the Tootsie Roll's Stock is overpriced, and by a bigger margin when using the sales-based PSR. This may suggest a lower quality of earnings for Tootsie Roll.

## COMPARATIVE ANALYSIS CASE

- (a) Both companies are using the multiple-step format in presenting income statement information. Companies use the multiple-step income statement to recognize additional relationships related to revenues and expenses. Both companies distinguish between operating and nonoperating transactions. As a result, trends in income from continuing operations should be easier to understand and analyze. Disclosure of operating income may assist in comparing different companies and assessing operating efficiencies.

The Coca-Cola Company shows an additional intermediate component of income—gross profit. PepsiCo does not report this information on its income statement.

- (b) The gross profit, operating profit, and net income for these two companies are as follows:

<b>PepsiCo</b>	<b><u>2004</u></b>	<b><u>2003</u></b>	<b><u>2002</u></b>	<b>% Change</b>
Sales .....	\$29,261	\$26,971	\$25,112	16.52%
Cost of sales .....	<u>13,406</u>	<u>12,379</u>	<u>11,497</u>	16.60%
Gross profit .....	<u>\$15,855</u>	<u>\$14,592</u>	<u>\$13,615</u>	16.45%
Operating profit .....	<u>\$5,259</u>	<u>\$4,781</u>	<u>\$4,295</u>	22.44%
Net income .....	<u>\$4,212</u>	<u>\$3,568</u>	<u>\$3,000</u>	40.40%
<b>Coca-Cola</b>	<b><u>2004</u></b>	<b><u>2003</u></b>	<b><u>2002</u></b>	<b>% Change</b>
Sales .....	\$21,962	\$21,044	\$19,564	12.26%
Cost of sales .....	<u>7,638</u>	<u>7,762</u>	<u>7,105</u>	7.50%
Gross profit .....	<u>\$14,324</u>	<u>\$13,282</u>	<u>\$12,459</u>	14.97%
Operating income.....	<u>\$5,698</u>	<u>\$5,221</u>	<u>\$5,458</u>	4.40%
Net income .....	<u>\$4,847</u>	<u>\$4,347</u>	<u>\$3,050</u>	58.92%

## COMPARATIVE ANALYSIS CASE (Continued)

As shown in the table above, the two companies report almost similar net incomes in 2004 and significant growth in income from 2002 to 2004. However, while PepsiCo's sales, gross profit and operating income shows stronger growth, both companies are doing well.

- (c) Coca-Cola and PepsiCo have reported gains on the equity transactions related to bottling operations. PepsiCo reported gains on its equity investments. Also, PepsiCo reported impairments, restructurings and merger-related costs during the past 3 years, which affected its income those years and make year-to-year comparisons of net income distorted—PepsiCo's income growth would have been even higher without the effects of these one-time items. These items are significant for both companies because they have contributed to bottom line net income in prior years but there is uncertainty about whether these items will recur in the future.
- (d) Coca-Cola provided the following adjustments to arrive at “adjusted net income”:

	<u>2004</u>	<u>2003</u>	<u>2002</u>
Net income before cumulative effect of accounting change	\$4,847	\$4,347	\$3,976
Add: Interest expense	196	178	199
Less: Effective tax rate benefit of interest expense	(43)	(37)	(55)

Coca-Cola's management believes that these financial measures provide investors and analysts useful additional insight into the Company's financial position and performance. Management also uses these financial measures to evaluate the Company's performance and to make certain decisions relating to the Company's optimal capital structure and allocation of resources.

They note that non-GAAP financial measures should not be considered substitutes for performance measures presented in Coke's consolidated financial statements in accordance with GAAP. In addition, they caution that the methodologies for the calculation of non-GAAP financial measures may vary from company to company and, therefore, non-GAAP financial measures that Coke presents may not be comparable to similarly-named non-GAAP financial measures reported by other companies.

## RESEARCH CASE 1

- (a) There are a number of differences: (1) Northrop uses a multi-step format, while Goodyear uses a single-step format. Northrop provides more detail on components of revenue and expenses. Note that Goodyear references the notes to the financial statements for additional detail on Income items.**
- (b) Northrop reports a discontinued operation in 2004, 2003, and 2002. Goodyear reports “Rationalizations”, which are described in Note 3 as arising from various actions to reduce capacity, eliminate redundancies, and reduce costs.**
- (c) Both companies report depreciation expense as an adjustment to net income in determining cash flow from operations in the statement of cash flow.**
- (d) Depends on preference for conciseness versus detail. Most would agree that Northrop has the more useful income statement in terms of detail provided and understandability. For example, only by reading note 3 does the statement reader understand that the “Rationalizations” in Goodyear’s income statement are reductions from income.**

## RESEARCH CASE 2

- (a) The second income statement would report comprehensive income, which includes all changes in equity during a period except those resulting from investments by owners and distributions to owners.**
- (b) Under current GAAP, many income items bypass the traditional income statement and are reported directly in equity. As a result, equity is becoming “a dumpster for an amorphous and growing mass of important information.”**
- (c) The alternatives identified include: (1) providing two separate income statements, (2) creating a single statement which reports traditional income as a subtotal and comprehensive income as the bottom line, and (3) creating a three-column statement of stockholders’ equity.**

## INTERNATIONAL REPORTING CASE

- (a) Some of the differences are:
1. The title of the statement is different.
  2. Units of currency—Avon reports in pounds sterling and earnings per share is 5.7 pence (loss).
  3. Terminology—The term used for sales is “Turnover”. Interest revenue and expense are referred to as receivables and payables.
  4. Avon separates out components between exceptional items and before exceptional items. The profit for the year was 5,974 higher before exceptional items.
- (b) The “Loss on the disposal of fixed assets” is an example of an irregular item. As in the U.S., these items are included in the measurement of income but they are separate from “Operating Profit”, likely due to their non-recurring nature. British companies also report interest revenue and expense under a separate heading in the income statement. This distinguishes income from the operating and financing activities of the company.

## FINANCIAL ACCOUNTING RESEARCH

Search Strings: “Comprehensive income,” “reclassification adjustment,” “comprehensive,” “other comprehensive income”

- (a) FAS130 Reporting Comprehensive Income (Issued June, 1997).
- (b) FAS130, Par8. Comprehensive income is defined in Concepts Statement 6 as “the change in equity [net assets] of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. It includes all changes in equity during a period except those resulting from investments by owners and distributions to owners” (paragraph 70).
- (c) FAS130, Par16. Items included in net income are displayed in various classifications. Those classifications can include income from continuing operations, discontinued operations, extraordinary items, and cumulative effects of changes in accounting principle. This Statement does not change those classifications or other requirements for reporting results of operations.
- (d) FAS130, Par17. Items included in other comprehensive income shall be classified based on their nature. For example, under existing accounting standards, other comprehensive income shall be classified separately into foreign currency items, minimum pension liability adjustments, and unrealized gains and losses on certain investments in debt and equity securities. Additional classifications or additional items within current classifications may result from future accounting standards.
- (e) FAS130, Par18. Adjustments shall be made to avoid double counting in comprehensive income items that are displayed as part of net income for a period that also had been displayed as part of other comprehensive income in that period or earlier periods. For example, gains on investment securities that were realized and included in net income of the current period that also had been included in other comprehensive income as unrealized holding gains in the period in which they arose must be deducted through other comprehensive income of the period in which they are included in net income to avoid including them in comprehensive income twice. Those adjustments are referred to in this Statement as reclassification adjustments.

## PROFESSIONAL SIMULATION

### Explanation

As indicated in the income statement below, the loss on abandonment is reported as an “other expense and loss.” 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 \$1,550,000, income from operations is \$930,000; income from continuing operations before taxes is \$900,000; net income is \$665,000; and earnings per share (on net income) is \$6.65.

### Measurement

**Jude Law Corporation**  
**Income Statement**  
**For the Year Ended December 31, 2007**

Sales .....		\$3,200,000
Cost of goods sold .....		<u>1,650,000</u>
Gross profit .....		1,550,000 (a)
Selling expenses .....	\$340,000	
Administrative expenses .....	<u>280,000</u>	<u>620,000</u>
Income from operations.....		930,000 (b)
Other revenues and gains		
Interest revenue.....	10,000	
Other expenses and losses		
Loss from plant abandonment .....	<u>40,000</u>	<u>30,000</u>
Income from continuing operations		
before income tax .....		900,000 (c)
Income tax (30% X 900,000) .....		<u>270,000</u>
Income from continuing operations .....		630,000
Discontinued operations		
Gain on disposal of component of business.....	90,000	
Less: Applicable income tax.....	<u>27,000</u>	<u>63,000</u>

**PROFESSIONAL SIMULATION (Continued)**

Income before extraordinary item.....		693,000
Extraordinary item		
Loss from earthquake .....	40,000	
Less: Applicable income tax .....	<u>12,000</u>	<u>(28,000)</u>
Net income.....		<u>\$665,000 (d)</u>
Per share of common stock		
Income from continuing operations.....		\$6.30
Discontinued operations, net of tax.....		<u>0.63</u>
Income before extraordinary item.....		6.93
Extraordinary item, loss from earthquake, net of tax .....		<u>(0.28)</u>
Net income.....		<u>\$6.65 (e)</u>

**Note to instructor: The change for inventory costing is reflected in the current years cost of goods sold. If comparative statements are presented, prior year's 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.**