CHAPTER 5

Income Statement and Related Information

ASSIGNMENT CLASSIFICATION TABLE

Topics	Questions	Brief Exercises	Exercises	Problems	Cases
1. Income measurement concepts.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 18, 20, 28, 31, 32, 33				3, 5, 6, 7, 9
2. Computation of net income from balance sheets and selected accounts.		1	1, 2, 7		
3. Single-step income statements; earnings per share.	11, 23, 24	2, 8	3, 4, 5, 6, 7, 10, 15, 16	2, 3, 4, 5	1, 9
4. Multiple-step income statements.	17	3	4, 5, 6, 8, 11	1, 4	
5. Extraordinary items; accounting changes; discontinued operations; prior period adjustments; errors.	14, 15, 16, 27, 29	4, 5, 6, 7	9, 10, 11, 12, 13	3, 4, 5, 6, 7, 8	4, 7, 8, 10
6. Retained earnings statement.	30	9, 10	10, 11, 12, 16	1, 2, 4, 5, 6, 7	
7. Intraperiod tax allocation.	21, 22, 25, 26, 27				
8. Comprehensive income.	34	11	14, 15, 16		11
9. Disposal of a component (discontinued operations).	35				

ASSIGNMENT CHARACTERISTICS TABLE

Item	Description	Level of Difficulty	Time (minutes)
E5-1	Computation of net income.	Simple	18-20
E5-2	Income statement items.	Simple	25-35
E5-3	Single-step income statement.	Moderate	20-25
E5-4	Multiple-step and single-step.	Simple	30-35
E5-5	Multiple-step and extraordinary items.	Moderate	30-35
E5-6	Multiple-step and single-step.	Moderate	30-40
E5-7	Compute Income, EPS.	Simple	15-20
E5-8	Multiple-step statement with retained earnings.	Simple	30-35
E5-9	Earnings per share.	Simple	20-25
E5-10	Condensed income statement—periodic inventory method.	Moderate	20-25
E5-11	Retained earnings statement.	Simple	20-25
E5-12	Earnings per share.	Moderate	15-20
E5-13	Change in accounting principle—depreciation.	Moderate	15-20
E5-14	Comprehensive income.	Simple	15-20
E5-15	Comprehensive income.	Moderate	15-20
E5-16	Single step statement, retained earnings statement, comprehensive income.	Moderate	30-35
P5-1	Multi-step income, retained earnings.	Moderate	30-35
P5-2	Single-step income, retained earnings—periodic inventory.	Simple	25-30
P5-3	Irregular items.	Moderate	30-40
P5-4	Multi- and single-step income, retained earnings.	Moderate	45-55
P5-5	Irregular items.	Moderate	20-25
P5-6	Retained earnings statement, prior period adjustments.	Moderate	25-35
P5-7	Income statement and irregular items.	Complex	40-50
P5-8	Income statement and irregular items.	Moderate	25-35
C5-1	Identification of income statement deficiencies.	Simple	20-25
C5-2	Identify income statement deficiencies.	Simple	10-15
C5-3	All-inclusive vs. current operating.	Moderate	25-35
C5-4	Extraordinary items.	Moderate	20-25
C5-5	Earnings management—ethical issues.	Moderate	20-25
C5-6	Earnings management	Simple	15-20
C5-7	Income reporting items.	Simple	25-30
C5-8	Identification of extraordinary items.	Moderate	30-35
C5-9	Identification of income statement weaknesses.	Moderate	30-40
C5-10	Classification of income statement items.	Moderate	20-25
C5-11	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 investments,
   b) Changes in the market values of long term liabilities, such as bonds payable,
   c) Changes in value of property, plant and equipment, such as land, natural resources, or equipment,
   d) Changes 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 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. Estimated 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, therefore, only the net change (income) is reflected whereas the transaction approach not only provides the net change (income) but the components of income (revenues and expenses). The final net income figure should be the same under either approach given the same valuation base.

6. Earnings management is often defined as the planned timing of revenues, expenses, gains and losses to smooth out bumps in earnings. In most cases, earnings management is used to increase income in the current year at the expense of income in future years. For example, companies prematurely recognize sales before they are complete in order to boost earnings. Earnings management can also be used to decrease current earnings in order to increase income in the future. The classic case is the use of "cookie jar" reserves, which are established, by using unrealistic assumptions to estimate liabilities for such items as sales returns, loan losses, and warranty 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 that 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 subsidiary 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 all-inclusive income statement includes all items of income and expense and gains and losses recognized in the accounts during the year. The retained earnings statement then would include only the beginning balance, the net amount transferred from income summary, dividends, and transfers to and from appropriations.

    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.

14. Items that are considered prior period adjustments should be charged or credited to the opening balance of retained earnings. Prior period adjustments would ordinarily be either corrections of errors made in a prior period discovered after issuance of financial statements for that period or retroactive adjustments required or permitted by an FASB Statement or APB Opinion.

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 accord 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, treated as a prior period adjustment.
    (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.
    (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 error should be considered a prior period adjustment and the beginning balance of Retained Earnings should be restated.
    (f) The cumulative effect of $925,000 should be separately reported between extraordinary items and net income.

17. (a) Other expenses or losses section or in 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 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.
    (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 their 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, cumulative effect of a change in accounting principle, 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 periods 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 periods adjustments (or of the opening balance of retained earnings).

26. Tax allocation within a period (intraperiod) becomes necessary when a firm encounters such items as discontinued operations, extraordinary items, accounting changes, or adjustments of prior periods (that is, of the opening balance of retained earnings). 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, accounting changes, prior period adjustments) should be disclosed separately because of their materiality.

27.

Natsume Sozeki Company
Partial Income Statement
For the Year Ended December 31, 2003

Income before taxes and extraordinary item		$1,000,000
Income taxes		340,000
Income before extraordinary item		660,000
Extraordinary item—gain on sale of plant (condemnation)	$450,000	
Less applicable income tax	135,000	315,000
Net income		$ 975,000

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 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 prior period adjustments, (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.
    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 and organization 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. Components are the major subsections of an income statement such as income from continuing operations, income from discontinued operations, other revenues and gains, etc. 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 expense), 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 taxes	$XXX
Income tax expense	XXX
Income from continuing operations	XXX
Discontinued operations	
Gain (loss) on disposal of Division X	
(less applicable income taxes of $—)	XXX
Net income	$XXX

SOLUTIONS TO BRIEF EXERCISES

BRIEF EXERCISE 5-1

Tim Allen Co.
Income Statement
For the Year 2003

Revenues		
Sales		$540,000
Expenses		
Cost of Goods Sold	$320,000	
Wages 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

BRIEF EXERCISE 5-2

Turner Corporation
Income Statement
For the Year Ended December 31, 2004

Revenues	
Net sales	$2,400,000
Interest revenue	31,000
Total revenues	2,431,000
Expenses	
Cost of goods sold	$1,250,000
Selling expenses	280,000
Administrative expenses	212,000
Interest expense	45,000
Income tax expense*	193,200
Total expenses	1,980,200
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 5-3

Turner Corporation
Income Statement
For the Year Ended December 31, 2004

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

*$450,800 ÷ 70,000 shares.

BRIEF EXERCISE 5-4

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)	189,000	504,000
Net income		$12,096,000

Earnings per share	
Income from continuing operations	$1.26
Discontinued operations	(.05)
Net income	$1.21

BRIEF EXERCISE 5-5

Income before income tax and extraordinary item	$7,300,000
Income tax	2,190,000
Income before extraordinary item	5,110,000
Extraordinary loss from casualty, net of $231,000 taxes	539,000
Net income	$4,571,000
Earnings per share	
Income before extraordinary item	$1.02
Extraordinary loss	(.11)
Net income	$ .91

BRIEF EXERCISE 5-6

Year	Straight-line	Double-declining balance	Difference
2002	$ 60,000	$120,000	$ 60,000
2003	60,000	110,400	50,400
	$120,000	$230,400	$110,400
Tax effect (30%)			33,120
			$ 77,280

Bradley's net income will be decreased (as a result of switching to a higher depreciation amount) by $77,280.

BRIEF EXERCISE 5-7

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 2004.

BRIEF EXERCISE 5-8

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

BRIEF EXERCISE 5-9

Lincoln Corporation
Retained Earnings Statement
For the Year Ended December 31, 2004

Balance, January 1	$ 675,000
Add: Net income for 2004	2,400,000
	3,075,000
Deduct: Cash dividends declared	75,000
Balance, December 31	$3,000,000

BRIEF EXERCISE 5-10

Lincoln Corporation
Retained Earnings Statement
For the Year Ended December 31, 2004

Balance, January 1, as reported	$ 675,000
Correction for overstatement of expenses in prior period (net of tax)	80,000
Balance, January 1, as adjusted	755,000
Add: Net income for 2004	2,400,000
	3,155,000
Deduct: Cash dividends declared	75,000
Balance, December 31	$3,080,000

BRIEF EXERCISE 5-11

(a)	Net income	$3,000
(b)	Dividend revenue	$3,000
	Unrealized holding gain	5,000
	Comprehensive income	$8,000
(c)	Unrealized holding gain	$5,000
(d)	Accumulated other comprehensive income, January 1, 2003	$ 0
	Unrealized holding gain	5,000
	Accumulated other comprehensive income, December 31, 2003	$5,000

SOLUTIONS TO EXERCISES

EXERCISE 5-1 (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 =	31,000 Increase
Change in stockholders' equity:		$173,000 Increase

Change in stockholders' equity accounted for as follows:

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

EXERCISE 5-2 (25-35 minutes)

(a) Total net revenue:

Sales		$390,000
Less: Sales discounts	$ 7,800	
Sales returns	12,400	20,200
Net sales		369,800
Dividends revenue		71,000
Rental revenue		6,500
Total net revenue		$447,300

(b) Net income:

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

(c) Dividends declared:

Ending retained earnings	$134,000
Beginning retained earnings	114,400
Net increase	19,600
Less net income	(37,300)
Dividends declared	$ 17,700

EXERCISE 5-2 (Continued)

ALTERNATE SOLUTION

Beginning retained earnings	$114,400
Add net income	37,300
	151,700
Deduct dividends declared	?
Ending retained earnings	$134,000

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

EXERCISE 5-3 (20-25 minutes)

LeRoi Jones Inc.
Income Statement
For Year Ended December 31, 2004

Sales	$1,250,000
Less sales discounts	17,000
Net sales	1,233,000
Expenses	
Cost of goods sold	500,000
Selling expenses	400,000
Administrative expenses	100,000
Interest expense	20,000
Total expenses	1,020,000
Income before taxes	213,000
Income taxes	63,900
Net income (per share $7.46)	$ 149,100

EXERCISE 5-3 (Continued)

Determination of amounts

Administrative expenses	**=**	**20% of cost of good sold**
	=	**20% of $500,000**
	=	**$100,000**
Gross sales X 8%	**=**	**administrative expenses**
	=	**$1,250,000**
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**

Per share $7.46 ($149,100 ÷ 20,000)

EXERCISE 5-4 (30-35 minutes)

(a)

Multiple-Step Form
P. Bride Company
Income Statement
For the Year Ended December 31, 2004
(In thousands, except earnings per share)

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

EXERCISE 5-4 (Continued)

(b)

<u>Single-Step Form</u>

P. Bride Company
Income Statement
For the Year Ended December 31, 2004
(In thousands, except earnings per share)

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

EXERCISE 5-4 (Continued)

(c) Single-step:

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

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 5-5 (30-35 minutes)

Maria Conchita Alonzo Corp.
Income Statement
For the Year Ended December 31, 2004

<u>Sales Revenue</u>		
Sales		$1,380,000
Less: Sales returns and allowances	$150,000	
Sales discounts	45,000	195,000
Net sales revenue		1,185,000
Cost of goods sold		621,000
Gross profit		564,000
<u>Operating Expenses</u>		
Selling expenses	194,000	
Admin. and general expenses	97,000	291,000
Income from operations		273,000
<u>Other Revenues and Gains</u>		
Interest revenue		86,000
		359,000
<u>Other Expenses and Losses</u>		
Interest expense		60,000
Income before taxes and extraordinary item		299,000
Income taxes		101,660
Income before extraordinary item		197,340
Extraordinary item		
Loss from earthquake damage	150,000	
Less applicable tax reduction	51,000	99,000
Net income		$ 98,340

EXERCISE 5-5 (Continued)

Per share of common stock:

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

EXERCISE 5-6 (30-40 minutes)

(a) **Multiple-Step Form**

Whitney Houston Shoe Co.
Income Statement
For the Year Ended December 31, 2004

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

EXERCISE 5-6 (Continued)

(b)

Single-Step Form

Whitney Houston Shoe Co.
Income Statement
For the Year Ended December 31, 2004

Revenues	
Net sales	$ 980,000
Rental revenue	29,000
Total revenues	1,009,000
Expenses	
Cost of goods sold	496,000
Selling expenses	177,900
Administrative expenses	207,100
Interest expense	18,000
Total expenses	899,000
Income before taxes	110,000
Income taxes	37,400
Net income	$ 72,600
Earnings per share	$3.63

EXERCISE 5-6 (Continued)

(c) Single-step:

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

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 5-7 (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	(40,000)
Income before income taxes	110,000
Income tax ($110,000 X .30)	33,000
Net income	$ 77,000

(b)

Income from continuing operations before income tax	$ 150,000
Income tax ($150,000 X .30)	45,000
Income from continuing operations	105,000
Discontinued operations, less applicable income tax of $12,000	(28,000)
Net income	$ 77,000
Earnings per share:	
Income from continuing operations	$ 10.50
Loss on discontinued operations	(2.80)
Net Income	$ 7.70

EXERCISE 5-8 (30-35 minutes)

(a)

Ivan Calderon Corp.
Income Statement
For the Year Ended December 31, 2004

Sales Revenue		
Net sales		$1,300,000
Cost of goods sold		780,000
Gross profit		520,000
Operating Expenses		
Selling expenses	$65,000	
Administrative expenses	48,000	113,000
Income from operations		407,000
Other Revenues and Gains		
Dividend revenue	20,000	
Interest revenue	7,000	27,000
		434,000
Other Expenses and Losses		
Write-off of inventory due to obsolescence		80,000
Income before taxes and extraordinary item		354,000
Income taxes		120,360
Income before extraordinary item		233,640
Extraordinary item		
Casualty loss	50,000	
Less applicable tax reduction	17,000	33,000
Net income		$ 200,640
Per share of common stock:		
Income before extraordinary item		$3.89
Extraordinary item (net of tax)		(.55)
Net income		$3.34

EXERCISE 5-8 (Continued)

(b)

Ivan Calderon Corp.
Retained Earnings Statement
For the Year Ended December 31, 2004

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

EXERCISE 5-9 (20-25 minutes)

Computation of net income:

2004 net income after tax		$33,000,000
2004 net income before tax		
[$33,000,000 ÷ (1 – .34)]		50,000,000
Add back major casualty loss		18,000,000
Income from operations		68,000,000
Income taxes (34% X $68,000,000)		23,120,000
Income before extraordinary item		44,880,000
Extraordinary item:		
Casualty loss	$18,000,000	
Less applicable income tax reduction	6,120,000	11,880,000
Net income		$33,000,000

Net income	$33,000,000
Less provision for preferred dividends	
(8% of $4,500,000)	360,000
Income available for common	32,640,000
Common shares	÷10,000,000
Earnings per share	$3.26

Income statement presentation

Per share of common stock:	
Income before extraordinary item	$4.45[a]
Extraordinary item (net of tax)	(1.19)[b]
Net income	$3.26

[a] $$\frac{\$44{,}880{,}000 - \$360{,}000}{10{,}000{,}000} = \$4.45$$

[b] $$\frac{\$11{,}880{,}000}{10{,}000{,}000} = \$1.19$$

EXERCISE 5-10 (20-25 minutes)

Spock Corporation
Income Statement
For the Year Ended December 31, 2004

Net sales		$4,162,000
Cost of goods sold		2,665,000
Gross profit		1,497,000
Selling expenses	$636,000	
Administrative expenses	491,000	1,127,000
Income from operations		370,000
Other revenue	240,000	
Other expense	(176,000)	64,000
Income before taxes		434,000
Income taxes		147,560
Income before extraordinary item		286,440
Extraordinary loss, net of $23,800 taxes		46,200
Net income		$ 240,240

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

Income before extraordinary item	$3.18
Extraordinary item	(.51)
Net income	$2.67

EXERCISE 5-10 (Continued)

Supporting computations

Net sales:

$4,275,000 – $34,000 – $79,000 = $4,162,000

Cost of goods sold:

$535,000 + ($2,786,000 + $72,000 – $27,000 – $15,000) – $686,000 = $2,665,000

Selling expenses:

$284,000 + $83,000 + $69,000 + $54,000 + $93,000 + $36,000 + $17,000 = $636,000

Administrative expenses:

$346,000 + $33,000 + $24,000 + $48,000 + $32,000 + $8,000 = $491,000

Income taxes:

34% X $434,000 = $147,560

EXERCISE 5-11 (20-25 minutes)

(a)

Eddie Zambrano Corporation
Retained Earnings Statement
For the Year Ended December 31, 2004

Balance, January 1, as reported	$225,000*
Correction for depreciation error (net of $10,000 tax)	15,000
Balance, January 1, as adjusted	210,000
Add net income	123,000**
	333,000
Deduct dividends declared	100,000
Balance, December 31	$233,000

*($40,000 + $125,000 + $160,000) – ($50,000 + $50,000)
**[$240,000 – (40% X $240,000)] – [$35,000 – (40% X $35,000)]

(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	163,000
Total	$233,000

EXERCISE 5-12 (15-20 minutes)

Net income:		
Income from continuing operations before taxes		$23,650,000
Income taxes (35%)		8,277,500
Income from continuing operations		15,372,500
Discontinued operations		
Loss before taxes	$3,225,000	
Less applicable income tax (35%)	1,128,750	2,096,250
Net income		$13,276,250
Preferred dividends declared:		$ 1,075,000
Weighted average common shares outstanding:		
12/31/03–3/31/04 (4,000,000 x 3/12)		1,000,000
4/1/04–12/31/04 (4,400,000 x 9/12)		3,300,000
Weighted average		4,300,000
Earnings per share		
Income from continuing operations		$3.33*
Discontinued operations		(.49)**
Net income		$2.84***

*($15,372,500 – $1,075,000) ÷ 4,300,000.
**$2,096,250 ÷ 4,300,000.
***($13,276,250 – $1,075,000) ÷ 4,300,000.

EXERCISE 5-13 (15-20 minutes)

(a) Depreciation expense for 2004

$$\frac{\$450{,}000 - \$30{,}000}{6 \text{ years}} = \$70{,}000$$

(b)

Year	DDB Method	SL Method	Difference
2002	$ 150,000	$ 70,000	$ 80,000
2003	100,000	70,000	30,000
Total	$ 250,000	$140,000	$ 110,000
Income taxes			38,500
Cumulative effect, net of tax			$ 71,500

EXERCISE 5-14 (15-20 minutes)

Roxanne Carter Corporation
Income Statement and Statement of Comprehensive Income
For the Year Ended December 31, 2004

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

EXERCISE 5-15 (15-20 minutes)

C. Reither Co.
Statement of Stockholders' Equity
For the Year Ended December 31, 2004

	Total	Comprehensive Income	Retained Earnings	Accumulated Other Comprehensive Income	Common Stock
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		$ 60,000			
Dividends	(10,000)		(10,000)		
Ending balance	$570,000		$200,000	$20,000	$350,000

*($700,000 – $500,000 – $80,000).

EXERCISE 5-16 (30-35 minutes)

(a) Roland Carlson Inc.
Income Statement
For the Year Ended December 31, 2004

Revenues		
Sales		$1,900,000
Rent revenue		40,000
Total revenues		1,940,000
Expenses		
Cost of goods sold		850,000
Selling expenses		300,000
Administrative expenses		240,000
Total expenses		1,390,000
Income from continuing operations before income taxes		550,000
Income taxes		187,000
Income from continuing operations		363,000
Discontinued operations		
Loss on discontinued operations	$75,000	
Less applicable income tax reduction	25,500	49,500
Income before extraordinary items		313,500
Extraordinary items:		
Extraordinary gain	95,000	
Less applicable income tax	32,300	62,700
		376,200
Extraordinary loss	60,000	
Less applicable income tax reduction	20,400	39,600
Net income		$ 336,600

EXERCISE 5-16 (Continued)

Per share of common stock:

Income from continuing operations	$3.63
Loss on discontinued operations, net of tax	(.49)
Income before extraordinary items	3.14
Extraordinary gain, net of tax	.63
Extraordinary loss, net of tax	(.40)
Net income	$3.37

(b)

Roland Carlson
Statement of Retained Earnings
For the Year Ended December 31, 2004

Retained Earnings, January 1, 2004	$600,000
2004 Net Income	336,600
	$936,600
Dividends Declared	(150,000)
Retained Earnings, December 31, 2004	$786,600

(c)

Roland Carlson
Statement of Comprehensive Income
For the Year Ended December 31, 2004

Net Income	$336,600
Other Comprehensive Income	
Unrealized Holding Gain	15,000
Comprehensive Income	$351,600

TIME AND PURPOSE OF PROBLEMS

Problem 5-1 (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 5-2 (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 5-3 (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 5-4 (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 5-1. As a consequence, the problem is time-consuming and emphasizes the differences between the multiple-step and single-step income statement.

Problem 5-5 (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 5-6 (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 5-7 (Time 40-50 minutes)
Purpose—to provide the student with the opportunity to solve a complex problem involving income statement presentation. The problem is unstructured and therefore proper classification is difficult to develop. The problem is specifically designed to cover most of the special items discussed in the textbook.

Problem 5-8 (Time 25-35 minutes)
Purpose—to provide the student with a problem to determine the reporting of several items, which may get special treatment as irregular items. This is a good problem for a group assignment.

SOLUTIONS TO PROBLEMS

PROBLEM 5-1

American Horse Company
Income Statement
For the Year Ended December 31, 2004

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

American Horse Company
Retained Earnings Statement
For the Year Ended December 31, 2004

Beginning balance of retained earnings		980,000
Plus net income		835,000
		1,815,000
Less dividends		
Preferred stock	70,000	
Common stock	250,000	320,000
Ending balance of retained earnings		$ 1,495,000

Earnings per share:		
Income from continuing operations		$ 5.62[a]
Discontinued operations		
Loss on operations (net of tax)	$(.30)	
Loss on disposal (net of tax)	(1.47)	(1.77)
Income before extraordinary item		3.85[b]
Extraordinary loss (net of tax)		(1.30)
Net income		$ 2.55[c]

[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] $$\frac{\$835{,}000 - \$70{,}000}{300{,}000 \text{ shares}} = \$2.55$$

PROBLEM 5-2

Mary J. Blige Corporation
Income Statement
For the Year Ended December 31, 2004

Revenues	
Net sales ($1,000,000 – $14,500 – $17,500)	$ 968,000
Gain on sale of land	30,000
Rent revenue	18,000
Total revenues	1,016,000
Expenses	
Cost of goods sold*	585,000
Selling expenses	232,000
Administrative expenses	99,000
Total expenses	916,000
Income before taxes	100,000
Income taxes	38,500
Net income (per common share $2.05)	$ 61,500

Mary J. Blige Corporation
Retained Earnings Statement
For the Year Ended December 31, 2004

Retained earnings at beginning of the year	260,000
Plus net income	61,500
	321,500
Less cash dividends declared and paid	45,000
Retained earnings at end of the year	$ 276,500

*Cost of goods sold:

Merchandise inventory, Jan. 1		$ 89,000
Purchases	$610,000	
Less purchase discounts	10,000	
Net purchases	600,000	
Add freight-in	20,000	620,000
Merchandise available for sale		709,000
Less merchandise inventory, Dec. 31		124,000
Cost of goods sold		$585,000

PROBLEM 5-3

Tony Rich Inc.
Income Statement (Partial)
For the Year Ended December 31, 2004

Income from continuing operations before taxes		$798,500*
Income taxes		220,350**
Income from continuing operations:		578,150
Discontinued operations:		
Loss from disposal of recreational division	$115,000	
Less applicable income tax reduction	34,500	80,500
Income before extraordinary item and cumulative effect of a change in accounting principle		497,650
Extraordinary item:		
Major casualty loss	80,000	
Less applicable income tax reduction	36,800	43,200
Cumulative effect on prior years of retroactive application of new inventory method		
Less applicable income taxes	40,000	
Net income	16,000	24,000
		$478,450
Per share of common stock:		
Income from continuing operations		$7.23
Discontinued operations, net of tax		(1.01)
Income before extraordinary items and cumulative effect of accounting change		6.22
Extraordinary item, net of tax		(.54)
Change in accounting principle, net of tax		.30
Net income ($478,450 ÷ 80,000)		$5.98

PROBLEM 5-3 (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 ÷ 6)	$9,000	
Corrected (54,000 – $9,000) ÷ 6	(7,500)	1,500
As restated		$798,500

**Computation of income tax:

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

PROBLEM 5-4

(a)

J. R. Reid Corporation
Income Statement
For the Year Ended June 30, 2004

Sales Revenue			
Sales			$1,678,500
Less: Sales discounts		$31,150	
Sales returns		62,300	93,450
Net sales			1,585,050
Cost of Goods Sold			896,770
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	4,715	248,785	

PROBLEM 5-4 (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	6,000	35,970	284,755
Income from operations			403,525
Other Revenues and Gains			
Dividend revenue			38,000
			441,525
Other Expenses and Losses			
Bond interest expense			18,000
Income before taxes			423,525
Income taxes			133,000
Net income			$ 290,525
Earnings per common share ($290,525 – $9,000 of preferred dividends ÷ 80,000 shares)			$3.52

PROBLEM 5-4 (Continued)

J. R. Reid Corporation
Retained Earnings Statement
For the Year Ended June 30, 2004

Retained earnings, July 1, 2003		
as reported	337,000	
Correction of depreciation		
understatement (net of tax)	17,700	
Adjusted balance of retained		
earnings at July 1, 2003		319,300
Plus net income		290,525
		609,825
Deduct:		
Dividends declared on preferred stock	9,000	
Dividends declared on common stock	32,000	41,000
Retained earnings, June 30, 2004		$568,825

PROBLEM 5-4 (Continued)

(b) **J. R. Reid Corporation**
Income Statement
For the Year Ended June 30, 2004

Revenues	
Net sales	$1,585,050
Dividend revenue	38,000
Total revenues	1,623,050
Expenses	
Cost of goods sold	896,770
Selling expenses	248,785
Administrative expenses	35,970
Bond interest expense	18,000
Total expenses	1,199,525
Income before taxes	423,525
Income taxes	133,000
Net income	$ 290,525
Earnings per common share	$3.52

PROBLEM 5-4 (Continued)

J. R. Reid Corporation
Retained Earnings Statement
For the Year Ended June 30, 2004

Retained earnings, July 1, 2003 as reported	$337,000	
Correction of depreciation understatement (net of tax)	17,700	
Retained earnings, July 1, 2003 adjusted		319,300
Plus net income		290,525
		609,825
Deduct:		
Dividends declared on preferred stock	9,000	
Dividends declared on common stock	32,000	41,000
Retained earnings, June 30, 2004		$568,825

PROBLEM 5-5

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 user 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 prospective 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 would never be run through current or future income statements.

4. **Earnings per share should be reported on the face of the income statement and not in the notes to the financial statements. Because such importance is ascribed to this statistic, the profession believes it necessary to highlight the earnings per share figure. In this case it should report both income before extraordinary item and net income on a per share basis.**

PROBLEM 5-6

Le Clair Corp.
Retained Earnings Statement
For the Year Ended December 31, 2004

Retained Earnings, January 1 as reported	$257,600
Correction of error from prior period (net of tax)	25,400
Adjusted balance of retained earnings at January 1	283,000
Add net income	44,100*
Deduct cash dividends declared	32,000
Retained earnings, December 31	$295,100

*$44,100 = ($84,500 + $41,200 + $21,600 – $25,000 – $60,000 – $18,200)

(b)
1. Gain on sale of investments—body of income statement, possibly unusual item.
2. Refund of litigation—body of income statement, possibly unusual item.
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.
5. Cumulative effect of change in depreciation method—body of the income statement, following the caption, "Income before extraordinary item and cumulative effect of change in accounting principle." If an extraordinary item is reported, the cumulative effect would be reported below this item.

PROBLEM 5-7

Rufino Tamayo Corporation
Income Statement
For the Year Ended December 31, 2004

Sales		$9,500,000
Cost of goods sold		5,900,000
Gross profit		3,600,000
Selling and administrative expenses ($1,300,000 – $40,000)	1,260,000*	
Loss due to write-down of inventory	72,000**	
Total operating expenses		1,332,000
Income before income taxes		2,268,000
Income taxes (30% of $2,268,000)		680,400
Income before extraordinary item and cumulative effect of a change in accounting principle		1,587,600
Extraordinary item:		
Major casualty loss (net of tax)		127,000
Cumulative effect on prior years of retroactive application of new depreciation method (net of $36,563 tax)		85,312***
Net income		$1,375,288

Per share of common stock	
Income before extraordinary item and cumulative effect of a change in accounting principle	$3.97
Extraordinary item, net of tax	(.32)
Cumulative effect of accounting change, net of tax	(.21)
Net income ($1,375,288 ÷ 400,000)	$3.44

PROBLEM 5-7 (Continued)

*Note: The $40,000 relates to the sales commission that should have been charged in 2003.

**The $72,000 may be identified as an unusual item if unusual or infrequent in nature. However, it cannot be considered extraordinary.

***($121,875 – $36,563)

PROBLEM 5-8

Rap Corp.
Income Statement (Partial)
For the Year Ended December 31, 2004

Income from continuing operations before taxes			$1,180,000*
Income taxes			448,400**
Income from continuing operations			731,600
Discontinued operations			
Loss from operations of discontinued subsidiary	$ 90,000		
Less applicable income tax reduction	34,200	$55,800	
Loss from disposal of subsidiary	100,000		
Less applicable income tax reduction	38,000	62,000	117,800
Income before extraordinary item			613,800
Extraordinary item:			
Gain on sale of investment		145,000	
Less applicable taxes		58,000	87,000
Net income			$ 700,800

Per share of common stock:	
Income from continuing operations	$7.32
Discontinued operations, net of tax	(1.18)
Income before extraordinary item	6.14
Extraordinary item, net of tax	.87
Net income ($762,800 ÷ 100,000)	$7.01

PROBLEM 5-8 (Continued)

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

As previously stated	**$1,210,000**
Write-off of account receivable	**(26,000)**
Loss on sale of equipment	**(4,000)**
Restated	**$1,180,000**

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

$1,180,000 X .38 = $448,400

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

TIME AND PURPOSE OF CASES

Case 5-1 (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.

Case 5-2 (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.

Case 5-3 (Time 25-35 minutes)
Purpose—to provide the student with an understanding of the difference between the current operating and all-inclusive income statement. Although the current operating statement has lost favor with the profession, the continual expansion of special items below income from continuing operations suggests that the profession believes merit exists for a modified current operating concept.

Case 5-4 (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.

Case 5-5 (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.

Case 5-6 (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.

Case 5-7 (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.

Case 5-8 (Time 30-35 minutes)
Purpose—to provide the student with the opportunity to distinguish between extraordinary, unusual, and ordinary items. The student must classify and describe for reporting purposes an extraordinary event and allocate the proper costs to that event.

Case 5-9 (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.

Time and Purpose of Cases (Continued)

Case 5-10 (Time 20-25 minutes)
Purpose—to provide the student with a variety of situations involving classification of special items. This case is different from Case 5-9 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.

Case 5-11 (Time 10-15 minutes)
Purpose—to provide the student with an opportunity to show how comprehensive income should be reported.

SOLUTIONS TO CASES

CASE 5-1

The deficiencies of John Amos Corporation 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. Intraperiod 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.

CASE 5-2

(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.

(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.

CASE 5-3

(a) The "current operating performance" income statement is intended to provide a net income figure that is the best possible indication of the earning power of the business. Under this concept the importance of the amount of recurring net income, the indication of earning power, requires that all material extraordinary and nonrecurring items be reported as adjustments to retained earnings. Only items of revenue and expense applicable to the regular operations of the current period should be used in ascertaining net income for the period.

The “all-inclusive” income statement may be said to have been prepared on the "clean surplus" theory. All extraordinary and nonrecurring items, regardless of their materiality, are included in the determination of periodic net income. Thus, a series of income statements will reveal all income information for the periods covered by the statements.

(b) An income statement prepared strictly on the current operating performance basis would show operating expenses deducted from net revenues to arrive at income from the operations which characterize the business. Recurring financial items are then added or deducted to produce net income. Material nonrecurring items are not included in the income statement but are charged or credited directly to retained earnings.

An income statement prepared strictly on the all-inclusive basis would show the same calculation of income from operations as does the current operating performance statement. Then the nonoperating and nonrecurring items and corrections of prior periods' profits would be added or deducted to produce net income.

There is substantial agreement that over the years all profits and losses should be accounted for in income, and a starting presumption is that all items of profit and loss recognized during an accounting period should be reported in the income of that period. However, it is recognized that readers of income statements draw inferences from a company's reported net income figure. For this reason extraordinary charges and credits should be segregated on the same income statement in a separate section appropriately labeled.

(c) Arguments advanced for the "all-inclusive" income statement are:

1. Extraordinary items are related to income determination, and net income for the period would be misstated if they were excluded.
2. All items should be included so that the income statements over a period of years will aggregate to the company's total income.
3. Readers of the financial statements might be unaware that the retained earnings statement should be read as well as the income statement to determine the results of the year's activities. Items handled through retained earnings might be overlooked.
4. Often there is no clear division between extraordinary items and operating items—frequently the distinction is a matter of opinion.
5. Charges and credits to retained earnings imply that the items are nonrecurring, but such items do recur.
6. There is a tendency for retained earnings charges to exceed credits so that, over a period of years, the income statements would exaggerate the company's earning power.
7. Retained earnings charges and credits create an opportunity for manipulation or normalization in the determination of net income.
8. Inconsistencies in determining extraordinary items affect the comparability of the company's earnings with prior years and with earnings of other companies.
9. The reader's attention is directed to the estimated and tentative nature of the income statement when corrections of prior years' net income are included.

CASE 5-3 (Continued)

Arguments offered for the "current operating performance" income statement are:

1. The earning power of the company is of interest to investors and others. Only normal operations produce the net income in which they are interested.
2. When nonrecurring items are included in the income statement, some readers are unable to determine the results of normal operations.
3. Inclusion of nonrecurring items causes difficulty in determining the trend of the company's operations and in comparing the results of operations with others.
4. There is a distortion of income for two years when a material correction of a prior year's net income is reported in the income statement.

CASE 5-4

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 gain or loss as extraordinary if the two conditions of an extraordinary item, unusual in nature and infrequent in occurrence, are met.

6. Classify as a gain or loss, but not extraordinary. Company practices indicate such sales are not unusual or infrequent in occurrence.

7. Material losses on extinguishment of debt should not be classified as extraordinary items. Note to instructors: The FASB recently changed the accounting in this area.

8. Classify as a loss, but not extraordinary. The loss is not an infrequent occurrence taking into account the environment in which the entity operates.

9. Classify as an extraordinary item if the two conditions of an extraordinary item, unusual in nature and infrequent in occurrence, are met.

CASE 5-5

(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)

Proposed Accounting Income	2000	2001	2002	2003	2004
Income before warranty expense				$43,000	$43,000
Warranty expense				8,000	2,000
Income	$20,000	$25,000	$30,000	$35,000	$41,000

Assuming the same income before warranty expense for both 2003 and 2004 and total warranty expense over the 2-year period of $10,000, this proposed accounting results in steadily increasing income over the two-year period.

(c)

Appropriate Accounting Income	2000	2001	2002	2003	2004
Income before warranty expense				$43,000	$43,000
Warranty expense				5,000	5,000
Income	$20,000	$25,000	$30,000	$38,000	$38,000

The appropriate accounting would be to record $5,000 in 2003, resulting in income of $38,000. However, with the same amount of warranty expense in 2004, Grace no longer shows an increasing trend in income. Thus, by taking more expense in 2003, Grace can save some income (a classic case of "cookie-jar" reserves) and maintain growth in income.

CASE 5-6

(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.

CASE 5-7

(a) It appears that the sale of the Casino Royale Division would qualify as a discontinued operation. The management 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 effect 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.

CASE 5-8

(a) 1. Extraordinary items are material items of a character significantly different from the typical or customary business activities of the entity. Extraordinary items are events and transactions that are distinguished by their unusual nature and infrequent occurrence. The product tampering and recall is material because the credits and refunds alone are thirteen percent of earnings before income taxes, is unusual because of its catastrophic nature, and is infrequent because it is the first occurrence in the more than fifty-year history of Anderson Company with no indication that the event will recur.

2. The extraordinary charge should be properly described as "Loss from product tampering and recall" and placed in a separate section in the 2003 income statement between discontinued operations and cumulative effect of accounting changes. The charge must be presented net of its applicable income taxes and the taxes may be shown parenthetically or in columnar form. Reporting per share amounts for extraordinary items is required. Details of the extraordinary charge should be disclosed in the notes to the 2003 financial statements.

CASE 5-8 (Continued)

(b) 1. Items 1, 3, 5, 6, 7, 8, 10, and 13 should be included in the extraordinary charge for 2003.

2. Items not included in the extraordinary charge and the reason for each is as follows:

Item Number	Reason Not Included
2	Insurance to cover possible future events is not directly related to the 2003 event. Should be capitalized and expensed over future periods.
4	Future security measures are future costs and not directly related to the 2003 event. Should be expensed over future periods.
9	These packaging costs are not directly related to the 2003 event and should be matched against revenues from the sale of the packaged products.
11	These costs resulted from a decision of the company in its reaction to the 2003 event. The costs are related to future operations and should be charged to operating expense or spread over the estimated period that the redesigned package will be in use.
12	The cost of the packaging equipment should be charged to an asset account and expensed over its estimated useful life.
14	Lost sales revenue is an opportunity cost and is not recorded or disclosed anywhere on the financial statements.

CASE 5-9

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

1. **Sales taxes.** Sales taxes have been erroneously added to 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 revenue 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 is not classified appropriately in that it has not been subtracted prior to arriving at net income.

The treatment appearing in the Cynthia Taylor Corporation income statement is tantamount to an assumption that the federal income tax is a distribution of net income instead of an operating expense and a determinant of net income. This assumption, the essence of the enterprise concept of net income, 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 after taxes as being a more relevant measure of income than income before taxes.

CASE 5-10

	Classification	Rationale
1.	No disclosure.	Error has "washed out"; that is, subsequent income statement compensated for the error. However, prior year income statements should be restated.
2.	Extraordinary item section.	Material, unusual in nature, and infrequent in occurrence.
3.	Separate disclosure of 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.	Cumulative effect of a change in accounting principle.	A change in depreciation methods is a change in accounting principle.
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.	Segment's assets, results of operations, and activities are clearly distinguishable physically, operationally, and for financial reporting purposes.

CASE 5-11

(a) **Separate Statement**	**Current Year**	**Prior Year**
Net income	$400,000	$410,000
Statement of Comprehensive Income		
Net Income	$400,000	$410,000
Unrealized Gains	20,000	
Comprehensive Income	$420,000	$410,000
(b) **Combined Format**		
…income components…		
Net income	$400,000	$410,000
Other Comprehensive Income		
Unrealized Gains	20,000	
Comprehensive Income	$420,000	$410,000

(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 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

1. **3M 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. 3M 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.**

2. **3M operates in the consumer products market. The company separates its operations into six segments:**

   Transportation, Graphics, and Safety—21.92%
   Health Care—21.26%
   Industrial—19.9%
   Consumer and Office—16.9%
   Electro and Communication—13.5%
   Specialty Material—6.36%

3. **3M's gross profit (Sales – Cost of Sales) was $7,330 million in 2001, $7,937 million in 2000, and $7,622 million in 1999. 3M's gross profit declined by 7.6% in 2001 compared to 2000. The decline in the gross margin in 2001 is due primarily to declining selling prices and lower international sales due to a stronger U.S. dollar.**

4. 3M probably makes a distinction between operating and nonoperating revenue for the reasons mentioned in the solution to Question 1. Interest expense and interest income increased in 2001 compared to 2000. By separating out these revenue and expense items, the statement reader can see the separate impacts of operating and financing activities.

5. 3M reports the following ratios in its 11-year " Financial Summary" section: Current ratio, Return on invested capital, Total debt to total capital. The Financial Summary also reports income statement items, such as cost of sales, selling, general, and administrative expenses, and operating income, all as a percentage of sales.

FINANCIAL STATEMENT ANALYSIS CASE 1

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

Altman Z Analysis

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

PepsiCo ($000,000)	2001	2000	Weights	2001	2000
Total Assets	21,695.00	20,757.00			
Current Assets	5,853.00	5,617.00			
Current Liabilities	4,998.00	4,795.00			
Working Capital	855.00	822.00			
Working Capital/Assets	0.039	0.040	1.2	0.047	0.048
Retained Earnings	11,519.00	16,510.00			
Retained Earnings/Assets	0.530	0.795	1.4	0.742	1.113
EBIT	4,021.00	3,818.00			
EBIT/Assets	0.185	0.184	3.3	0.611	0.607
Sales	26,935.00	25,479.00			
Sales/Assets	1.24	1.23	0.99	1.227	1.218
MV Equity	86,044.00	86,506.00			
Total Liabilities	13,021.00	13,131.00			
MV Equity/Total Liabilities	6.61	6.59	0.6	3.966	3.954
Market Price	49	49 9/16	Z-Score	6.593	6.940
Shares Outstanding	1,756.00	1,749.00			

(b) PepsiCo's Z-score in 2001 has decreased and is easily in a range suggesting it is unlikely to go bankrupt. The decline in retained earnings is the result of a charge for 6.6 billion shares to effect the merger with Quaker Oats.

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	**$0.55**
Discontinued operations	**(0.20)**
Earnings before extraordinary items and accounting changes	**0.35**
Extraordinary items	**(0.03)**
Cumulative effect of accounting changes	**(2.22)**
Net earnings (loss)	**(1.90)**

COMPARATIVE ANALYSIS CASE

4. 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.

5. The gross profit, operating profit, and net income for these two companies are as follows:

($000,000)

PepsiCo	2001	2000	1999	% Change
Sales	$26,935	$25,479	$25,093	7.34%
Cost of Sales	10,754	10,226	10,326	4.14%
Gross Profit	16,181	15,253	14,767	9.58%
Operating Income	4,021	3,818	3,483	15.4%
Net Income	2,662	2,543	2,505	6.27%

COMPARATIVE ANALYSIS CASE (Continued)

Coca-Cola	2001	2000	1999	% Change
Sales	$20,092	$19,889	$19,284	4.18%
Cost of Sales	6,044	6,204	6,009	.58%
Gross Profit	14,048	13,685	13,275	5.82%
Operating Income	5,352	3,691	3,982	34.40%
Net Income	$3,969	$2,177	$2,431	63.27%

As shown in the table above, the two companies reported similar incomes for 1999 and 2000. Coke's net income for 2001 accounted for the large percentage increase over the three year period.

6. Coca-Cola reported unusual expenses in 1999 and 2000 of $1.443 billion and $813.0 million respectively related to the bottling operations. As a result, operating income for these two years was depressed. Pepsi reported a gain on bottling transactions in 1999 through 2001, which increased its income those years and make year-to-year comparisons of net income distorted. 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.

7. PepsiCo discusses 5 items that affect comparability of amounts in their financial statements: 1) 53 weeks in 2000 compared to 52 in 1999; 2) Restructuring of their bottling operations; 3) Impairment and Restructuring charges in 1999 and 1998; 4) Acquisitions and Mergers; and 5) Income Tax adjustments.

With respect to 1), with an extra week in 2000, the levels of sales and income are higher and not comparable—note that PepsiCo discloses how much sales and profits are higher due to the difference in the length of accounting period.

For 2), in 2000 Pepsi became non-controlling shareholder in its bottling operations. As a result, some of these businesses are now reflected in Pepsi's financial statements as equity investments—gains on these investments were discussed in (c) above.

With respect to number 3), in part (c), we discuss the effects of one-time charges, restructuring charges, and write-offs. For number 4), two items will affect results in future periods. The prior acquisition of Tropicana has been reflected in the financial statements since 1998, and the merger with Quaker Oats in 2000.

For number 5), Adjustment to tax accrual and tax assets from the Quaker Oats merger and the effect of operating loss carry forwards also affect comparability.

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 12.4 pence.
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 5,247 higher before exceptional items.

(b) The "Profit 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.