CHAPTER 17

EARNINGS PER SHARE AND RETAINED EARNINGS

CONTENT ANALYSIS OF EXERCISES AND PROBLEMS

Number	Content	Time Range <u>(minutes)</u>
E17-1	<u>Weighted Average Shares</u> . (Moderate) Stock dividend, stock split, reacquisition.	10-20
E17-2	<u>Comparative EPS</u> . (Easy) Weighted average shares, stock split, stock dividend, comparative analysis.	10-20
E17-3	Basic EPS. (Easy) Weighted average shares. Nonconvertible preferred dividends. Compute price/earnings ratio.	10-15
E17-4	Basic EPS. (Easy) Weighted average shares. Stock dividend, nonconvertible preferred stock, income statement presentation.	10-20
E17-5	Impact on EPS and Rankings. (Moderate) Convertible stocks and bonds, computation of impact and ranking of securities.	10-20
E17-6	Share Options and EPS. (Easy) Share options. Compute diluted EPS. IFRS discussion.	5-15
E17-7	<u>Convertible Preferred Stock and EPS</u> . (Moderate) Weighted average shares. Diluted EPS calculation.	10-20
E17-8	Convertible Bonds and EPS. (Moderate) Weighted average shares. Diluted EPS calculation.	10-20
E17-9	<u>Convertible Securities and EPS</u> . (Moderate) Convertible preferred stocks and bonds. Diluted EPS calculation. Individual dilution. Income statement and disclosure.	10-20
E17-10	<u>Convertible Securities and EPS</u> . (Moderate) Convertible preferred stocks and bonds. Diluted EPS calculations. Individual dilution. Income statement presentation.	10-20
E17-11	<u>Dividends</u> . (Moderate) Participating, nonparticipating, partially participating preferred stock. Cumulative, noncumulative. Arrears. Compute amounts to be paid. Compute dividend yields.	15-20
E17-12	Various Dividends. (Moderate) Journal entries for payment of cash, property, and stock dividends.	10-15

Number	Content	Time Range <u>(minutes)</u>
E17-13	<u>Various Dividends</u> . (Moderate) Journal entries for payment of cash, property, stock, and scrip dividends. Balance sheet presentation.	10-20
E17-14	<u>Stock Dividends</u> . (Easy) Journal entries on the date of declaration and the date of issuance for large and small stock dividends. Stockholders' equity presentation.	10-20
E17-15	<u>Stock Dividends</u> . (Easy) Comparison of the impact of a small stock dividend and a large stock dividend on the stockholders' equity section of the balance sheet.	10-15
E17-16	Prior Period Adjustments. (Moderate) Corrections to retained earnings, preparation of the statement of retained earnings.	10-20
E17-17	<u>Restrictions</u> . (Easy) Disclose bond and treasury stock restrictions.	5-10
E17-18	<u>Retained Earnings Statement</u> . (Moderate) Prior period adjustments, cash and stock dividends, stock retirement, acquisition of treasury stock.	10-20
E17-19	<u>Retained Earnings Statement</u> . (Moderate) Prior period adjustments, cash and stock dividends, stock retirement, acquisition of treasury stock.	10-20
E17-20	<u>Stockholders' Equity</u> . (Moderate) Balance sheet preparation. Preferred, common, treasury stock.	10-20
E17-21	<u>Changes in Stockholders' Equity</u> . (Moderate) Given the prior year-end balance sheet and a list of transactions, prepare a statement of changes in stockholders' equity. Compute return on stockholders' equity.	10-20
P17-1	Income Statement and Basic EPS. (Moderate) Preparation of multiple-step income statement. Results of discontinued operations, extraordinary gain, weighted average.	20-30
P17-2	<u>Comparative Income Statements and Basic EPS</u> . (Moderate) Preparation of multiple-step income statements for two years. Extraordinary items, stock dividend, weighted average. Compute and discuss price/earnings ratios.	30-45
P17-3	<u>EPS</u> . (Moderate) Weighted average shares, stock split, share options, convertible stocks. Income statement disclosure. IFRS discussion.	30-45
P17-4	Impact on EPS, Rankings, and Computations. (Challenging) Convertible stocks and bonds. Determination of impact and ranking. Computations.	30-45

Number	<u>Content</u>	Time Range (minutes)
P17-5	<u>Comprehensive: EPS</u> . (Challenging) Weighted average shares, stock dividends, share options, convertible stocks and bonds. Extraordinary loss. Basic and diluted EPS computation. Income statement disclosures.	30-45
P17-6	<u>Comprehensive: EPS</u> . (Challenging) Weighted average shares, share options. Convertible stocks and bonds. Basic and diluted EPS computation. Income statement disclosure.	30-45
P17-7	(AICPA adapted). <u>EPS</u> . (Moderate) Weighted average shares, stock split, reacquisition, stock warrants, convertible stocks and bonds. Basic and diluted EPS computation. Income statement presentation.	30-45
P17-8	(AICPA adapted). <u>EPS</u> . (Moderate) Weighted average shares, share options, stock warrants, convertible bonds. Basic and diluted EPS computation.	30-45
P17-9	<u>Dividends</u> . (Moderate) Fully participating, partially participating, nonparticipating preferred stock. Cumulative, noncumulative. Computation of amounts to be paid.	30-45
P17-10	(AICPA adapted). <u>Dividends</u> . (Moderate) Nonparticipating, noncumulative preferred stock. Fully participating, cumulative. Five years net income or loss given. Worksheet to show maximum amount available for cash dividends.	20-30
P17-11	<u>Comprehensive: Dividends</u> . (Moderate) Cash, stock, and property dividends, stock split, reacquisition. Journal entries and stockholders' equity presentation.	30-45
P17-12	<u>Comprehensive: Dividends</u> . (Moderate) Cash, stock, and property dividends, reacquisition, stock split. Journal entries and stockholders' equity presentation.	30-45
P17-13	<u>Dividends</u> . (Moderate) Small and large stock dividends, cash (normal and liquidating) and property dividends. Journal entries and stockholders' equity presentation.	35-50
P17-14	<u>Retained Earnings Statement</u> . (Moderate) Restrictions, stock retirement, stock split, stock and cash dividends, prior period adjustment, reissuance of treasury stock.	30-45
P17-15	<u>Retained Earnings Statement</u> . (Moderate) Cash and stock dividends, retirement, prior period adjustment. Journal entries and statement of retained earnings.	20-30
P17-16	<u>Comprehensive: Retained Earnings Journal Entries and</u> <u>Statement</u> . (Challenging) Stock retirement, stock dividend, reacquisition, restrictions, cash dividends, prior period adjustments.	30-45

<u>Number</u>	<u>Content</u>	Time Range <u>(minutes)</u>
P17-17	<u>Corrections</u> . (Challenging) Account analysis with correcting journal entries. Preparation of corrected stockholders' equity section.	30-45
P17-18	(AICPA adapted). <u>Comprehensive: Retained Earnings and</u> <u>Stockholders' Equity</u> . (Moderate) Preparation of retained earnings statement and stockholders' equity section of balance sheet.	30-45
P17-19	(AICPA adapted). <u>Comprehensive: Retained Earnings and</u> <u>Stockholders' Equity</u> . (Moderate) Preparation of retained earnings statement and stockholders' equity section of balance sheet.	30-45
P17-20	<u>Comprehensive: Stockholders' Equity</u> . (Challenging) Journal entries. Reacquisition, reissuance, retirement. Cost method for treasury stock. Donation, dividends. Statement of changes in stockholders' equity. Balance sheet disclosure with related notes.	35-50
P17-21	<u>Comprehensive: Stockholders' Equity</u> . (Challenging) Journal entries. Reissuance of treasury stock. Share option plan, donation, dividends. Statement of changes in stockholders' equity. Balance sheet disclosure with related notes. Compute return on stockholders' equity.	35-50
P17-22	(AICPA adapted). <u>Stockholders' Equity</u> . (Moderate) Share option plan, employee share purchase plan. Preparation of stockholders' equity section with related notes.	30-45
P17-23	(AICPA adapted). <u>Comprehensive: Liabilities and</u> <u>Stockholders' Equity</u> . (Challenging) Preparation of long-term liabilities and stockholders' equity sections of balance sheet. Computation of interest expense.	45-60
P17-24	(AICPA adapted). <u>Comprehensive: Stockholders' Equity</u> . (Moderate) Determine amounts of prior period adjustment, cash dividends (preferred and common), property dividends, common shares issued, treasury stock, and EPS numerator.	30-40

ANSWERS TO QUESTIONS

- <u>Q17-1</u> A simple capital structure is one that consists only of common stock outstanding (or also has non-convertible preferred stock outstanding).
- <u>Q17-2</u> For a corporation with a simple capital structure, basic earnings per share is computed by dividing net income (less preferred dividends) by the weighted average number of common shares outstanding during the period.
- Q17-3 The "weighted average" number of shares is the equivalent whole shares of common stock outstanding during the period. It is calculated by starting with the actual number of common shares outstanding at the beginning of the period and multiplying this "layer" of shares by the fraction of the year it is outstanding until more common stock is issued or reacquired. These new shares are added to the existing number of shares and the new layer is multiplied by the fraction of the year it is outstanding. This process is continued for all the issuances during the year. The resulting equivalent whole units for all of the layers are added to determine the weighted average number of common shares for the period.
- Q17-4 For computing earnings per share, stock dividends and splits are given retroactive recognition. That is, regardless of when they were actually issued, stock dividends and splits are assumed to have occurred at the beginning of the earliest period for which comparative financial statements are presented. This assumption enables a corporation to express all comparative earnings per share figures in terms of its most recent capital structure.
- <u>Q17-5</u> Several securities such as share options and warrants, convertible preferred stock and convertible bonds, participating securities and two-class stocks, and contingent shares might be found in the complex capital structure of a corporation.
- <u>Q17-6</u> The two earnings per share amounts generally reported by a corporation with a complex capital structure are basic earnings per share and diluted earnings per share. Besides common shares outstanding, diluted earnings per share include all dilutive potential common shares (options and warrants, convertible preferred stock and bonds).
- <u>Q17-7</u> The treasury stock method is used to determine the change in the number of shares for a corporation's diluted earnings-per-share calculations when the corporation has share options, warrants, and similar arrangements outstanding. The increase in the denominator is the difference between the assumed shares issued and the assumed shares reacquired (using the average market price) under the arrangements.
- Q17-8 To develop the ranking, the <u>if-converted</u> method is used. First, the impact of the conversion of each convertible security upon earnings per share is computed. This impact is calculated by dividing the change in the numerator (that is, the savings in preferred dividends or interest expense) by the increased number of common shares issuable upon conversion. Second, the ranking is developed with the convertible security having the <u>lowest</u> (and, therefore, most dilutive) numerical value impact on diluted earnings per share listed first and the remaining securities listed in sequential order according to the magnitude of their impact on diluted earnings per share. The dilutive securities are then sequentially entered into the diluted earnings per share calculation according to the ranking.

- Q17-9 The additional disclosures made by a corporation in the notes to its financial statements include a schedule identifying and reconciling the numerators and denominators on which both basic and diluted earnings per share figures are calculated. In addition, the schedule includes the amount of preferred dividends deducted to determine the income available to common stockholders, the potential common shares that were <u>not</u> included in diluted EPS because they were antidilutive, and a description of any material impact on the common shares outstanding of subsequent conversions after the close of the accounting period but before the issuance of the financial report.
- Q17-10 Under IFRS, if a company has potentially dilutive stock options, it will use the treasury stock method to determine the dilutive effect of these options. However, IFRS do not require a company to include any unrecognized compensation cost in the assumed proceeds from issuing the stock. Under U.S. GAAP, any unrecognized compensation cost is added to the assumed proceeds from issuing the stock which, in turn, decreases the incremental number of shares in the denominator of the EPS calculation. The exclusion of the unrecognized compensation cost under IFRS would result in lower earnings per share amounts being reported under IFRS relative to U.S. GAAP.
- <u>Q17-11</u> Even though the loss is unusual and infrequent, IFRS do not have the concept of extraordinary items. Therefore, Parker Company would make no EPS disclosure related to this loss.
- Q17-12 The four important dates are (1) the date of declaration, (2) the ex-dividend date, (3) the date of record, and (4) the date of payment. On the date of declaration, the corporation makes a journal entry to reduce retained earnings and establish the liability. No journal entry is made on the ex-dividend date; this is the date the stock stops selling with attached dividends. A memorandum entry is made on the date of record indicating that stockholders of record on that date are entitled to the dividend. On the date of payment, the Cash account is reduced and the liability eliminated.
- <u>Q17-13</u> Stockholders of fully participating preferred stock share with the common stockholders in any extra dividends. These extra dividends are distributed proportionally based on the respective total par value of each class of stock.

Stockholders of partially participating preferred stock are limited in their participation to a fixed rate (based on their respective par value) or amount per share.

- <u>Q17-14</u> A property dividend is considered a nonreciprocal nonmonetary exchange where the corporation gives up an asset and receives no asset or service in return. The exchange is recorded at its fair value. Consequently, on the date of declaration, a corporation first writes up or down the property (for example, stock held in another company) to be used in the dividend to its fair value on that date and recognizes a gain or loss. It then makes a second entry to reduce retained earnings and establish the dividend liability.
- <u>Q17-15</u> An ordinary stock dividend consists of the issuance of the same class of stock (i.e. common on common) for the dividend. A special stock dividend involves the distribution of a different class of stock (i.e. preferred on common) for the dividend.

<u>Q17-16</u> A small stock dividend is one that presumably has no significant impact on the market price per share of the stock. A stock dividend of less than 20 to 25% of the previously outstanding shares is considered a small stock dividend. A stock dividend involving a greater percentage distribution of shares is considered a large stock dividend.

Neither a small nor a large stock dividend affects total stockholders' equity, although each affects the components of stockholders' equity. In the case of a small stock dividend, a corporation transfers an amount equal to the fair value of the newly issued shares from retained earnings to contributed capital on the date of declaration. For a large stock dividend, a corporation transfers an amount equal to the par value of the shares from retained earnings to contributed capital on the date of declaration.

- <u>Q17-17</u> A liquidating dividend is treated as a reduction in contributed capital whereas a normal cash dividend is treated as a reduction in retained earnings.
- <u>Q17-18</u> A corporation treats a correction of a material error made in a previous year as a prior period adjustment. The asset or liability account balance is corrected and retained earnings is increased or decreased for the amount of the error. Any related effect on income taxes is similarly recorded. The corporation reports the effect of the error (net of income taxes) on its current year's statement of retained earnings as an adjustment to the beginning retained earnings balance, as previously reported.
- <u>Q17-19</u> A corporation may restrict its retained earnings to meet legal requirements (for example, treasury stock), to meet contractual restrictions (for example, bond provisions), or because of discretionary actions (for example, self-insurance). It reports a restriction in an explanatory note to its financial statements.
- <u>Q17-20</u> The suggested format is shown below. The two most common elements are net income and dividends.

Beginning retained earnings, as previously reported Plus (minus): Prior period (and retrospective) adjustments (net of income tax effect) Adjusted beginning retained earnings Plus (minus): Net income (loss) Minus: Dividends (specifically identified, including per share amounts) Reductions due to retirement or reacquisition of capital stock Reductions due to conversion of bonds or preferred stock Ending retained earnings

- <u>Q17-21</u> A corporation might include in the accumulated other comprehensive income section of its stockholders' equity the following items (amounts accumulated to date):
 - 1. Unrealized increases (gains) or decreases (losses) in the fair value of investments in available-for-sale securities.
 - 2. Translation adjustments from converting the financial statements of a company's foreign operations to U.S. dollars.
 - 3. Certain gains and losses on "derivative" financial instruments.
 - 4. Certain pension plan gains, losses, and prior service cost adjustments.

<u>Q17-22</u> GAAP requires a corporation to disclose the separate changes in all its stockholders' equity accounts as well as the changes in the number of shares of capital stock. Typically, the corporation will summarize these changes in its statement of changes in stockholders' equity. This statement frequently will include the changes in retained earnings. Examples of changes included are the issuance of capital stock, the issuance and exercise of share options, transactions involving treasury stock, net income, and dividends.

ANSWERS TO MULTIPLE CHOICE

1.	d	3.	d	5.	a	7.	С	9.	С
2.	b	4.	С	6.	b	8.	a	10.	а

SOLUTIONS TO REVIEW EXERCISES

<u>RE17-1</u>

	Shares <u>Itstanding</u> 10,000 15,000 14,400	x <u>Yea</u> x X X	Fraction 6 <u>ar Outstar</u> 6/12 2/12 4/12		7	Equivalent <u>Whole Units</u> 5,000 2,500 <u>4,800</u> <u>12,300</u>
<u>RE17-2</u>						
Net Income \$13,000 Preferred dividends (4,000) Earnings and shares \$ 9,000/	4,500 share	es = <u>\$2.0</u>	<u>0</u> Basic ec	arnings pe	ər sł	nare
<u>RE17-3</u>						
Shares issued from assumed Shares assumed reacquired:	exercise:				2	2,000
Proceeds Average Market Price Per Sh	$\frac{1}{1} = \frac{2,00}{1}$	<u>)0 x (\$14</u> \$20	<u>+ \$1)</u> = <u>\$</u> ;	<u>30,000</u> \$20	_(1 <i>,</i> 500)
Assumed increment in comm computing diluted earnin						_500
<u>RE17-4</u>						
<u>Security</u> 6% Preferred stock	<u>Impact</u> <u>\$4,800</u> 2,000	= <u>\$2.40</u>				
<u>RE17-5</u>						
<u>Security</u> 9% Bonds	<u>Impact</u> <u>\$6,300</u> 2,500	= <u>\$2.52</u>				
<u>RE17-6</u>						
<u>Explanation</u> Basic earnings per share Savings in dividends*	<u>(Adjus)</u> \$4	nings <u>tments)</u> ,000 ,000	/ <u>(Adjus</u> / 1,	ares <u>stments)</u> 000	=	Earnings <u>per share</u> <u>\$4.00</u> Basic
Increment in shares Diluted earnings and shares	\$5	,000		<u>000</u> 000	=	<u>\$2.50</u> Diluted

<u>RE17-6</u> (continued)

*Calculation:

<u>Security</u>		<u>Impact</u>		
Preferred	$\frac{\$1,000}{200 \times 5} =$	<u>\$1,000</u> 1,000	=	\$1.00

<u>RE17-7</u>

1007 dividend to protorred		Preferred	<u>Common</u>
10% dividend to preferred (on \$22,000 par)		\$2,200	
Common dividend (equal to 10% of \$44,000 par)			\$4,400
Extra dividend proportionate to par values: Total to allocate Allocated (\$2,200 + \$4,400) Remainder (1/3 to preferred,	\$10,200 (6,600)		
2/3 to common) Dividends to each class of stock	\$ 3,600	<u>\$1,200</u> <u>\$3,400</u>	<u>\$2,400</u> <u>\$6,800</u>
<u>RE17-8</u>			
Investment in Violet Company Bonds (\$77,000 - \$58,000) Gain on Disposal of Investments		19,000	19,000
Retained Earnings Property Dividends Payable		77,000	77,000
<u>RE17-9</u>			
Retained Earnings (\$30 x 7,500) Common Stock to be Distributed Additional Paid-in Capital From Stock Div	idend	225,000	75,000* 150,000
*Calculation: 15% x 50,000 = 7,500 shares issued for stock (dividend; 7	7,500 x \$10 = 1	\$75,000

<u>RE17-10</u>

	Retained Earnings (\$10 par x 25,000) Common Stock to be Distributed		250,000*	250,000
	*Calculation: 50% x 50,000 = 25,000 shares issued for stock	dividend;	25,000 x \$10 =	\$250,000
<u>RE</u>	<u>17-11</u>			
	Retained Earnings, January 1 Plus: Net income Minus: Dividends Retained earnings, December 31	\$22,250 10,000 <u>(3,200)</u> <u>\$29,050</u>		
<u>RE</u>	17-12			
	Retained Earnings Interest Payable		40,000	40,000
	Income Tax Refund Receivable Retained Earnings		12,000	12,000

SOLUTIONS TO EXERCISES

<u>E17-1</u>

20,000 x 1.10 x 2.00	=	44,000 x 3/12 =	11,000
25,000 x 1.10 x 2.00	=	55,000 x 2/12 =	9,167
29,000 x 1.10 x 2.00	=	63,800 x 4/12 =	21,267
63,800 - 1,000	=	62,800 x 2/12 =	10,467
62,800 + 1,000	=	63,800 x 1/12 =	5,317
Weighted	<u>57,218</u>		

<u>Note to Instructor</u>: Students may mistakenly add the 10% stock dividend to the 200% stock split and multiply the initial issuance by 210% (instead of the correct 220%).

<u>E17-2</u>

1. 2010 annual report:

2010 basic earnings per share: <u>\$0.50</u>

- 2010 computations: $\frac{\$5,125}{10,250^*} = \frac{\$0.50}{10,250^*}$
- * $9,000 \times 7/12 = 5,250$ 12,000 × 5/12 = 5,00010,250
- 2. 2011 annual report:
 - 2011 basic earnings per share: <u>\$0.60</u>
 - 2010 basic earnings per share: <u>\$0.25</u>

2011 computations:
$$\frac{\$16,400}{27,333^*} = \frac{\$0.60}{27,333^*}$$

E17-2 (continued)

2. (continued)

2010 computations: $\frac{\$5,125}{20.500^*} = \frac{\$0.25}{20.500^*}$ *9,000 x 2.00 x 7/12 = 10,500 12,000 x 2.00 x 5/12 = $\frac{10,000}{10,000}$ or 10,250 (from requirement 1) x 2.00 = $\frac{20,500}{10,000}$ 20,500 3. 2012 annual report: 2012 basic earnings per share: \$0.70 2011 basic earnings per share: \$0.50 2010 basic earnings per share: \$0.21 2012 computations: $\frac{$23,520}{33,600^*} = 0.70$ *28,000 x 1.20 x 12/12 = <u>33,600</u> 2011 computations: $\frac{\$16,400}{32.800^*} = 0.50$ *12,000 x 2.00 x 1.20 x 2/12 = 4,800 or 27,333 (from requirement 2) $14,000 \times 2.00 \times 1.20 \times 10/12 = 28,000 \times 1.2 = 32,800$ 32,800 2010 computations: $\frac{$5,125}{24.600*} = \underline{$0.21}$ * 9,000 x 2.00 x 1.20 x 7/12 = 12,600 or 20,500 (from requirement 2) $12,000 \times 2.00 \times 1.20 \times 5/12 = 12,000 \times 1.2 = 24,600$ 24,600

<u>E17-3</u>

- 1. $\frac{\$29,975 \$10,000^*}{8,500^{\#}} = \frac{\$2.35}{8}$
 - *10% x (\$100 x 1,000)
 - $#7,000 \times 3/12 = 1,750$ 9,000 $\times 9/12 = \frac{6,750}{8,500}$
- 2. Price / earnings ratio = $\frac{\text{Marketpriceper common share}}{\text{Earningsper share}}$

$$\underline{7.4 \text{ times}} = \frac{\$17.50}{\$2.35}$$

<u>E17-4</u>

- 1. $\frac{\$27,760-\$6,000}{13,600*} = \$1.60 \text{ Basic earnings per share}$ $\frac{\$29,936-\$6,000}{13,600*} = \$1.76 \text{ Basic earnings per share related to}$ income before extraordinaary items
 - *10,000 x 1.20 = 12,000 x 4/12 = 4,000 12,000 x 1.20 = 14,400 x 8/12 = 9,600<u>13,600</u>
- 2.Income before extraordinary items\$1.76Extraordinary loss(0.16)Net income (see Note A)\$1.60
- 3. <u>Note A</u>: Preferred dividends of \$6,000 were deducted from income before extraordinary items and net income to determine earnings available to common stockholders. Each earnings per share figure is based upon 13,600 weighted average common shares outstanding.

<u>E17-5</u>

		0.005 #000	~~~	a
1.	9.5% preferred stock:	$\frac{0.095 \times \$200}{2,000 \times 4.}$,000 2	$\frac{0}{8,400} = \frac{\$19,000}{\$2.26}$
	11.0% bonds:	(0.11 x \$220,0 220	000) x 44	$\frac{1}{4} \times (1-0.3) = \frac{\$16,940}{9,680} = \frac{\$1.75}{100}$
	8.0% preferred stock:	0.08 x \$150,0 1,500 x 3.8	00_	$=\frac{\$12,000}{5,700}=\underline{\$2.11}$
	10.0% bonds: <u>[(0.10 x (</u>	<u>\$100,000) + \$6,</u> 100 x	<u>000/</u> 55	$\frac{1}{201 \times (1-0.3)} = \frac{\$7,210}{5,500} = \frac{\$1.31}{5,500}$
	9.0% bonds: [(0.09 x	\$200,000) - \$1 200 x 4	6,000 8	$\frac{20/25 \times (1-0.3)}{9,600} = \frac{\$12,152}{9,600} = \frac{\$1.27}{9,600}$
2.	<u>Security</u> 9.5% preferred 11.0% bonds 8.0% preferred 10.0% bonds 9.0% bonds	<u>Impact</u> \$2.26 \$1.75 \$2.11 \$1.31 \$1.27	<u>Rc</u>	<u>anking</u> 5 3 4 2 1
<u>E17</u>	<u>7-6</u>			
1.	Diluted EPS: $\frac{$36,0}{30,000}$ +	<u>00</u> 889*	=	<u>\$1.17</u>
	*lssued			4,000
	Reacquired $\frac{4,000 \text{ x}}{3}$	(\$32 + \$3) \$45	=	= <u>(3,111)</u>
	Increment			<u>889</u>
2.	cost in the assumed p	roceeds from i	ssuin	nclude the unrecognized compensation ng the shares under the treasury stock are would be \$1.16 (instead of \$1.17) as
	Diluted EPS: $\frac{$36,0}{30,000}$ +	<u>00</u> 1 1.56*	=	<u>\$1.16</u>

Diluted EPS:	<u>\$36,000</u> 30,000 + 1,156*	=	<u>\$1.16</u>
*Issued			4,000
Reacquired:	<u>4,000 x \$32</u> 45	=	<u>(2,844</u>)
Increment			1,156

<u>E17-7</u>

	Earnings	Shares	Earnings
<u>Explanation</u>	<u>(Adjustments)</u>	÷ <u>(Adjustments)</u>	= <u>Per Share</u>
Basic earnings and shares	\$39,000ª	÷ 12,000b	= \$3.25 Basic
Preferred dividend savings	4,800 ^c		
Increment in common shares		<u>3,000</u> d	
Diluted earnings and shares	\$43,800	÷ 15,000	= <u>\$2.92</u> Diluted

°\$39,000 = \$43,800 - \$4,800 (600 x 0.08 x \$100) preferred dividends

^b10,000 x 6/12 = 5,000 14,000 x 6/12 = $\frac{7,000}{12,000}$ ^c\$4,800 ÷ (600 x 5) = \$1.60 < \$3.25; individually dilutive d600 x 5

<u>E17-8</u>

Earnings <u>(Adjustments)</u> \$79,200 3,920° \$83,120	÷ <u>(A</u> ÷	Shares <u>djustments)</u> 18,000 ^a <u>2,000</u> ^d 20,000	=	Earnings <u>Per Share</u> \$4.40 Basic <u>\$4.16</u> Diluted
30 x 25) = \$1.96 <	< \$4.40);		
d	30 x 25	5		
Earnings <u>(Adjustments)</u> \$45,000° 3,500°	÷ <u>(A</u> ÷	Shares <u>djustments)</u> 15,000 ⁶		Earnings <u>Per Share</u> \$3.00 Basic
\$48,500 9,000° \$57,500	÷	<u>1,750</u> ° 16,750 <u>3,500</u> °	=	\$2.90 DEPS ₁ <u>\$2.84</u> Diluted
	$\frac{(Adjustments)}{\$79,200}$ $\frac{3,920^{\circ}}{\$83,120}$ $\frac{30 \times 25}{\$83,120} = \$1.96 < 30 \times 25 = $1.96 \times 25 \times 2$	$\frac{(\text{Adjustments})}{\$79,200} \div \frac{(\text{Adjustments})}{3,920^{\circ}} \div \frac{(\text{Adjustments})}{\$83,120} \div \frac{(\text{Adjustments})}{30 \times 25} = \$1.96 < \$4.40$ $^{d}80 \times 25$ $\frac{(\text{Adjustments})}{\$45,000^{\circ}} \div \frac{(\text{Adjustments})}{3,500^{\circ}} \div \frac{(\text{Adjustments})}{9,000^{\circ}} \div \frac{(\text{Adjustments})}{9,000^{\circ}} \div \frac{(\text{Adjustments})}{3,500^{\circ}} \div \frac{(\text{Adjustments})}{9,000^{\circ}} \div \frac{(\text{Adjustments})}{3,500^{\circ}} \div \frac{(\text{Adjustments})}{9,000^{\circ}} \div \frac{(\text{Adjustments})}{3,500^{\circ}} \div (\text{$	$\frac{(Adjustments)}{\$79,200} \div \frac{(Adjustments)}{18,000^{\circ}} \\ \div 18,000^{\circ} \\ 3,920^{\circ} \\ \hline \$83,120} \div \frac{2,000^{\circ}}{20,000} \\ 30 \times 25) = \$1.96 < \$4.40; \\ c^{\circ}80 \times 25 \\ \frac{(Adjustments)}{\$45,000^{\circ}} \div \frac{Shares}{15,000^{\circ}} \\ \div \frac{1,750^{\circ}}{16,750} \\ 9,000^{\circ} \\ \hline 3,500^{\circ} \\ \hline \frac{3,500^{\circ}}{3,500^{\circ}} \\ \hline \frac{1,750^{\circ}}{3,500^{\circ}} \\ \hline \frac{3,500^{\circ}}{3,500^{\circ}} \\ \hline 3,50$	$\frac{(\text{Adjustments})}{\$79,200} \div \frac{(\text{Adjustments})}{18,000^{\circ}} = 3,920^{\circ}$ $\frac{3,920^{\circ}}{\$83,120} \div \frac{2,000^{\circ}}{20,000} = 30 \times 25$ $\frac{30 \times 25}{\$83,120} \div 15,000^{\circ} = 3,500^{\circ}$ $\frac{(\text{Adjustments})}{\$45,000^{\circ}} \div \frac{1,750^{\circ}}{16,750} = \frac{1,750^{\circ}}{3,500^{\circ}} = \frac{3,500^{\circ}}{3,500^{\circ}}$

<u>E17-9</u> (continued)

a\$45,000 = \$54,000 net income - \$9,000 preferred dividends

 $b15,000 = 15,000 \times 12/12$

cImpact on diluted earnings per share and ranking:

ImpactRankingPreferred:
$$\frac{\$9,000}{1,000 \times 3.5} = \frac{\$9,000}{3,500} = \$2.57$$
2Bonds: $\frac{\$10,000 \times (1 - 0.3) \times 1/2 \text{ year}}{100 \times 35 \times 1/2 \text{ year}} = \frac{\$3,500}{1,750} = \$2.00$ 1

^dConvertible bonds are included in diluted earnings per share because \$2.00 < \$3.00, so individually dilutive.

•Convertible preferred stock is included in diluted earnings per share because \$2.57 < \$2.90, so individually dilutive.

Walker would report basic earnings per share of \$3.00 and diluted earnings per share of \$2.84 on its 2010 income statement.

<u>E17-10</u>

	Earnings		Shares		Earnings
<u>Explanation</u>	(Adjustments)	÷ <u>(</u> A	<u>djustments)</u>	=	Per Share
Basic earnings and shares	\$52,000ª	÷	20,000 ^b	=	\$2.60 Basic
Preferred dividend savings ^d	9,500°				
Increment in common shares			<u>6,000</u> c		
Tentative diluted EPS	\$61,500	÷	26,000	=	\$2.37 DEPS1
Bond interest expense savings ^e	7,980°				
Increment in common shares			<u>4,400</u> c		
Diluted earnings and shares	\$69,480	÷	30,400	=	<u>\$2.29</u> Diluted

a\$52,000 = \$61,500 net income - \$9,500 preferred dividends

 $b20,000 = 20,000 \times 12/12$

cImpact on diluted earnings per share and ranking:

	<u>Impact</u>	<u>Ranking</u>
Bonds:	$\frac{\$11,400 \times (1-0.3)}{200 \times 22} = \frac{\$7,980}{4,400} = \$1.81$	2
Preferred:	$\frac{\$9,500}{2,000 \times 3} = \frac{\$9,500}{6,000} = \$1.58$	1

E17-10 (continued)

^dConvertible preferred stock is included in diluted earnings per share because \$1.58 < \$2.60, so individually dilutive.

•Convertible bonds are included in diluted earnings per share because \$1.81 < \$2.37, so individually dilutive.

Caldwell would report basic earnings per share of \$2.60 and diluted earnings per share of \$2.29 on its 2010 income statement.

<u>E17-11</u>

1.			Preferred	<u>Common</u>
a.		dend (2,000 x 0.10 x \$100) o common (\$80,000 - \$20,000)	\$20,000	<u>\$60,000</u>
	Total		<u>\$20,000</u>	<u>\$60,000</u>
b.	Current prefe	arrears (2 x 2,000 x 0.10 x \$100) erred dividend (2,000 x 0.10 x \$100) o common (\$80,000 - \$60,000)	\$40,000 20,000	\$20,000
	Total		\$60,000	<u>\$20,000</u>
c.	Current prefe	arrears (1 x 2,000 x 0.10 x \$100) erred dividends	\$20,000 20,000	\$ 00,000
		portional share (0.10 x 30,000 x \$10) hared* (\$80,000 - \$70,000)	<u>4,000</u> <u>\$44,000</u>	\$30,000 <u>6,000</u> <u>\$36,000</u>
	*Preferred:	\$10,000 extra dividend x $\frac{2,000}{(2,000 \times $100)}$	0 x \$100)+(30,000 x \$	<u>10)</u> = \$4,000
	Conmmon:	$10,000 \text{ extra dividend x} \frac{300,000}{500,000} = 9$	6,000	
d.	Preferred divi		\$20,000	
		portional share (0.10 x 30,000 x \$10) a (0.05 x \$200,000)	10,000	\$30,000
	Common ext	ra (0.05 x \$300,000) common (\$80,000 - \$75,000)		1 <i>5,</i> 000 <u>5,000</u>
			\$30,000	\$50,000

E17-11 (continued)

2.	Dividend yield =	Dividends per share Market price per share
		$\frac{\$20,000/2,000}{\$125} = \frac{\$10}{\$125} = \underline{\$\%}$
	Common stock	$:\frac{\$60,000/30,000}{\$20} = \frac{\$2}{\$20} = \underline{10\%}$

<u>E17-12</u>

<u>2010</u> Feb.	2	Dividends Payable: Preferred Dividends Payable: Common	4,000 40,000	
		Cash	40,000	44,000
Mar.	5	Investment in Xurk Company Bonds Gain on Disposal of Investments	6,000	6,000
		Retained Earnings Property Dividend Payable	31,000	31,000
Apr.	5	Property Dividend Payable Investment in Xurk Company Bonds	31,000	31,000
July	6	Retained Earnings* Dividends Payable: Preferred Dividends Payable: Common	48,000	4,000 44,000
		*Preferred: 1,000 shares x \$4.00 = \$ 4,00 Common: 40,000 shares x \$1.10 = \$44,00		
Aug.	17	Dividends Payable: Preferred Dividends Payable: Common Cash	4,000 44,000	48,000
Oct.	15	Retained Earnings* Common Stock To Be Distributed Additional Paid-in Capital From Stock Dividend	17,600	8,000 9,600
		*40,000 shares x 2% x \$22 per share		

E17-12 (continued)

	Dec	c. 3		ock To Be Distributed Stock, \$10 Par	8,000	8,000
		28		arnings* s Payable: Preferred s Payable: Common	52,960	4,000 48,960
				1,000 shares x \$4.00 = \$ 4 40,800 shares x \$1.20 = \$48		
<u>E17</u>	<u>7-13</u>					
1.	(1)		ned Earnings idends Payab	ble	10,000	10,000
		Divide Ca	ends Payable sh		10,000	10,000
	(2)			(10,000 x 0.05 x \$17) To Be Distributed	8,500	8,500
			mon Stock To mmon Stock,	Be Distributed No Par	8,500	8,500
	(3)			nds (\$13,000 - \$9,000) I of Investment	4,000	4,000
			ned Earnings perty Dividen	ds Payable	13,000	13,000
		•	erty Dividends estment in M S	•	13,000	13,000
	(4)		ned Earnings idends Payab	ole: Scrip	8,000	8,000
			ends Payable:	8,000 x 0.12 x 11/12) : Scrip	880 8,000	8,880

E17-13 (continued) 1. (continued)

(!	5)	Retained Earnings (10,000		7,000	
		•	Contributed Capital Distributed as a Liquidating Dividend (10,000 x \$0.30) Dividends Payable		
		Dividends Payable Cash		10,000	10,000
2. (1	ί	Current assets Investment in M bonds Fixed assets (net)	\$ 50,000 9,000 <u>200,000</u> <u>\$259,000</u>	Current liabilities Common stock, no pa Retained earnings	\$ 30,000 150,000 <u>79,000</u> <u>\$259,000</u>
(2	Ĺ	Current assets Investment in M bonds Fixed assets (net)	\$ 60,000 9,000 <u>200,000</u> <u>\$269,000</u>	Current liabilities Common stock, no pa Retained earnings	\$ 30,000 1 58,500 <u>80,500</u> <u>\$269,000</u>
(3	,	Current assets Fixed assets (net)	\$ 60,000 <u>200,000</u> <u>\$260,000</u>	Current liabilities Common stock, no par Retained earnings (\$89,000 - \$13,000 - \$4,000 gain)	
(4	ί	Current assets Investment in M bonds Fixed assets (net)	\$ 51,120 9,000 <u>200,000</u> <u>\$260,120</u>	Current liabilities Common stock, no par Retained earnings (\$89,000 - \$8,000 -	
				\$880 interest)	<u> 80,120</u> <u>\$260,120</u>
(5	I	Current assets Investment in M bonds Fixed assets (net)	\$ 50,000 9,000 <u>200,000</u> <u>\$259,000</u>	Current liabilities Common stock, no par Contributed capital distributed as a liquidating dividen Retained earnings	(3,000)

<u>E17-14</u>

1. <u>6% stock dividend</u>

(a)	Retained Earnings (25,000 x 0.06 x \$3 Common Stock To Be Distributed Additional Paid-in Capital From Stock Dividend	30)	45,000	1 <i>5,</i> 000 30,000
(b)	Common Stock To Be Distributed Common Stock, \$10 Par		15,000	15,000
(c)	Common stock, \$10 par Additional paid-in capital on common stock Additional paid-in capital from stock dividend Retained earnings	\$265,000 150,000 30,000 <u>155,000</u> <u>\$600,000</u>		
2. <u>40%</u>	<u>Sstock dividend</u>			
(a)	Retained Earnings (25,000 x 0.40 x \$1 Common Stock To Be Distributed	10)	100,000	100,000
(b)	Common Stock To Be Distributed Common Stock, \$10 Par		100,000	100,000
(c)	Common stock, \$10 par Additional paid-in capital on common stock Retained earnings	\$350,000 150,000 <u>100,000</u> <u>\$600,000</u>		
<u>E17-15</u>				
Pre T Ret T	2. <u>Stockholders' Equity</u> mmon stock, \$10 par mium on common stock otal contributed capital ained earnings otal stockholders' equity ,096,000 = \$1,300,000 - (\$34 x 40,000 sh	nares x 0.15)	(1) \$ 460,000 <u>944,000</u> \$1,404,000 <u>1,096,000</u> ^α <u>\$2,500,000</u>	(2) \$ 520,000 <u>800,000</u> \$1,320,000 <u>1,180,000^b</u> <u>\$2,500,000</u>

^b\$1,180,000 = \$1,300,000 - (\$10 x 40,000 shares x 0.30)

E17-15 (continued)

3. Retained earnings are reduced <u>more</u> by a small stock dividend than by a large stock dividend. From a theoretical standpoint, this might have been avoided by (1) using the adjusted market price after the dividends had been declared for both sizes of dividends, or (2) recording the dividends like a stock split.

<u>E17-16</u>

1.	(1)	Accumulated Depreciation Retained Earnings	15,000	15,000
		Retained Earnings (\$15,000 x 0.30) Income Taxes Payable on Prior Earnings	4,500	4,500
	(2)	Retained Earnings Interest Payable	4,000	4,000
		Income Taxes Payable on Prior Earnings Retained Earnings (\$4,000 x 0.30)	1,200	1,200
2.		MILES COMPANY Statement of Retained Earnings For Year Ended December 31, 2010		
	Prio	ained earnings, as previously reported, January 1, 2010 r Period Adjustments:		\$142,400
		Correction of overstatement in 2009 depreciation (net of \$4,500 income taxes) Correction of understatement in 2009 interest		10,500
		(net of \$1,200 income tax credit) Usted retained earnings, January 1, 2010		<u>(2,800)</u> \$150,100 <u>60,000</u> \$210,100
	Less Reto	: Cash dividends ained earnings, December 31, 2010		<u>(13,000)</u> <u>\$197,100</u>

Stockholders' Equity (in part)

Retained earnings (see Note 1)

\$400,000

Notes to 2010 Financial Statements

Note 1: Retained earnings are restricted in the amount of \$20,000 as a result of a contractual agreement in connection with the issuance of 12%, 5-year, \$100,000 bonds. This restriction will increase by \$20,000 each year until the maturity date. Additionally, retained earnings has been restricted in the amount of \$15,000, the cost of the treasury stock that it currently holds.

E17-18

HERNANDEZ COMPANY Statement of Retained Earnings For Year Ended December 31, 2010

Retained earnings, as previously		
reported, January 1, 2010		\$120,000
Add: Correction due to understatement of previous		
income (net of \$4,200 income taxes)		9,800
Adjusted retained earnings, January 1, 2010		\$129,800
Add: Net income		80,000
		\$209,800
Less: Cash dividends	\$13,000	
Stock dividends	17,000	
Reduction due to retirement of preferred stock	10,000	<u>(40,000)</u>
Retained earnings, December 31, 2010 (see Note A)		<u>\$169,800</u>

2. Note A: Retained earnings are restricted in the amount of \$20,000, the cost of the common shares being held as treasury stock.

E17-17

<u>E17-19</u> 1.

FRANKLIN COMPANY Statement of Retained Earnings For Year Ended December 31, 2010

Retained earnings, as previously reported, January 1, 2010		\$206,000
Less: Correction of overstatement of previous net income (net of \$5,400 income tax credit)		<u>(12,600)</u>
Adjusted retained earnings, January 1, 2010		\$193,400
Add: Net income		58,000
		\$251,400
Less: Cash dividends	\$ 9,000	
Stock dividends	6,000	
Reduction due to retirement		
of preferred stock	40,000	<u>(55,000)</u>
Retained earnings, December 31, 2010 (see Note A)		<u>\$196,400</u>

2. <u>Note A</u>: Retained earnings are restricted in the amount of \$14,000, the cost of the common shares being held as treasury stock.

WILK MANUFACTURING CORPORATION Stockholders' Equity December 31, 2010

Contributed Capital Preferred stock, \$50 par (6,000 shares authorized, issued, and outstanding) Common stock, \$5 par (30,000 shares authorized, 15,000 shares issued of which 500 shares	\$300,000
are being held as treasury stock)	75,000
Additional paid-in capital:	
On preferred stock	120,000ª
On common stock	255,000 ^b
From treasury stock	<u>2,500</u> c
Total contributed capital	\$752,500
Retained earnings (see Note A)	16,000
Accumulated other comprehensive income (loss) Unrealized decrease in value of	
available-for-sale securities	(2,500)
Total contributed capital, retained earnings, and accumulated other comprehensive income Less: Treasury stock at cost (500 common	\$766,000
shares at \$18) Total stockholders' equity	<u>(9,000)</u> <u>\$757,000</u>

Notes to Financial Statements

Note A: Retained earnings are restricted in the amount of \$9,000, the cost of the treasury stock.

- °(\$70 \$50) x 6,000
- ^b(\$22 \$5) x 15,000

°(\$23 - \$18) x 500

<u>E17-20</u>

WINSLOW DESIGN COMPANY Statement of Changes in Stockholders' Equity For Year Ended December 31, 2010

Balances, 1/1/2010 Issued preferred stock	Preferre Shares Issued 1,250 250	<u>d Stock</u> Par <u>Value</u> \$125,000 25,000	Shares <u>Issued</u> 15,000	<u>on Stock</u> Par <u>Value</u> \$150,000	<u>Additic</u> Preferred <u>Stock</u> \$55,000 16,000°	nal Paid-In C Common <u>Stock</u> \$105,000	<u>Capital</u> Treasury <u>Stock</u> \$ 0	Retained <u>Earnings</u> \$78,000	Treasury Stock <u>(cost)</u> \$(4,200)
Issued common stock	200	20,000	3,000	30,000	,	21,000 ^b			
Reacquired treasury stock Reissued treasury stock							750°	44 500	(3,000) 3,500
Net income Dividends					\$71,000			46,500 <u>(25,000)</u>	
Balances, 12/31/2010	1,500	<u>\$150,000</u>	18,000	<u>\$180,000</u>		<u>\$126,000</u>	<u>\$750</u>	<u>\$99,500</u>	<u>\$(3,700)</u>
a(\$164 - \$100) x 250									
^b (\$17 - \$10) x 3,000									
c(\$17 - \$14) x 250									

2. Return on stockholdes' equity = $\frac{\text{Net income}}{\text{Average stockholdes' equity}}$ = $\frac{\$46,500}{(\$623,550^* + \$508,800)/2} = \frac{\$46,500}{\$566,175} = \underbrace{8.2\%}{100}$

*\$150,000 + \$180,000 + \$71,000 + \$126,000 + \$750 + \$99,500 - \$3,700 = \$623,550

1.

SOLUTIONS TO PROBLEMS

<u>P17-1</u>

MANTY COMPANY Income Statement For Year Ended December 31, 2010

Sales Cost of goods sold Gross profit Operating expenses Pretax income from continuing operations Income tax expense Income from continuing operations Results of discontinued operations Gain on disposal of discontinued Division B (net of \$2,400 income taxes)	\$ 5,600	\$206,000 (131,000) \$ 75,000 (19,250) \$ 55,750 (16,725) \$ 39,025
Loss from operations of discontinued Division B (net of \$6,000 income tax credit) Income before extraordinary gain	(14,000)	<u>(8,400)</u> \$ 30,625
Extraordinary gain from bond retirement (net of \$4,500 income tax expense) Net income		<u>10,500</u> <u>\$ 41,125</u>
Basic earnings per share (see Note A): Income from continuing operations Results of discontinued operations Extraordinary gain Net income		\$2.85 (0.70) <u>0.88</u> <u>\$3.03</u>

Notes to Financial Statements

<u>Note A</u>: Preferred dividends of \$4,800 were deducted from income from continuing operations and net income to determine earnings available to common stock. The resulting amounts of \$34,225 and \$36,325 divided by the 12,000* weighted average number of common shares yielded \$2.85 and \$3.03 basic earnings per share, respectively.

*10,000 x 6/12 = 5,000 (Jan. - June) 12,000 x 4/12 = 4,000 (July - Oct.) 18,000 x 2/12 = 3,000 (Nov. - Dec.) 12,000

<u>Note to Instructor</u>: 18,000 common shares (\$90,000 ÷ \$5 par) were outstanding on December 31. Therefore, 10,000 (18,000 - 6,000 - 2,000) shares were outstanding on January 1.

<u>P17-2</u>

1.

AGOCHA COMPANY Comparative Income Statements For Years Ended December 31, 2010 and 2011

Sales \$124,300 \$140,000 Cost of goods sold (75,000) (80,000) Gross profit \$49,300 \$60,000 Operating expenses (18,000) (20,000)		<u>2010</u>	<u>2011</u>
Gross profit \$ 49,300 \$ 60,000 Operating expenses (18,000) (20,000)	Sales	\$124,300	\$140,000
Operating expenses (18,000) (20,000)	Cost of goods sold	<u>(75,000</u>)	<u>(80,000)</u>
	Gross profit	\$ 49,300	\$ 60,000
	Operating expenses	<u>(18,000</u>)	(20,000)
Pretax income before extraordinary item \$31,300 \$40,000	Pretax income before extraordinary item	\$ 31,300	\$ 40,000
Income tax expense (9,390) (12,000)	Income tax expense	<u>(9,390)</u>	(12,000)
Income before extraordinary item \$ 21,910 \$ 28,000	Income before extraordinary item	\$ 21,910	\$ 28,000
Extraordinary gain (net of \$1,800	Extraordinary gain (net of \$1,800		
income tax expense) 4,200	income tax expense)	4,200	
Extraordinary loss (net of \$2,700	Extraordinary loss (net of \$2,700		
income tax credit) (6,300)	income tax credit)		(6,300)
Net income <u>\$ 26,110</u> <u>\$ 21,700</u>	Netincome	<u>\$ 26,110</u>	<u>\$ 21,700</u>
Basic earnings per share (see Note A):	Basic earnings per share (see Note A):		
Income before extraordinary item \$2.79 \$2.92	Income before extraordinary item	\$2.79	\$2.92
Extraordinary gain 0.64	Extraordinary gain	0.64	
Extraordinary loss (0.75)	Extraordinary loss		<u>(0.75</u>)
Net income \$3.43 \$2.17	Net income	<u>\$3.43</u>	<u>\$2.17</u>

Notes to Financial Statements

<u>Note A</u>: For comparative purposes, retroactive recognition back to 2010 was given to a 20% stock dividend issued in 2011. Preferred dividends of \$3,500 were deducted from income before extraordinary item and net income to determine earnings available to common stock. The resulting amounts of \$18,410 and \$22,610 divided by the 6,600* weighted average number of common shares yielded \$2.79 and \$3.43 earnings per share in 2010, respectively. The resulting amounts of \$24,500 and \$18,200 divided by the 8,400* weighted average common shares yielded \$2.92 and \$2.17 basic earnings per share in 2011, respectively.

* <u>2010</u>
5,000 X 1.20 X 9/12 = 4,500
7,000 X 1.20 X 3/12 = <u>2,100</u>
6,600
<u>2011</u>
7,000 X 1.20 X 12/12 = 8,400

P17-2 (continued)

2 Price / earnings ratio -	Market price per common share		
	Earnings per share from continuing operations		
<u>2011</u>	<u>2010</u>		
<u>\$32.20</u> = <u>11 times</u> \$2.92	<u>\$25.75</u> = <u>9.2 times</u>		

The price/earnings ratio for 2011 was higher than for 2010 because the ending market price increased at a rate faster than the increase in earnings per share from continuing operations.

<u>P17-3</u>

1.a. & b.

				Earnings
<u>Explanation</u>	<u>Earnings</u>	÷	<u>Shares</u>	= <u>Per Share</u>
Basic earnings and shares	\$ 91,000°	÷	30,000 ^b	= \$3.03 Basic
Increment in shares (options)		÷	<u> </u>	
Tentative DEPS1 amounts	\$ 91,000	÷	30,500	= \$2.98 DEPS ₁
Preferred dividend savings	18,800 ^d			
Increment in shares (P/S)			<u>8,000</u> d	
Diluted earnings and shares	\$109,800	÷	38,500	= <u>\$2.85</u> Diluted

a\$91,000 = \$109,800 (net income) - \$18,800 (9.4% preferred dividends)

^bWeighted average shares:

$10,000 \times 2.00 \times 3/12 =$	5,000
$12,000 \times 2.00 \times 2/12 =$	4,000
$18,000 \times 2.00 \times 7/12 =$	<u>21,000</u>
Weighted average	<u>30,000</u>

^cIncrement due to share options:

 Issued
 2,000

 Reacquired
 $(2,000 \times (\$16 + \$2))$

 \$24 = (1,500)

 Increment in shares
 500

almpact on diluted earnings per share:

Preferred: $\frac{0.094 \times \$200,000}{2,000 \times 4} = \frac{\$18,800}{8,000} = \frac{\$2.35}{8,000}$

\$2.35 impact < \$2.98 (DEPS1), therefore dilutive

P17-3 (continued)

2.	Earnings per Share (See Note 1)	
	Basic earnings per share	<u>\$3.03</u>
	Diluted earnings per share	<u>\$2.85</u>
	Notes to Financial Statements	

Note 1: Basic earnings per share is based upon 30,000 average common shares outstanding. Preferred dividends of \$18,800 have been deducted from net income to determine the basic earnings available to common stockholders. Diluted earnings per share include 500 shares from the assumed exercise of share options and 8,000 shares from the assumed conversion of preferred stock, for a total of 38,500 common shares. Diluted earnings available to common stockholders assume no payment of \$18,800 dividends on the converted preferred stock.

3. IFRS do not require a company to include any unrecognized compensation cost in the application of the treasury stock method for share options. Therefore, the calculations in footnote (c) would differ as shown below.

<u>Explanation</u>	<u>Earnings</u>	÷	<u>Shares</u>	=	<u>Per Share</u>
Basic earnings and shares	\$ 91,000¤	÷	30,000	=	\$3.03 Basic
Increment in shares (options)			<u> 667</u> c		
Tentative DEPS1 amounts	\$ 91,000	÷	30,667	=	\$2.97 DEPS1
Preferred dividend savings	18,800 ^d				
Increment in shares (P/S)			<u>8,000</u> d		
Diluted earnings and shares	\$109,800	÷	38,667	=	<u>\$2.84</u> Diluted

a\$91,000 = \$109,800 (net income) - \$18,800 (9.4% preferred dividends)

^b Weighted average shares:	10,000 x 2.00 x 3/12	=	5,000
	12,000 x 2.00 x 2/12	=	4,000
	18,000 x 2.00 x 7/12	=	<u>21,000</u>
	Weighted average		<u>30,000</u>

cIncrement due to share options:

Issued 2,000

Reacquired: $\left(\frac{2,000 \times \$16}{\$24}\right) = (1,333)$

Increment in shares <u>667</u>

dImpact on diluted earnings per share:

Preferred: $\frac{0.094 \times \$200,000}{2,000 \times 4} = \frac{\$18,800}{8,000} = \underline{\$2.35}$

\$2.35 impact < \$2.97 (DEPS1), therefore dilutive

<u>P17-4</u> 1. and 2.

		(1) <u>Impa</u>	ct	(2) <u>Ranking</u>
10.2% bonds: $\frac{$20,400}{200}$ x	$\frac{x\ 0.7}{28} = \frac{\$14,280}{5,600}$	= <u>\$2.5</u>	55	5
12.0% bonds: $\frac{\left(\$19,200-\frac{\$16,000}{20}\right)}{160 \times 47}$		= <u>\$1.7</u>	71	3
9.0% bonds: $\frac{(\$18,000 + \frac{\$10,000}{10})}{200 \times 44}$	$\frac{\times 0.7}{=} = \frac{\$13,300}{8,800}$	= \$1.5	51	2
8.3% preferred stock: $\frac{\$9,960}{1,200 \times 3.9} =$	= <u>\$9,960</u> 4,680	= <u>\$2.</u>]	13	4
7.5% preferred stock: $\frac{\$13,500}{1,800 \times 6} = \frac{\$}{1}$	513,500 10,800	= <u>\$1.2</u>	<u>25</u>	1
3. and 4. <u>Explanation</u> Basic earnings and shares 7.5% preferred dividend savings	<u>Earnings</u> ÷ \$ 96,000ª ÷ 13,500 ^b	<u>Shares</u> 40,000	=	Earnings <u>Per Share</u> \$2.40 Basic
Increment in shares (P/S) Tentative DEPS1 9% bond interest expense savings	\$109,500 ÷ 13,300 ^b	<u>10,800</u> 50,800	=	\$2.16 DEPS1
Increment in shares (9% bonds) Tentative DEPS ₂ 12% bond interest expense savings	\$122,800 ÷ 12,880 ^b	<u>8,800</u> 59,600	=	\$2.06 DEPS ₂
Increment in shares (12% bonds) Diluted earnings and shares	\$135,680 ÷	<u>7,520</u> 67,120	=	<u>\$2.02</u> ° Diluted

°\$96,000 = \$119,460 (net income) - \$9,960 (8.3% preferred dividends) - \$13,500 (7.5% preferred dividends)

^bThe 7.5% preferred stock, 9% bonds, and 12% bonds are included in diluted earnings per share because they are individually dilutive (\$1.25 < \$2.40, \$1.51 < \$2.16, \$1.71 < \$2.06).

^cThe 10.2% bonds and the 8.3% preferred stock are not included in diluted earnings per share because they are individually antidilutive.

5. Madsen Company would report basic earnings per share of \$2.40 and diluted earnings per share of \$2.02 on its 2010 income statement.

P17-5

Note to Instructor: This problem includes an extraordinary loss, so the impact of each convertible security is compared to earnings per share related to income from continuing operations (see footnote 11 in the chapter). The entire solution is formatted in that manner.

1. and 2.				Earnings
<u>Explanation</u>	<u>Earnings</u>	÷	<u>Shares</u>	= <u>Per Share</u>
Basic earnings and shares	\$117,000ª	÷	25,300 ^b	= \$4.62 Basic ^f
Increment in shares (options)			<u>600</u> c	
Tentative DEPS1 amounts	\$117,000	÷	25,900	= \$4.52 DEPS ₁
Bond interest expense savings	6,930 ^d			
Increment in shares (bonds)			2,200 ^e	
Diluted earnings and shares	\$123,930	÷	28,100	= <u>\$4.41</u> 9 Diluted
Increment in shares (options) Tentative DEPS1 amounts Bond interest expense savings Increment in shares (bonds)	\$117,000 6,930 ^d	÷	<u>600</u> c 25,900 <u>2,200</u> e	= \$4.52 DEPS ₁

*Related to income from continuing operations

a\$117,000 = \$130,400 (income from continuing operations) - \$7,000 (7% preferred dividends) - \$6,400 (8% preferred dividends)

^b Weighted average shares:	$20,000 \times 1.10 \times 6/12 = 11,000$
	$24,000 \times 1.10 \times 2/12 = 4,400$
	$27,000 \times 1.10 \times 4/12 = 9,900$
	Weighted average <u>25,300</u>

clncrement due to share options:

Issued

3.000 Reacquired $\left(\frac{3,000 \times (\$20 + \$4)}{\$30}\right) = (2,400)$

Increment in shares

600

dImpact on diluted earnings per share and ranking:

			<u>Impact</u>	R <u>anking</u>
Preferred:	$\frac{0.08 \times \$80,000}{800 \times 1.7} = \frac{\$6,400}{1,360} =$		\$4.71	2
Bonds:	$\frac{[(0.096 \times \$100,000) + \$300] \times 0.7}{100 \times 22}$	= <u>\$6,930</u> 2,200 =	= \$3.15	1

^eDilutive effect:

\$3.15 impact <\$4.52 (DEPS₁), therefore individually dilutive Bonds:

Preferred: \$4.71 impact >\$4.41, therefore antidilutive and excluded from EPS

^fBasic earnings per share related to extraordinary loss is \$0.39 (\$10,000 extraordinary loss ÷ 25,300); rounded down to balance

⁹Diluted earnings per share related to extraordinary loss is \$0.36 (\$10,000 extraordinary loss ÷ 28,100)

P17-5 (continued)

3.	Basic earnings per share (See Note 1) Income before extraordinary items Extraordinary loss Net income	\$4.62 <u>(0.39</u>) <u>\$4.23</u>
	Diluted earnings per share (See Note 1) Income before extraordinary items Extraordinary loss Net income	\$4.41 <u>(0.36)</u> <u>\$4.05</u>

Notes to Financial Statements

<u>Note 1</u>: Basic earnings per share are based on 25,300 average common shares outstanding; 7% and 8% preferred dividends totaling \$13,400 have been deducted from net income to determine the basic earnings available to common stockholders. Diluted earnings per share include 600 shares from the assumed exercise of stock options and 2,200 shares from the assumed conversion of bonds. Diluted earnings available to common stockholders assume no interest expense (net of tax) of \$6,930 on the converted bonds.

<u>P17-6</u>

			Earnings
<u>Earnings</u> ÷	<u>Shares</u>	=	<u>Per Share</u>
\$122,000ª ÷	33,333 ^b	=	\$3.66 Basic
	<u>293</u> c		
\$122,000 ÷	33,626	=	\$3.63 DEPS1
13,300 ^d			
	<u>4,400</u> d		
\$135,300 ÷	38,026	=	\$3.56 DEPS ₂
28,500 ^d			
	<u>9,310</u> d		
\$163,800 ÷	47,336	=	<u>\$3.46</u> Diluted
	\$122,000 ^a ÷ \$122,000 ÷ 13,300 ^d \$135,300 ÷ 28,500 ^d	$\begin{array}{rcrcrcrcrc} \$122,000^{a} \div & 33,333^{b} \\ & & 293^{c} \\ \$122,000 \div & 33,626 \\ 13,300^{d} \\ \hline \$135,300 \div & \frac{4,400^{d}}{38,026} \\ & 28,500^{d} \\ \hline & & 9,310^{d} \end{array}$	$\begin{array}{rcrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$

a\$122,000 = \$150,500 (net income) - \$28,500 (preferred dividends)

^b Weighted average shares:	25,000 x 1.20 = 30,000 x 7/12 = 32,000 x 1.20 = 38,400 x 4/12 =	-
	38,400 - 2,000 = 36,400 x 1/12 = Weighted average shares	•

clncrement due to share options:

Issued 4,000 Reacquired $\left(\frac{4,000 \times (\$33 + \$5)}{\$41}\right) = (3,707)$

Increment in shares 293

<u>P17-6</u> (continued) 1. and 2. (continued)

^dImpact on diluted earnings per share and ranking:

10% bonds:	$\frac{[(0.10 \times \$200,000) - \$1,000] \times 0.7}{200 \times 22} = \frac{\$13,300}{4,400} =$	<u>Impact</u> \$3.02	<u>Ranking</u> 1
5.8% bonds:	$\frac{(0.058 \times \$540,000) \times 0.7}{540 \times 11.6} = \frac{\$21,924}{6,264} =$	\$3.50	3
7.5% preferre	d: $\frac{0.075 \times \$380,000}{3,800 \times 2.45}$ = $\frac{\$28,500}{9,310}$ =	\$3.06	2

. . .

^eDilutive effect on diluted earnings per share:

10% bonds: \$3.02 impact < \$3.63 (DEPS₁), therefore dilutive
7.5% preferred: \$3.06 impact < \$3.56 (DEPS₂), therefore dilutive
5.8% bonds: \$3.50 impact > \$3.46 (DEPS₃), therefore antidilutive and excluded from EPS

- 3. Frost Company would report basic earnings per share of \$3.66 and diluted earnings per share of \$3.46 on its 2010 income statement.
- P17-7 (AICPA adapted solution)

LAFAYETTE CORPORATION Schedule to Compute Basic Earnings Per Share and Diluted Earnings Per Share For Year Ended September 30, 2011

Basic earnings per share	Earnings Adjusted for Assumed Conversions <u>\$540,000</u>	Number of <u>Shares</u> <u>350,000</u>	Earnings Per Share (Income <u>Statement)</u> <u>\$1.54</u>
Diluted earnings per common share	<u>\$657,600</u> *	<u>456,000</u>	<u>\$1.44</u>
*Includes interest, net of tax eff year ended September 30, 20	-	pentures fo	or the

Interest (7% x \$2,400,000)	\$168,000
Less income taxes (30% x \$168,000)	(50,400)
Interest, net of tax effect	\$117,600

P17-7 (continued)

Computation of Number of Shares To Be Used in Earnings Per Share Computations

Weighted average shares outstanding during year: October 1 - November 30, 2010		
(giving retroactive effect to stock split)	120,000 x 1/6	20,000
December 1, 2010 - March 2, 2011	400,000 x 1/4	100,000
March 3 - March 31, 2011	360,000 x 1/12	30,000
April 1 - September 30, 2011	400,000 x 1/2	<u>200,000</u>
Number of shares to be used in basic		
earnings per share computations		350,000
Add excess of number of shares to be issued on the ex Series A warrants (50,000) over number of treasury that could be purchased with the funds obtained	y shares I from the	
exercise of the warrants $($30 \times 50,000 \div $37.50 = 4)$	0,000)	10,000
Add shares resulting from conversion of convertible debentures (40 x 2,400) Number of shares to be used in computation of		96,000
diluted earnings per share		<u>456,000</u>

P17-8 (AICPA adapted solution)

1.

MASON CORPORATION Weighted Average Number of Common Shares for Computation of Basic Earnings per Share For Year Ended December 31, 2010

<u>Dates</u> January 1 - August 31	<u>Shares</u> 300,000	х	Months <u>Outstanding</u> 8	Weighted <u>Shares</u> = 2,400,000
September 1, sold additional shares September 1 - December 31	<u>36,000</u> <u>336,000</u>	х	4	= <u>1,344,000</u> 3,744,000
Total shares-months Weighted average number of shares outstanding				

P17-8 (continued)

2.

3.

MASON CORPORATION Computation of Basic Earnings Per Share For Year Ended December 31, 2010

Income: Net income Deduct dividends paid on preferred stock (10,000 shares x \$3) Net income, adjusted	\$750,000 <u>(30,000)</u> <u>\$720,000</u>
Number of shares (Requirement 1)	312,000
Basic earnings per share (\$720,000 ÷ 312,000)	<u>\$2.31</u>
MASON CORPORATION Number of Shares for Computation of Diluted Earnings per Share For Year Ended December 31, 2010	
 Weighted average number of shares outstanding (Requirement 1) Stock options and warrants: From share options-dilutive (<u>Schedule 1</u>) From warrants-antidilutive (<u>Schedule 2</u>) Shares assumed to be issued upon conversion of convertible bonds (\$1,000,000 ÷ \$1,000 = 1,000 bonds x 40) Total number of shares for diluted EPS computation 	312,000 11,250 0 <u>40,000</u> <u>363,250</u>
<u>Schedule 1</u> :	
Assumed Shares Increase From Share Options- Treasury Stock Method	Sharos
Shares that would be issued upon exercise of options Cash proceeds that would be realized upon exercise [30,000 shares x \$22.50 (\$20.50 option price + \$2 unrecognized compensation cost) = \$675,000] Treasury shares that could be purchased [\$675,000 ÷ \$36 (average market price)]	<u>Shares</u> 30,000 (18,750)
Dilutive share options	<u>11,250</u>

<u>P17-8</u> (continued) 3. (continued)

<u>Schedule 2</u>:

Assumed Shares Increase (Decrease) From Warrants-Treasury Stock Method					
	Shares that would be issued upon exercise of warrants Cash proceeds that would be realized upon exercise [20,000 shares x \$38 (exercise price) = \$760,000] Treasury shares that could be purchased [\$760,000 ÷ \$36 (average market price)] Antidilutive warrants (not included in EPS computations)				20,000 <u>(21,111)</u> <u>(1,111</u>)
4.		MASON CORPC Computation of Diluted E For Year Ended Dece	arnings Per Sl		
	Income:				¢750.000
	Net in Deduc	come ct dividends paid on preferred sto	ck		\$750,000
	(10,000 shares x \$3)				
		nterest expense (net of income ta			\$720,000
	\$	n convertible bonds [\$1,000,000 x 80,000 x 0.70 (1.00 - 0.30 tax rate)] come, adjusted			<u> 56,000</u> <u>\$776,000</u>
	Number	of shares (Requirement 3)			363,250
	Diluted e	earnings per share (\$776,000 ÷ 363	,250)		<u>\$2.14</u>
<u>P17</u>	7_9				
1.	Year 1	Preferred	<u>Preferred</u> <u>\$ 6,000</u>	<u>Common</u> <u>\$ 0</u>	<u>Total</u> <u>\$ 6,000</u>
	Year 2	Current preferred dividend (\$100 x 0.07 x 1,000) Remainder to common Totals	\$ 7,000 <u>\$ 7,000</u>	 <u>\$21,000</u> <u>\$21,000</u>	<u>\$28,000</u>
	Year 3	Current preferred dividend Remainder to common Totals	\$ 7,000 <u>\$ 7,000</u>	 <u>\$23,000</u> <u>\$23,000</u>	<u>\$30,000</u>

P17-9 (continued)

<u>P17-9</u> (continued)					
		Preferred	<u>Common</u>	<u>Total</u>	
2. Year 1	Preferred (and \$1,000 is in arrears)	<u>\$ 6,000</u>	<u>\$0</u>	<u>\$ 6,000</u>	
Year 2	Dividends in arrears Current preferred dividend Remainder to common Totals	\$ 1,000 7,000 <u>\$ 8,000</u>	 \$20,000 \$20,000	<u>\$28,000</u>	
Year 3	Current preferred dividend Remainder to common Totals	\$ 7,000 <u>\$ 7,000</u>	\$23,000 \$23,000	<u>\$30,000</u>	
3. Year 1	Preferred (and \$1,000 is in arrears)	<u>\$ 6,000</u>	<u>\$0</u>	<u>\$ 6,000</u>	
Year 2	Dividends in arrears Current preferred dividend Common proportional share (0.07 x \$5 x 40,000) Remainder (\$28,000 - \$22,000)* Totals	\$ 1,000 7,000 <u>2,000</u> \$10,000	 \$14,000 <u>4,000</u> \$18,000	\$28,000	
*Preferred: \$100,000 \$100,000 + \$200,000 x \$6,000 extra dividend = \$2,000					

Common: $\frac{200,000}{100,000 + 200,000} \times 6,000 \text{ extra dividend} = 4,000$

Year 3	Current preferred dividend	\$ 7,000		
	Common proportional share		\$14,000	
	Remainder (\$30,000 - \$21,000)*	3,000	6,000	
	Totals	<u>\$10,000</u>	<u>\$20,000</u>	<u>\$30,000</u>

*Preferred: $\frac{\$100,000}{\$100,000} \times \$9,000 = \$3,000$ Common: $\frac{\$200,000}{\$100,000 + \$200,000} \times \$9,000 = \$6,000$

P17-9 (continued)

4.	Year 1	Preferred (and \$1,000 is in arrears)	<u>\$ 6,000</u>	<u>\$0</u>	<u>\$ 6,000</u>
	Year 2	Preferred in arrears Preferred current Common proportional share Remainder (2% of par value) Totals	\$ 1,000 7,000 <u>2,000</u> <u>\$10,000</u>	 \$14,000 <u>4,000</u> <u>\$18,000</u>	\$28,000
	Year 3	Preferred current Common proportional share Extra (2% of par value) Remainder to common Totals	\$ 7,000 2,000 <u>\$ 9,000</u>	\$14,000 4,000 <u>3,000</u> <u>\$21,000</u>	<u>\$30,000</u>

P17-10 (AICPA adapted solution)

TOMASCO, INC. Maximum Cash Dividend Distribution December 31, 2010

	Common <u>stock</u>	4% Preferred <u>stock</u>	8% Preferred <u>stock</u>	<u>Total</u>
8% preferred stock, dividends				
in arrears for 2006-2009 (\$1,000,000 x 8% x 4 years)			\$320,000	\$320,000
4% preferred stock dividends for			ψ320,000	ψυζυ,000
2010 (\$100,000 x 4%)		\$4,000		4,000
8% preferred stock dividends for				
2010 (\$1,000,000 x 8%)			80,000	80,000
Distribution of remaining retained				
earnings (Schedule 1)	<u>\$175,333</u>		<u> 270,667 </u>	446,000
	<u>\$175,333</u>	<u>\$4,000</u>	<u>\$670,667</u>	<u>\$850,000</u>

<u>P17-10</u> (continued)

Schedule 1: Distribution of Remaining Retained Earnings

(\$500,000) Distribution of	remaining retained earnings of	Common <u>stock</u> \$ 40,000	8% Preferred <u>stock</u>	<u>Total</u> \$ 40,000
Common 8% preferred s	ased on the ratio of par values: stock $\frac{$500,000}{$1,500,000} \times $406,000$ tock $\frac{$1,000,000}{$1,500,000} \times $406,000$	135,333 <u>\$175,333</u>	\$270,667 <u>\$270,667</u>	406,000 <u>\$446,000</u>
*\$850,000 - \$32 <u>P17-11</u>	0,000 - \$4,000 - \$80,000 - \$40,000			
1. <u>2010</u> Jan. 4	Cash (3,000 x \$25) Common Stock, \$10 par Additional Paid-in Capital on Common Stock		75,000	30,000 45,000
30	Dividends Payable: Preferred [(\$100 x 0.08) x 1,200] Dividends Payable: Common* Cash		9,600 32,000	41,600
	*18,000 - 2,000 in treasury = 16,00	00 x \$2 = \$32	,000	
Mar. 2	Cash (400 x \$125) Preferred Stock, \$100 par Additional Paid-in Capital on Preferred Stock		50,000	40,000
May 7	Cash (600 x \$24) Treasury Stock (600 x \$21) Additional Paid-in Capital from Treasury Stock		14,400	12,600
				.,000

P17-11 (continued) 1. (continued)

June	15	Common Stock, \$10 par (21,000 x \$10) Additional Paid-in Capital on Common Stock	210,000 42,000	
		Common Stock, \$6 par (42,000 x \$6)	,	252,000
	15	<u>Memorandum entry</u> : The treasury stock p split on this date. There are now 2,800 tree value per share and a cost of \$10.50 per s	asury shares a	
July	2	Retained Earnings*	27,440	
		Common Stock To Be Distributed (1,960 x \$6)		11,760
		Additional Paid-in Capital from Stock Dividend		15,680
		*42,000 shares issued - 2,800 treasury shares (1,400 split two for 39,200 shares outstanding <u>x 0.05</u> stock dividend % 1,960 shares in stock dividend <u>x \$14</u> current market price <u>\$27,440</u> reduction in retained earnings	one)	
Aug.	3	Common Stock To Be Distributed Common Stock, \$6 Par	11,760	11,760
Oct.	1	Allowance for Change in Value of Investment [2,000 x (\$16 - \$15)] Unrealized Increase in Value of Available-for-Sale Securities [2,000 x (\$15 - \$12)]	2,000	
		Gain on Disposal of Investment [2,000 x (\$16 - \$12)]	0,000	8,000
		Retained Earnings (2,000 x \$16) Property Dividend Payable	32,000	32,000
Nov.	1	Property Dividend Payable Investment in Lamb Company Stock	32,000	24,000
		Allowance for Change in Value of Investment [2,000 x (\$16 - \$12)]		8,000

P17-11 (continued) 1. (continued)

Dec. 31 Retained Earnings 53,960 Dividends Payable: Preferred* Dividends Payable: Common*) 12,800 41,160
*Preferred: 1,200 + 400 = 1,600 x \$8 = \$12,800 Common: 42,000 - 2,800 + 1,960 = 41,160 x \$1 = \$41,160	
2. GRAY COMPANY Stockholders' Equity December 31, 2010	
Preferred stock (8%, \$100 par, 1,600 shares issued and outstanding) Common stock (\$6 par, 43,960 shares issued	\$160,000
of which 41,160 are outstanding and 2,800 shares are being held as treasury stock) Additional paid-in capital on preferred stock Additional paid-in capital on common stock Additional paid-in capital from treasury stock Additional paid-in capital from stock dividend Total contributed capital Retained earnings (restricted in the amount of \$29,400, the cost of the treasury shares) Contributed capital and retained earnings Less: Treasury stock (2,800 shares of common at \$10.50 per share) Total stockholders' equity a\$31,600 = \$21,600 + \$10,000	263,760 31,600° 93,000b 1,800 <u>15,680</u> \$565,840 <u>341,600</u> ° \$907,440 <u>(29,400)</u> <u>\$878,040</u>
^b \$93,000 = \$90,000 + \$45,000 - \$42,000	
°\$341,600 = \$230,000 + \$225,000 - \$27,440 - \$32,000 - \$53,960	
<u>P17-12</u>	
1. <u>2010</u> Jan. 4 Dividends Payable: Preferred (\$6 x ½ x 2,000) 6,000 Dividends Payable: Common* 46,400 Cash	
*30,000 - 1,000 in treasury = 29,000 x \$1.60 = \$46,400)

<u>P17-12</u> (continued) 1. (continued)

1.5.0				
Jan.	5	Cash (500 x \$110) Preferred Stock, \$100 Par Premium on Preferred Stock	55,000	50,000 5,000
	23	Cash (4,000 x \$23) Common Stock, \$5 Par Premium on Common Stock	92,000	20,000 72,000
Apr.	2	Cash (700 x \$24)	16,800	
		Treasury Stock (700 x \$20 per share cost)		14,000
		Additional Paid-in Capital from Treasury Stock		2,800
May	14	Retained Earnings*	84,250	
		Common Stock To Be Distributed (3,370 x \$5)		16,850
		Additional Paid-in Capital from Stock Dividend		67,400
		*34,000 shares issued <u>- 300</u> treasury shares 33,700 shares outstanding <u>x 0.10</u> stock dividend % 3,370 shares in stock dividend <u>x \$25</u> current market price <u>\$84,250</u> reduction in retained earnings		
June	4	Retained Earnings [(2,000 + 500) x \$6 x ½ year]	7,500	
		Dividends Payable: Preferred	,,000	7,500
	29	Common Stock To Be Distributed Common Stock, \$5 Par	16,850	16,850
July	5	Dividends Payable: Preferred Cash	7,500	7,500
	20	<u>Memorandum entry</u> : On this date the cor for one and the par value was reduced fro The number of issued common shares incr 74,740. The number of treasury shares incr	om \$5 to \$2.5 eased from 3	50 per share. 37,370* to

*37,370 = 34,000 issued + 3,370 stock dividend

and the cost decreased to \$10 per share.

<u>P17-12</u> (continued) 1. (continued)

Aug.	3	Loss on Disposal of Investment [5,000 x (\$9 - 4)] Unrealized Decrease in Value of Securities Available-for-Sale [5,000 x (\$9 - 6)] Allowance for Change in Value of Investment [5,000 x (\$6 - 4)]	25,000	1 <i>5,</i> 000 10,000
		Retained Earnings (5,000 x \$4) Property Dividend Payable	20,000	20,000
Sept.	14	Property Dividend Payable Allowance for Change in Value of	20,000	
		Investment Investment in Drot Company Stock	25,000	45,000
Dec.	3	Retained Earnings* Dividends Payable: Preferred Dividends Payable: Common	74,226	7,500 66,726
*Preferre Commo		2,500 x \$6 x ½ year = \$7,500 (74,740 - 600 in treasury) x \$0.90 = \$66,726		
2.		JACOBI COMPANY Stockholders' Equity December 31, 2010		
issue Premium Commo of w Premium Addition Addition Total c Retained \$6,0 Accumu Unreal a Contril a Less: Tr \$10	ed ar on on p on sto /hich on al pa contri d ear 00, th ulated vaila bute ccur reasu per s	ck (6%, \$100 par, 2,500 shares nd outstanding) oreferred stock ck (\$2.50 par, 74,740 shares issued 600 are in the corporate treasury) common stock aid-in capital from treasury stock aid-in capital from stock dividend buted capital mings (restricted in the amount of ne cost of the treasury shares) d other comprehensive income (loss) decrease in value of ble-for-sale securities d capital, retained earnings, and mulated other comprehensive income try stock (600 common shares at share) holders' equity	\$250,000 <u>17,000</u> ¤ \$186,850 <u>312,000</u> b	<pre>\$ 267,000 498,850 2,800 67,400 \$ 836,050 711,024^d (26,000)^c \$1,521,074 (6,000) \$1,515,074</pre>

<u>P17-12</u> (continued)

2. (continued)

°\$17,000 = \$12,000 + \$5,000

b312,000 = \$240,000 + \$72,000

°\$26,000 = \$41,000 - \$15,000

 $^{d}\$711,024 = \$627,000 + \$270,000 - \$84,250 - \$7,500 - \$20,000 - \$74,226$

<u>P17-13</u>

1.	(1)	(a)	Retained Earnings (1,200 x \$30) Common Stock To Be Distributed Additional Paid-in Capital From Stock Dividend	36,000	12,000 24,000
		(b)	Common Stock To Be Distributed Common Stock, \$10 Par	12,000	12,000
	(2)	(a)	Retained Earnings (4,500 x \$10) Common Stock To Be Distributed	45,000	45,000
		(b)	Common Stock To Be Distributed Common Stock, \$10 Par	45,000	45,000
	(3)	(a)	Retained Earnings (150 preferred shares x \$123) Preferred Stock To Be Distributed Additional Paid-in Capital From Stock Dividend	18,450	1 <i>5,</i> 000 3,450
		(b)	Preferred Stock To Be Distributed Preferred Stock, \$100 Par	15,000	1 <i>5,</i> 000
	(4)		Common Stock, \$10 Par Premium on Common Stock Common Stock, \$4 Par (30,000 shares)	1 <i>5</i> 0,000	30,000 120,000
	(5)	(a)	Investment in West Company Stock [1,000 x (\$54 - \$48)] Gain on Disposal of Investment	6,000	6,000
			Retained Earnings Property Dividend Payable	54,000	54,000

<u>P17-13</u> (continued) 1. (5) (continued)

	(b)	Property Dividend Payable Investment in West Company Stock	54,000	54,000
(6)	(a)	Retained Earnings [(1,000 x \$8) + (15,000 x \$2.00)] Contributed Capital Distributed as a Liquidating Dividend on	38,000	
		Preferred Stock (1,000 x \$2) Contributed Capital Distributed as a Liquidating Dividend on	2,000	
		Common Stock (15,000 x \$0.30) Dividend Payable: Preferred Stock Dividend Payable: Common Stock (15,000 x \$2.30)	4,500	10,000 34,500
	(b)	Dividend Payable: Preferred Stock Dividend Payable: Common Stock Cash	10,000 34,500	44,500

	(1)	(2)	(3)	(4)	(5)	(6)
Preferred stock	\$100,000	\$100,000	\$115,000	\$100,000	\$100,000	\$100,000
Common stock	162,000	195,000	150,000	120,000	150,000	150,000
Premium on preferred stock	16,000	16,000	16,000	16,000	16,000	16,000
Premium on common stock	220,000	220,000	220,000	250,000	220,000	220,000
Additional paid-in capital						
from stock dividend	24,000		3,450	—	—	—
Contributed capital distributed as a liquidating dividend on preferred						(0,000)
stock						(2,000)
Contributed capital distributed as a liquidating dividend on common						
stock				—	—	(4,500)
Retained earnings	<u>228,000</u>	219,000	245,550	264,000	<u>216,000</u> *	226,000
Total stockholders' equity	<u>\$750,000</u>	<u>\$750,000</u>	<u>\$750,000</u>	<u>\$750,000</u>	<u>\$702,000</u>	<u>\$705,500</u>

*\$216,000 = \$264,000 - \$54,000 + \$6,000 gain

TATE COMPANY Statement of Retained Earnings For Year Ended December 31, 2010

Retained earnings, as previously reported, January 1, 2010 Add: Correction of overstatement in 2009		\$180,000
depreciation (net of \$3,900 income taxes) Less: Correction of omission of 2009 loss on		9,100
sale of land (net of \$3,000 income tax credit)		(7,000)
Adjusted retained earnings, January 1, 2010		\$182,100
Add: Net income		72,000
		\$254,100
Less: Stock dividends	\$39,000 ¹	
Cash dividends	29,900 ²	
Reduction of retained earnings due		
to a retirement of preferred		
stock at a call price higher		
than the original issue price	9.600 ³	(78,500)
Retained earnings, December 31, 2010 (see Note A)	7,000*	\$175,600
Refulled = Continue, Decentiber = ST, ZOTO (see NOTE A)		<u>ψ17,000</u>

Notes to Financial Statements

<u>Note A</u>: Retained earnings are restricted in the amount of \$50,000 in accordance with the provisions of a bond issue that matures on January 1, 2020. The restriction applies during the period the bonds are outstanding.

¹(10,000 x 2 x 0.15) x \$13 ²[(10,000 x 2) + (10,000 x 2 x 0.15)] x \$1.30 ³(\$120 - \$108) x 800

<u>P17-15</u>

1. (1) Retained Earnings (4,000 x \$3) Dividends Payable	12,000 12	2,000
Dividends Payable Cash	12,000 12	2,000

P17-15 (continued) 1. (continued)

(2) Retained Earnings (600 x \$36) Common Stock To Be Distributed Additional Paid-in Capital From Stock Dividend	21,600	6,000 1 <i>5,</i> 600
Common Stock To Be Distributed Common Stock, \$10 Par	6,000	6,000
(3) Preferred Stock, \$100 Par Additional Paid-in Capital	50,000	
on Preferred Stock Retained Earnings [500 x (\$125 - \$110)] Cash	5,000 7,500	62,500
(4) Accumulated Depreciation (\$45,000 - \$20,000) Retained Earnings	25,000	25,000
Retained Earnings (\$25,000 x 0.30) Income Taxes Payable on Prior Earnings	7,500	7,500
FASTOR COMPANY Statement of Retained Earning For Year Ended December 31, 20		
Retained earnings, as previously reported, January 1, 2010 Add: Correction of overstatement in 2009 depreciation expense		\$218,600
(net of \$7,500 income taxes) Adjusted retained earnings, January 1, 2010 Add: Net income		<u>17,500</u> \$236,100 <u>67,000</u>
Less: Cash dividends (\$3 per share) Stock dividend (\$25 current market	\$12,000	\$303,100
price on 600 common shares) Reduction of retained earnings due to retirement of 500 shares of preferred stock at a \$125 call price in excess of the \$110	21,600	
original issuance price Retained earnings, December 31, 2010	7,500	<u>(41,100)</u> <u>\$262,000</u>

<u>P17-16</u>

1.	<u>2010</u> Jan.	Preferred Stock (8%), \$100 par Premium on Capital Stock [(\$105 - \$100) x 1,000] Retained Earnings Cash	100,000 5,000 11,000	116,000
	Apr.	Retained Earnings [(\$220,000 ÷ \$10) x 0.10 x \$16] Common Stock To Be Distributed (2,200 x \$10) Premium on Capital Stock	35,200	22,000 13,200
		Common Stock To Be Distributed Common Stock, \$10 par	22,000	22,000
	Nov.	Treasury Stock (\$18 x 1,000) Cash	18,000	18,000
	Dec.	Retained Earnings Dividends Payable: Preferred [(\$100 x 0.07) x 1,500]	10,500	10,500
	Dec.	Retained Earnings Dividends Payable: Common [\$1 x (22,000 + 2,200 - 1,000 treasury shares)]	23,200	23,200
	Dec.	Dividends Payable: Preferred Cash	10,500	10,500
	Dec.	Dividends Payable: Common Cash	23,200	23,200
	Dec.	Income Summary (net income) Retained Earnings	87,000	87,000
	Dec.	Retained Earnings (depreciation error) Accumulated Depreciation	10,000	10,000
		Income Tax Refund Receivable Retained Earnings (\$10,000 x 0.30)	3,000	3,000

<u>P17-16</u> (continued) 1. (continued)

2.

Dec.	Accumulated Depreciation Retained Earnings (gain error)	8,000	8,000
	Retained Earnings (\$8,000 x 0.30) Income Taxes Payable*	2,400	2,400
	*Or, credit to Income Tax Refund Receivable to reduce refund from previous journal entry.		
	CORY COMPANY Statement of Retained Earnings For Year Ended December 31, 2010	D	
Potain	ed earnings, as previously		
	ported, January 1, 2010		\$182,200
	Correction of error in 2009 gain on		+··-/
	sale of equipment (net of \$2,400 income taxes)		5,600
Less:	Correction of omission of 2009 depreciation		
	on certain machinery (net of \$3,000 income		(7,000)
Adjusta	tax credit) ed retained earnings, January 1, 2010		<u>(7,000)</u> \$180,800
	Net income		<u>\$180,800</u>
/ (00.			\$267,800
Less:	Stock dividend (\$16 current market		·
	price on 2,200 shares)	\$35,200	
	Cash dividends: preferred (\$7 on	10 500	
	1,500 shares) Cash dividends: common (\$1 on	10,500	
	23,200 shares)	23,200	
	Reduction of retained earnings resulting	-,	
	from retirement of preferred stock		
	at a call price in excess of the		
	original issue price (1,000 shares at \$11 excess)	11,000	(79,900)
Retain	ed earnings, December 31, 2010 (see Note A)		<u> (77,700</u>) \$187,900
			<u>+ /· = =</u>

Notes to Financial Statements

Note A: Retained earnings are restricted in the amount of \$18,000, the cost of the 1,000 common shares being held as treasury stock.

<u>P17-17</u>

1.	Capital Surplus Premium on Common Stock Premium on Preferred Stock	30,1	00 27,10 3,00	
	Capital Surplus Unrealized Capital from Donation of Lar	16,0 Id	00 16,00	00
	Treasury Stock Capital Surplus	7,5	00 7,50	00
	Retained Earnings* Capital Surplus	80,C	00 80,00	00
	Prior period adjustment Loss from fire Property dividend Cash dividend	\$20,000 12,000 18,000 6,000 <u>24,000</u> <u>\$80,000</u>		
2.	MARBLE COM Stockholders' E December 31,	Equity		
	Preferred stock (\$100 par, 300 shares issued and outstanding) Common stock (\$10 par, 6,500 shares issued of which 6,000 shares are outstanding		\$ 30,00	00
F R L C	and 500 shares are in the treasury) Premium on preferred stock Premium on common stock Contributed capital Retained earnings (see Note A): Inrealized capital from donation of land Contributed capital, retained earnings, and unrealized capital ess: Treasury stock (500 shares		65,00 3,00 <u>27,10</u> \$125,10 70,00 <u>16,00</u> \$211,10)0)0)0)0*)0
_	at \$15 per share cost) Total stockholders' equity		<u>(7,50</u> <u>\$203,60</u>	•

P17-17 (continued)

2. (continued)

Notes to Financial Statements

Note A: Retained earnings is restricted in the amount of \$7,500, the cost of the treasury shares.

*\$150,000 - \$80,000

P17-18 (AICPA adapted solution)

1.

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

Balance, December 31, 2009, as originally reported Add: Prior period adjustment from error understating inventories at			\$ 6,470,000
December 31, 2009 Less: Income tax effect As restated Net income	\$	300,000 <u>(90,000</u>)	210,000 \$ 6,680,000 <u>4,500,000</u> \$11,180,000
Deduct cash dividends:			
On preferred stock at required rate [\$4.50 (\$50 x 9%) x 100,000 shares] On common stock, \$1.00 per share	\$	450,000	
[\$1 x 2,480,000 shares (2,000,000 + 500,000 - 20,000)] Balance, December 31, 2010		2,480,000	<u>(2,930,000</u>) <u>\$ 8,250,000</u>

<u>P17-18</u> (continued) 2.

ASHWOOD, INC. Stockholders' Equity Section of Balance Sheet December 31, 2010

Preferred stock, \$50 par value, 9% cumulative, convertible; 600,000 shares authorized; 100,000 shares issued and outstanding Common stock, \$10 par value; 6,000,000 shares authorized; 2,500,000 shares issued (2,000,000 + 500,000), of which 10,000	\$ 5,000,000
shares are held in treasury Additional paid-in capital from preferred	25,000,000
stock [100,000 x \$4 (\$54 - \$50)] Additional paid-in capital from common	400,000
stock (Schedule 1) Retained earnings	11,050,000 <u>8,250,000</u> \$49,700,000
Less: Common stock in treasury, 10,000 shares at cost [\$16 x 10,000 (20,000 - 10,000)] Total stockholders' equity	<u>(160,000)</u> <u>\$49,540,000</u>
Schedule 1: Additional Paid-In Capital From Common Stock	
Balance, December 31, 2009	\$ 7,500,000
From issuance of 500,000 shares on April 27, 2010 [500,000 x \$7 (\$17 - \$10)]	3,500,000
From sale of 10,000 shares treasury stock on November 9, 2010 [10,000 x \$5 (\$21 - \$16)] Balance, December 31, 2010	<u>50,000</u> <u>\$11,050,000</u>
P17-19 (AICPA adapted solution)	
1. CARR CORPORATION Statement of Retained Earnings For the Year Ended December 31, 2010	
Balance, December 31, 2009, as originally reported Deduct: Prior period adjustment from error overstating rent income for	\$4,000,000
Less: Income tax effect (225,000) As restated Net income	<u>275,000</u> \$3,725,000 <u>2,600,000</u> \$6,325,000
Deduct dividends: Cash dividend on preferred stock \$180,000 Dividend in kind on common stock <u>630,000</u> Balance, December 31, 2010	

P17-19 (continued)

2.	CARR CORPORATION Stockholders' Equity Section of Balance Sheet December 31, 2010						
	Preferred stock, \$100 par, 10% cumulative; 100,000 shares authorized; 18,000 shar issued and outstanding Common stock, \$5 stated value; 3,000,000 authorized, 1,290,000 shares issued an	res shares		\$ 1,800,000			
	outstanding Additional paid-in capital From preferred stock From common stock Total additional paid-in capital Retained earnings Accumulated other comprehensive incom Unrealized decrease in value of	ne (loss)	\$ 90,000 <u>4,640,000</u> d	6,050,000° 4,730,000 5,515,000			
	marketable equity securities Total stockholders' equity			<u>(135,000)</u> <u>\$17,960,000</u>			
	^a Cash dividend on preferred stock for 2010 Shares outstanding Dividends per share (\$100 par x 10%) Total dividend)	18,000 <u>x \$10</u> <u>\$ 180,000</u>				
	^b Dividend in kind on common stock for 201 Bush, Inc., common stock shares Market price on 2/13/10 declaration da Total dividend		10,000 <u>x \$63</u> <u>\$ 630,000</u>				
	°Common stock Balance Deduct: Treasury stock retired	<u>Date</u> 12/31/09 01/09/10	<u>Shares</u> 1,030,000 <u>(30,000)</u> 1,000,000	<u>Amount</u> \$5,150,000 <u>(150,000)</u> \$5,000,000			
	Stock rights exercised Balance	04/23/10 12/31/10	<u>210,000</u> <u>1,210,000</u>	<u>1,050,000</u> <u>\$6,050,000</u>			
	^d Additional paid-in capital form common s 12/31/09, balance 1/09/10, deduct treasury stock retired (\$270,000 - \$150,000)	stock		\$3,500,000 <u>(120,000</u>)			
	4/23/10, stock rights exercised [(\$11 - \$5) x 210,000 shares] 12/31/10, balance			\$3,380,000 <u>1,260,000</u> <u>\$4,640,000</u>			

DANA COMPANY Statement of Changes in Stockholders' Equity For Year Ended December 31, 2010

	Compre-	Prefe	erred Stock	<u>Comn</u>	<u>non Stock</u>	Additic	onal Paid-In C	<u>Capital</u>		Accumulated Other	
<u>Explanation</u>	hensive	Share	s Par	Shares	Par	Preferred	Common	Treasury	Retained	Comprehensive	e Treasury
	<u>Income</u>	Issuec	<u>Value</u>	Issued	Value	<u>Stock</u>	<u>Stock</u>	<u>Stock</u>	<u>Earnings</u>	Income	<u>Stock</u>
Balances,											
January 1, 2010		1,000	\$100,000	9,000	\$90,000	\$20,000	\$99,000		\$330,000		
Comprehensive income:											
Net income	\$83,000								83,000		
Unrealized decrease in											
value of available-for-sale	(10,000)									¢(10,000)	
securities (net of taxes) Comprehensive income	<u>(10,000</u>) <u>\$73,000</u>								(27,500)	\$(10,000)	
Dividends	<u>\$73,000</u>								(27,300)		
Reacquired treasury stock											\$(16,500)
Reissued treasury stock								\$2,500			11,000
Retired treasury stock				(200)	(2,000)		(2,200)ª	φ2,000	(200)	b	4,400
Issued preferred stock		100	10,000	(() = =)	2,500					,
Balances, December 31,											
2010		<u>1,100</u>	<u>\$110,000</u>	8,800	<u>\$88,000</u>	<u>\$22,500</u>	<u>\$96,800</u>	<u>\$2,500</u>	<u>\$385,300</u>	<u>\$(10,000</u>)	<u>\$ (1,100)</u>

 $^{\circ}$ \$99,000 ÷ 9,000 shares = \$11 pro rata reduction x 200 shares

^b\$4,400 - (\$2,000 + \$2,200 from footnote a)

P17-20 (continued)

2.	DANA COMPANY Stockholders' Equity December 31, 2010	
	Contributed Capital Preferred stock, 9%, \$100 par (10,000 shares authorized, 1,100 shares issued) Common stock, \$10 par (20,000 shares authorized, 8,800 shares issued of which 100 shares	\$110,000
	are being held as treasury stock) Additional paid-in capital on preferred stock	88,000 22,500
	Additional paid-in capital on common stock Additional paid-in capital from	96,800
	treasury stock	2,500
	Total contributed capital	\$319,800
	Retained earnings (Note 1)	385,300
	Accumulated other comprehensive income (loss) Unrealized decrease in value of	
	available-for-sale securities (Note 2) Total contributed capital, retained earnings,	(10,000)
	and accumulated other comprehensive income Less: Treasury stock (100 shares at	\$695,100
	cost of \$22)	(1,100)
	Total stockholders' equity	<u>\$694,000</u>

Notes to Financial Statements

<u>Note 1</u>: Retained earnings are restricted in the amount of \$1,100, the cost of the treasury stock.

<u>Note 2</u>: The aggregate market value of the company's long-term investments in available-for-sale equity securities dropped below the carrying value of these securities by \$10,000 at the end of 2010.

<u>P17-21</u>

1.	(1)	Cash Common Stock, \$10 par Premium on Common Stock	40,000	10,000
		[1,000 × (\$40 - \$10)]		30,000
	(2)	Compensation Expense Common Stock Option Warrants	3,000	3,000
	(3)	Cash (500 x \$30) Common Stock Option Warrants (500 x \$3) Common Stock, \$10 par Premium on Common Stock (\$16,500 - \$5,000)	1 <i>5,</i> 000 1 <i>,5</i> 00	5,000 11,500
	(4)	Cash (200 x \$41) Treasury Stock (200 x \$31) Premium on Common Stock	8,200	6,200 2,000
	(5)	Land Donated Land for Factory Site from Columbus Development Association	50,000	50,000
	(6)	Legal Fees Expense (100 x \$142) Preferred Stock, \$100 par Premium on Preferred Stock	14,200	10,000 4,200
	(7)	Income Summary Retained Earnings	182,000	182,000
		Retained Earnings Cash (\$24,800 + \$43,000)	67,800	67,800

GAINES INDUSTRIES Statement of Changes in Stockholders' Equity For Year Ended December 31, 2010

	Preferr	ed Stock	<u>Comn</u>	<u>non Stock</u>	Pre	<u>mium</u>	Common Stock			
<u>Explanation</u>	Shares Issued	Par Value	Shares Issued	Par Value	Preferred Stock	Common <u>Stock</u>	Option Warrants	Retained Earnings	Donated <u>Capital</u>	Treasury <u>Stock</u>
Balances,	<u>1330CU</u>	<u>v aioc</u>	<u>1330CU</u>	<u>v aioc</u>	JIOCK	JICCK	<u>wananis</u>	<u>Lamings</u>	<u>capitai</u>	JIOCK
January 1, 2010	3,000	\$300,000	20,000	\$200,000	\$120,000	\$280,000	\$32,000	\$260,000		\$(15,500)
Issued common stock			1,000	10,000		30,000				
Compensation expense for share options							3,000			
Share options exercised			500	5,000		11,500	(1,500)			
Reissued treasury stock						2,000	. ,			6,200
Accepted donated land for factory site									\$50,000	
Issued preferred stock	100	10,000			4,200			100.000		
Net income Dividends Releases December 21								182,000 (67,800)		
Balances, December 31, 2010	<u>3,100</u>	<u>\$310,000</u>	21,500	<u>\$215,000</u>	<u>\$124,200</u>	<u>\$323,500</u>	<u>\$33,500</u>	<u>\$374,200</u>	<u>\$50,000</u>	<u>\$(9,300)</u>

17-60

P17-21 (continued)

3. GAINES INDUSTRIES Stockholders' Equity December 31, 2010	
Contributed Capital Preferred stock, 8%, \$100 par (5,000 shares	
authorized, 3,100 shares issued)	\$ 310,000
Common stock, \$10 par (25,000 shares authorized, 21,500 shares issued of which	
300 shares are being held as treasury stock	215,000
Premium on preferred stock	124,200
Premium on common stock	323,500
Common stock option warrants (Note 1)	33,500
Total contributed capital	\$1,006,200
Retained earnings (Note 2)	374,200
Donated land for factory site (Note 3)	50,000
Total contributed capital, retained earnings, and	
donated capital	\$1,430,400
Less: Treasury stock (300 common shares at \$31)	(9,300)
Total stockholders' equity	<u>\$1,421,100</u>

<u>Note 1</u>: The company has a share option plan for its key executives. In accordance with the plan, the shares under option and the option price per share for each executive are known on the grant date. During 2010, no new options were granted, compensation expense of \$3,000 was recorded, and 500 shares were issued.

Note 2: Retained earnings are restricted in the amount of \$9,300, the cost of treasury stock.

<u>Note 3</u>: The Columbus Development Association donated a parcel of land valued at \$50,000 in an industrial park for a factory building site.

4.	Return on stockholders' equity for 2010	=	<u>Net income</u> Average stockholders' equity
		=	<u>\$182,000</u> (\$1,421,100 + \$1,176,500)/2
		=	<u>\$182,000</u> \$1,298,800
		=	<u>14.0%</u>

P17-22 (AICPA adapted solution)

<u>Note to Instructor</u>: This problem appeared in the CPA Exam before GAAP was modified to require additional disclosures about fair values not specified in the problem.

RAUN COMPANY Stockholders' Equity Section of Balance Sheet December 31, 2010

9% cumulative convertible preferred stock,		
\$100 par value, 2,000,000 shares authorized,		
1,000,000 shares issued (Note 1)	\$	100,000,000
Common stock, \$1 stated value, 5,000,000 shares		
authorized, 3,580,000 shares issued (Note 2)		3,580,000
Paid-in Capital in Excess of Par or Stated Value		
On preferred stock		20,000,000
On common stock		XXXX
Total paid-in capital	\$	XXXXXXXXXXXXX
Retained earnings		XXXX
Total stockholders' equity	<u>\$</u>	XXXXXXXXXXXXX

<u>Note 1</u>: Convertible preferred stock. On December 31, 2010, all 1,000,000 shares of preferred stock outstanding of the company were convertible into common stock on a share-for-share basis. No shares of preferred stock were converted into common stock during 2010. Any preferred stock not converted into common stock by December 31, 2016 will lose its conversion right and becomes callable at par value at the discretion of the company.

<u>Note 2</u>: Employee share option plan and employee share purchase plan. The company has granted options to officers and certain key employees to purchase common stock of the company at the market price at the date of the grant. All options are exercisable in installments of one-third each year, commencing one year following date of the grant, and expire if not exercised within 4 years of the grant date. The following tabulation summarizes certain information relative to employee share options.

	<u>Shares</u>	Option Price
Outstanding at January 1, 2010	70,000	\$47.00 to \$83.00
Granted during 2010 Exercised in 2010	1 <i>5,</i> 000 20,000	86.00 47.00 to 79.00
Expired in 2010	None	
Outstanding at December 31, 2010	65,000	54.00 to 86.00
Exercisable at December 31, 2010	30,000	54.00 to 79.00

P17-22 (continued)

1.

2.

Pursuant to the terms of the employee share purchase plan, employees have subscribed to, paid for, and received 60,000 shares of common stock of the company during 2010. The company contributed one-half and the employees paid one-half of the stock price based on the market value of the common stock at the date of the subscription.

At December 31, 2010, a total of 355,000 shares of common stock were available for future grants under the share option plan and future purchases under the employee share purchase plan.

P17-23 (AICPA adapted solution)

FAY, INC. Long-Term Liabilities Section of Balance Sheet December 31, 2010

9% unsecured note payable to bank,	
due in annual principal installments	
of \$800,000, less current portion	\$ 3,200,000 [1]
11% debenture bonds payable due December 31,	
2022, plus unamortized premium of \$337,640	<u> </u>
Total long-term liabilities	<u>\$ 8,537,640</u>

FAY, INC. Stockholders' Equity Section of Balance Sheet December 31, 2010

Common stock, \$10 par; 2,000,000 shares authorized; 840,000 shares issued;	
829,500 shares outstanding	\$ 8,400,000 [3]
Additional paid-in capital	2,485,000 [4]
Retained earnings	4,765,000 [5]
Accumulated other comprehensive income (loss)	
Unrealized decrease in value of	
noncurrent available-for-sale securities	(20,000)[6]
Treasury stock, at cost, 10,500 shares	(130,000)[7]
Total stockholders' equity	\$15,500,000

P17-23 (continued)

3.

FAY, INC.

Interest Expense For the Year Ended December 31, 2010

Note payable to bank Debenture bonds payable Total interest expense			\$ 60,000 [8] <u>535,240</u> [9] <u>\$595,240</u>		
Explanations of Amounts					
 [1] 9% note payable to bank Note payable, 11/2/10 Deduct installment due 11/2 Long-term portion, 12/31/10 	/11		\$4,000,000 <u>(800,000)</u> <u>\$3,200,000</u>		
[2] Debenture bonds payable Carrying amount, 12/31/09 Deduct amortization of bond Interest paid 12/31/10 (\$5,		\$550,000	\$5,352,400		
	Less effective interest (\$5,352,400 x 10%) (535,240)				
[3] Common stock issued Balance 5% stock dividend issued Balance	<u>Date</u> 12/31/09 03/02/10 12/31/10	<u>Shares</u> 800,000 <u>40,000</u> <u>840,000</u>	<u>Amount</u> \$8,000,000 <u>400,000</u> <u>\$8,400,000</u>		
 [4] Additional paid-in capital Balance, 12/31/09 Treasury stock reissued, 1/16, [\$225,000 - \$195,000 (\$3 Stock dividend issued, 3/2/10 	25,000 x 60%)])		\$2,295,000 30,000		
[(\$14 - \$10) x 40,000 sha Balance, 12/31/10	resj		<u>160,000</u> <u>\$2,485,000</u>		
[5] Retained earnings Balance, 12/31/09 Stock dividend issued, 3/2/10	ſ		\$2,465,000		
(\$14 x 40,000 shares) Net income for 2010 Balance, 12/31/10	J		(560,000) <u>2,860,000</u> <u>\$4,765,000</u>		

P17-23 (continued)

3. (continued)

[6]	Unrealized decrease in value of available-for-sale securities Balance, 12/31/10 [(\$20 - \$18) x 10,000 shares]	<u>\$ 20,000</u>
[7]	Treasury stock at cost [(10,000 ÷ 25,000) x \$325,000]	<u>\$130,000</u>
[8]	Interest expense on note payable to bank [11/2/10 to 12/31/10 (\$4,000,000 x 9% x 2/12)]	<u>\$ 60,000</u>
[9]	Interest expense on debenture bonds payable Interest paid 12/31/10 for year ended 12/31/10 Deduct amortization of bond premium for year Interest expense year ended 12/31/10	\$550,000 [2] 14,760 [2] <u>\$535,240</u>

<u>P17-24</u>

- 1. \$14,000[(\$320,000 ÷ 8 x 1/2) x (1-0.30)]
- 2. \$12,000 (\$200,000 x 0.06)
- 3. \$165,000 [(100,000 + 13,000 5,000 + 2,000) x \$1.50]
- 4. \$720,000 (fair value on date of declaration)
- 5. 113,000 (100,000 + 13,000)
- 6. \$113,000 (113,000 x \$1)
- 7. $934,000 [800,000 + {13,000 x ($11 1)} + {2,000 x ($16 $14)}]$
- 8. \$42,000 (3,000 x \$14)
- 9. \$826,000 (\$838,000 \$12,000)

ANSWERS TO CASES

<u>C17-1</u> (AICPA adapted solution)

1. Dividends on outstanding preferred stock must be subtracted from net income or added to net loss for the period before computing EPS on the common shares. This generalization will be modified by the various features and different requirements preferred stock may have with respect to dividends. Thus, if preferred stock is cumulative, it is necessary to subtract its current dividend requirements from net income (or to add them to net loss) in order to arrive at the amount into which to divide outstanding common shares to compute basic EPS on the latter. This must be done regardless of whether or not the preferred dividends were actually declared. Where the preferred shares are noncumulative, only preferred dividends actually declared during the current period need be subtracted from net income (or added to net loss) to arrive at the amount to be used in basic EPS calculations.

In case the preferred shares are convertible into common stock, when assuming conversion, dividend requirements on the preferred shares are not deducted from net income. This applies when testing for potential dilution to determine whether or not the diluted EPS figures for the period are lower than basic EPS figures.

- 2. When options and warrants to buy common stock are outstanding and their option price (that is, proceeds the corporation would derive from issuance of common stock pursuant to the warrants and options, including any unrecognized compensation cost) is less than the average price at which the company could acquire its outstanding shares as treasury stock, the treasury stock method is generally applicable. In these circumstances, existence of the options and warrants would be dilutive. However, if the option price exceeded the average price of the common stock, the cash proceeds from their assumed exercise would provide for repurchasing more common shares than were issued when the warrants were exercised, thereby reducing the number of shares outstanding. In these circumstances, assumed exercise of the warrants would be antidilutive, so exercise would not be presumed for purposes of computing diluted EPS.
- 3. In the case of convertible bonds that are assumed to be converted and are dilutive, their interest (less tax effect) is added back to net income as the numerator element of the diluted EPS calculation while the number of shares of common stock into which they would be convertible is added to the shares outstanding to arrive at the denominator element of the calculation.

<u>C17-2</u> (AICPA adapted solution)

A capital structure is regarded as complex when it includes potentially dilutive convertible securities, options, warrants, or other rights that upon conversion or exercise could dilute earnings per common share.

When a corporation has a complex capital structure, there should be a dual presentation with equal prominence on the face of the earnings statement. This presentation is to include a basic earnings per share that is based on average outstanding common shares divided into net earnings. Also included in this presentation is the calculation of the diluted earnings per share. This is a pro forma presentation that reflects dilution of earnings per share that would have occurred if all potential common shares that would individually reduce earnings per share had taken place at the beginning of the year.

C17-2 (continued)

Additional disclosures when a complex structure exists include a schedule or note identifying and reconciling the numerators and denominators on which basic and diluted earnings per share are calculated. The schedule or note should also include the amount of preferred dividends deducted to determine the income available to common stockholders, the potential common shares that were <u>not</u> included in diluted earnings per share because they were antidilutive, and any material impact on common shares outstanding of subsequent transactions after the close of the accounting period but before issuance of the financial report.

C17-3 (AICPA adapted solution)

The general categories of a corporation's capital are contributed (invested) capital, earned capital (retained earnings), and accumulated other comprehensive income.

Contributed capital represents the amounts paid in for all classes of shares of stock and the amounts capitalized by order of the corporation's board of directors. Included in contributed capital is legal capital, which is usually the aggregate par value or stated value of the shares issued. Legal capital is usually not subject to withdrawal; it is intended to protect corporate creditors. Contributed capital also includes other amounts in addition to the legal capital. These amounts are generally referred to as additional paid-in capital and include the following:

- Premiums over the par (stated) value of the stock issued (including stock dividends).
- Donations of assets to the corporation by governmental units.
- Assessments on stockholders.
- Forfeitures of stock subscriptions.
- Excess of proceeds from reissuing treasury stock over its cost.
- Conversion of convertible bonds or preferred stock.
- Reacquisition of outstanding shares at an amount below par (stated) value.
- Tax benefits from certain share options.

Retained earnings are the accumulated net earnings of a corporation in excess of any net losses from operations and dividends (cash or stock). Total retained earnings should also include prior-period adjustments as direct increases or decreases and may include certain reserves. These reserves are restrictions of retained earnings as unavailable for dividends. These reserves and related restrictions may arise as a result of a restriction in a bond indenture or other formal agreement.

C17-3 (continued)

Accumulated other comprehensive income includes amounts accumulated to date for the following items:

- 1. Unrealized increases (gains) or decreases (losses) in the market (fair) value of investments in available-for-sale securities.
- 2. Translation adjustments from converting the financial statements of a company's foreign operations to U.S. dollars.
- 3. Certain gains and losses on "derivative" financial instruments.
- 4. Certain pension liability adjustments.

(<u>Note to Instructor</u>: This case appeared in the Uniform CPA Examination before GAAP required the reporting of accumulated other comprehensive income. The authors have updated the solution for the new GAAP.)

<u>C17-4</u> (AICPA adapted solution)

1. The date of declaration is the date when the liability for dividends payable is recorded by a debit to retained earnings and a credit to dividends payable.

The date of stockholders of record is the date that determines which stockholders will receive dividends on the payment date. No journal entry is made at this date.

The date of payment is the date when the dividends are paid and is recorded by a debit to dividends payable and a credit to cash.

2. The effect of an ordinary 10 percent common stock dividend is that an amount equal to the fair value of the additional common stock issued is transferred from retained earnings to common stock and additional paid-in capital. There is no effect on total stockholders' equity.

<u>C17-5</u> (AICPA adapted solution)

- 1. A stock split effected in the form of a dividend is a distribution of corporate stock to present stockholders in proportion to each stockholder's current holdings and can be expected to cause a material decrease in the fair value per share of the stock. GAAP specifies that a distribution in excess of 20% to 25% of the number of shares previously outstanding would cause a material decrease in the fair value. This is a characteristic of a stock split as opposed to a stock dividend, but, for legal reasons, the term "dividend" must be used for this distribution. From an accounting viewpoint, it should be disclosed as a stock split effected in the form of a dividend because it meets the accounting definition of a stock split as split as explained above.
- 2. The stock split effected in the form of a dividend differs from an ordinary stock dividend in the amount of other paid-in capital or retained earnings to be capitalized. An ordinary stock dividend involves capitalizing (charging) retained earnings equal to the fair value of the stock distributed. A stock split effected in the form of a dividend involves no charge to retained earnings or other paid-in capital if the par (stated) value of the stock is reduced in inverse proportion to the distribution. If the stock's par (stated) value is not reduced in inverse proportion to the distribution of stock, other paid-in capital or retained earnings

<u>C17-5</u> (continued) 2. (continued)

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

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

<u>C17-6</u> (AICPA adapted solution)

- 1. Convertible securities are included in the computation of the number of shares in the denominator for diluted earnings per share as long as they have a dilutive effect. Any related dividends or bond interest expense (net of taxes) are excluded from the numerator.
- 2. Antidilutive convertible securities are excluded from diluted earnings per share. They are, however, described in the notes to the financial statements.

<u>C17-7</u> (AICPA adapted solution)

The diluted earnings per share computations are based on net earnings divided by the adjusted number of shares. The weighted average number of common shares is adjusted for the assumed increment in shares under the share option plan when the average market price is higher than the option price (plus any unrecognized compensation cost per share). The assumed increment is the difference between assumed shares issued under the plan and the assumed shares reacquired at the average market price with the proceeds.

<u>C17-8</u> (AICPA adapted solution)

Note to Instructor: This case includes treasury stock, discussed in Chapter 16.

 Brady should account for the cash dividend on December 21, 2010, the declaration date, by debiting retained earnings and crediting cash dividends payable for \$1 per share multiplied by the number of shares outstanding. A cash dividend is a distribution to the corporation's stockholders. The liability for this distribution is incurred on the declaration date, and it is a current liability because it is payable within one year (January 11, 2011). The effect of the cash dividend on Brady's balance sheet at December 31, 2010 is an increase in current liabilities and a decrease in retained earnings.

C17-8 (continued)

- 2. Brady should account for the stock dividend by debiting retained earnings for \$16 per share (the market value of the stock in October 2010, the date of the stock dividend) multiplied by the 2,000 shares distributed. Brady should then credit common stock for the par value of the common stock (\$10 per share) multiplied by the 2,000 shares distributed, and credit additional paid-in capital for the excess of the market value (\$16 per share) over the par value (\$10 per share) multiplied by the 2,000 shares distributed. Total stockholders' equity does not change, but, because this is considered a small stock dividend, recognition has been made of a capitalization of retained earnings equivalent to the fair value of the additional shares resulting from the stock dividend.
- 3. Brady should account for the purchase of the treasury stock on August 13, 2010 by debiting treasury stock and crediting cash for the cost of the purchase (1,000 shares x \$12 per share). Brady should account for the sale of the treasury stock on September 14, 2010 by debiting cash for the selling price (500 shares x \$14 per share), crediting treasury stock for cost (500 shares x \$12 per share), and crediting additional paid-in capital from treasury stock transactions for the excess of the selling price over the cost (500 shares x \$2 per share). The remaining treasury stock (500 shares x \$12 per share) should be presented separately in the stockholders' equity section of Brady's December 31, 2010 balance sheet as an unallocated reduction of stockholders' equity. These shares are considered issued but not part of common stock outstanding.

<u>C17-9</u>

- 1. The company uses the term "reinvested earnings"; the amount at the end of 2007 was \$36,235 million (p. 67).
- 2. The balance of accumulated other comprehensive income on December 31, 2007 was \$626 million. The \$(1,291) beginning loss was decreased by \$1,575 million of net foreign currency translation adjustment, increased by a \$(64) million net loss on derivatives, decreased by a \$14 million net change in unrealized gain on available-for-sale securities, and decreased by a \$392 million net change in pension liability (p. 69).
- 3. The basic net income per share was \$2.59 for 2007 (p. 66). No preferred dividends were subtracted because the company has no preferred stock outstanding (p. 67). The average number of common shares outstanding used in the computation of the basic net income per share was 2,313 million (p. 66). The diluted net income per share was \$2.57 for 2007. This compares to \$2.16 in 2006. Dilutive securities for 18 million shares were included because, if exercised, they would decrease net income per share. Approximately 71 million stock option awards were excluded because, if exercised, would be antidilutive (p. 66 and 73).
- 4. The dividends per share were \$1.36 and the total dividends were \$3,149 million for 2007 (p. 69).
- 5. The return on shareowners' equity for 2007 was 30.9%, computed as follows:

Net Income	_	\$5,981	- 20.007
	=		= 30.9%
Average Shareowners' Equity		(\$21,744 + \$16,920)/2	

The return on shareowners' equity for 2006 was 30.5%, computed as follows:

\$5,080 (\$16,920 + \$16,355)/2 = 30.5%

<u>C17-10</u>

<u>Note to Instructor</u>: This case does not have a definitive answer. From a financial reporting perspective, GAAP is identified and summarized. From an ethical perspective, various issues are raised for discussion purposes.

From a financial reporting perspective, in regard to bad debt expense, under the percentage of net sales method the bad debt expense is determined by multiplying the historical uncollectible percent of net credit sales times the net credit sales for the current year. The historical percentage may be adjusted as new evidence arises that shows that a change in the uncollectible percentage has occurred. This type of expense allocation is known as the association of cause and effect in the matching of revenues and expenses. In regard to depreciation, the straight line method is used when it is expected that the benefits to be derived from the asset will be constant each period of its life. An activity method is used when it is expected that the service life of an asset is affected primarily by the amount the asset is used. The estimated service life or residual value may be changed if new information arises that justifies the change in estimate. This type of expense allocation is known as systematic and rational allocation. For Ryan Company, a reduction in credit sales by itself does not warrant a change in the estimated uncollectible percent. On the other hand, if the decrease in credit sales occurred because customers must meet stricter credit policies before being allowed to make credit sales, then an adjustment of the uncollectible percent may be warranted. Ryan's depreciation method is not activity based. Hence, an increase in the estimated life because of decreased usage may not be appropriate. On the other hand, consideration might be given to switching to an activity based method, if, in fact, it can be justified that the service life is based on the amount the factory equipment is used. If this switch is made, this is a change in method and the cumulative effects would be reported on the income statement. However, because the activity method is more complex (and costly) than the straight-line method, many companies use the straight-line method even when the life of the asset is constrained by physical causes. In this case, an increase in the service life may be appropriate.

From an ethical perspective, the issue involves whether it is appropriate to adjust expenses downward to offset decreased revenues and increase income, thereby increasing earnings per share (EPS) to meet the company's goal. The primary stakeholders are you, the company's officers, and current and potential stockholders. An increase in earnings per share might get you a promotion, would make the officers appear to be managing the company well, and might continue the increase in the market value of the shares held by current stockholders. On the other hand, if this increase is not grounded in economic reality potential stockholders may be misled about the value of an investment in the company. An adjustment of expenses is only appropriate if, as a result, economic reality is better depicted in the income statement. An adjustment of expenses to "inflate" net income to achieve a targeted EPS goal may not be appropriate. More investigation is needed concerning the legitimacy of the adjustment of the bad debt percentage and the justification for a change in depreciation method or service life.

ANSWER TO RESEARCH SIMULATION

<u>R17-1</u>

<u>Note to Instructor</u>: Students are expected to cite references to GAAP in their research of this issue. They might use the <u>FARS</u> electronic database, pronouncements listed on the FASB web site, the <u>FASB Original Pronouncements</u>, the <u>FASB Current text</u>, or other primary sources of GAAP to obtain these references. They may also use the <u>FASB Accounting</u> <u>Standards Codification</u> which is cited in parentheses.

To: President of Tara Corporation

From: Student

I have researched the issue of how to report comparative earnings per share over a twoyear period when a company reports basic earnings per share in one year and is required to report both basic and diluted earnings per share in the next year. According to <u>FAS 128</u>, par. 38 (FASB Cod. # 260-10-45-7), a dual presentation is required for all periods presented if it is required for any period presented. Since the Tara Corporation has a complex capital structure in the second year, the dual presentation is required for both the second and first years. Thus, I recommend the following earnings per share disclosures on the 2010 and 2011 comparative income statements in Tara Corporation's 2011 annual report:

Basic earnings per share	<u>2010</u> <u>\$1.05</u>	
Diluted earnings per share	<u>\$1.05</u>	<u>\$0.98</u>