

Question #1 of 130

Question ID: 1573393

The following information pertains the QRK Company:

- One million shares of common stock outstanding at the beginning of 2005.
- 200,000 shares issued on the last day of March.
- 500,000 shares issued on the last day of June.
- 800,000 shares issued on the last day of September.

What is the number of shares that should be used to compute 2005 earnings per share for the QRK Company?

A) 1.6 million.



B) 1.9 million.



C) 2.5 million.



Explanation

The weighted average number of common shares outstanding is the number of shares outstanding during the year weighted by the portion of the year they were outstanding. For the QRK Company, the weighted number of shares outstanding is the original one million shares plus 150,000 shares for the end-of-March issue ($= 200,000 \times 9/12$), plus 250,000 shares for the end-of-June issue ($= 500,000 \times 6/12$), plus 200,000 shares for the end-of-September issue ($= 800,000 \times 3/12$), or 1.6 million shares.

(Module 30.4, LOS 30.d)

Question #2 of 130

Question ID: 1573375

Suppose that JPK, Inc., paid dividends of \$80,000 to its preferred shareholders and \$40,000 to its common shareholders during 2004. The company had 20,000 shares of common stock issued and outstanding on January 1, 2004, issued 7,000 more shares on June 1, 2004, and paid a 10% stock dividend on August 1, 2004. Assuming that JPK had \$150,000 in net income, what is the firm's basic earnings per share (EPS) for 2004?

A) \$2.71.



B) \$2.64.



C) \$2.91.



Explanation

1/1/00 22,000 shares (adjusted for 10% stock dividend) \times 12 months = 264,000

6/1/00 7,700 shares (adjusted for 10% stock dividend) \times 7 months = 53,900

Total share month = 317,900

Average shares = 317,900 / 12 = 26,492




Basic EPS = $(\$150,000 - \$80,000) / 26,492 = 2.64$

(Module 30.4, LOS 30.d)

Question #3 of 130

Question ID: 1573470

Which of the following statements regarding basic and diluted EPS is *least* accurate?

- A) A simple capital structure contains no potentially dilutive securities. 
- B) Antidilutive securities decrease EPS if they are exercised or converted. 
- C) Dilutive securities decrease EPS if they are exercised or converted to common stock. 

Explanation




Antidilutive securities *increase* EPS if exercised or converted to common stock.

(Module 30.4, LOS 30.d)

Question #4 of 130

Question ID: 1573362

Which expense recognition method is *most appropriate* for intangible assets with indefinite lives?

- A) Test for impairment but do not amortize. 
- B) Use accelerated amortization for tax reporting and straight-line amortization for financial reporting. 
- C) Use straight-line amortization. 

Explanation

Under IFRS and U.S. GAAP, intangible assets with indefinite lives (e.g., goodwill) are not amortized but are tested for impairment at least annually.

(Module 30.2, LOS 30.b)

Question #5 of 130

Question ID: 1573461

An analyst has gathered the following information about Artcraft, Inc. for the year:

- Net income of \$30,000.
- 5,000 shares of common stock and 500 shares of 8%, \$90 par convertible preferred stock outstanding during the whole year.
- Each share of convertible preferred can be converted into 4 shares of common stock.
- Last year, Artcraft issued at par, \$60,000 total face value of 6.0% convertible bonds, with each of the 60 bonds convertible into 110 shares of the Artcraft common stock.

If Artcraft's effective tax rate is 40%, what will Artcraft report as diluted earnings per share (EPS)?

A) \$3.37.



B) \$3.12.



C) \$2.36.



Explanation

First calculate Basic EPS, as any anti-dilutive instruments should be excluded.

Basic EPS = (net income – preferred dividends)/weighted average common shares

Basic EPS = (\$30,000 – \$3,600)/5,000 = \$5.28.

Diluted EPS = adjusted earnings after conversion (EAC) / weighted average plus potential common shares outstanding.

Step 1: *Calculate Adjusted EAC*

<i>adjusted EAC:</i>		net income - preferred dividends
	+	dividends on convertible preferred stock
	+	<u>after-tax interest on convertible debt</u>
	=	adjusted earnings available for common shares

preferred dividends = convertible preferred dividends = (0.08)(90)(500) = 3,600

convertible debt interest = (60,000)(0.06)(1 – 0.40) = 2,160

adjusted EAC = (30,000 – 3,600 + 3,600 + 2,160) = **\$32,160**

Step 2: *Calculate Weighted average plus potential common shares outstanding.*

weighted average common shares			=	5,000
shares from conversion of convertible preferred stock	=	(500 × 4)	=	2,000
shares from conversion	=	(60 × 110)	=	<u>6,600</u>

of convertible bonds				
<i>weighted ave. plus potential common shares outst.</i>			=	13,600

Step 3: Confirm dilution or anti-dilution.

The impact of the convertible preferred stock is $\$3,600/2,000 = \1.8 , this is less than BEPS and so dilutive.

The impact of the convertible bonds is $\$2,160/6,600 = \0.33 , again less than BEPS and so also dilutive. Both should be included in the final calculation.

Step 4: *Calculate Diluted EPS*

$$\text{Diluted EPS} = 32,160 / 13,600 = \mathbf{\$2.36}.$$

(Module 30.4, LOS 30.d)

Question #6 of 130

Question ID: 1573454

Selected information from Caledonia, Inc.'s financial activities in the year 20X6 is as follows:

- Net income = \$460,000.
- 2,300,000 shares of common stock were outstanding on January 1.
- The average market price per share was \$2 and the year-end stock price was \$1.50.
- 1,000 shares of 8%, \$1,000 par value preferred shares were outstanding on January 1. Preferred dividends were paid in 20X6.
- 10,000 warrants, each of which allows the holder to purchase 100 shares of common stock at an exercise price of \$1.50 per common share, were outstanding the entire year.

Caledonia's diluted earnings per share for 20X6 are *closest* to:

A) \$0.165.



B) \$0.15.



C) \$0.180.



Explanation

Caledonia's basic EPS = (net income – preferred stock dividends) / (weighted average common shares outstanding)

$$= [\$460,000 - (\$1,000 \times 1,000 \times 0.08)] / 2,300,000 = \$0.17.$$

Using the treasury stock method, if the warrants were exercised, cash inflow would be $10,000 \times 100 \times \$1.50 = \$1,500,000$. The number of Caledonia shares that could be purchased with the inflow, using the average share price, is $\$1,500,000 / \$2 = 750,000$. The net increase in common shares outstanding would have been $1,000,000 - 750,000 = 250,000$.

$$\text{Diluted EPS} = \$380,000 / (2,300,000 + 250,000) = \$0.15.$$

(Module 30.4, LOS 30.d)

Question #7 of 130

Question ID: 1573379

At the beginning of 2004, the Alaska Corporation had 2 million shares of common stock outstanding and no preferred stock. At the end of August, 2004, Alaska issued 600,000 new shares of common stock. If Alaska reported net income equal to \$8.8 million, what was the firm's earnings per share for 2004?

A) \$4.00.



B) \$3.67.



C) \$3.38.



Explanation

EPS = earnings available to common shareholders divided by the weighted average number of common shares outstanding. With no preferred shareholders, all of net income is available to the common shareholders. The weighted average number of shares outstanding equals the original 2 million shares plus 4/12 of the additional 600,000 shares. The 4/12 weight is used because the new shares were only outstanding 4 months of the year. Thus, $\text{EPS} = \$8.8 \text{ million} / [2 \text{ million} + (4/12)(600,000)] = 8.8/2.2 = \4.00 .

(Module 30.4, LOS 30.d)


Question #8 of 130

Question ID: 1573462

In calculating the numerator for diluted Earnings Per Share, the interest on convertible debt is:

A) subtracted from earnings available to common shareholders after an adjustment for taxes.



B) added to earnings available to common shareholders after an adjustment for taxes. 

C) added to earnings available to common shareholders. 

Explanation

Formula = Diluted EPS = $[(\text{Net income} - \text{Preferred dividends}) + \text{Convertible preferred dividends} + (\text{Convertible debt interest})(1 - t)] / [(\text{Weighted average shares}) + (\text{Shares from conversion of conv. pfd shares}) + (\text{Shares from conversion of conv. debt}) + (\text{Shares issuable from stock options})]$

(Module 30.4, LOS 30.d)

Question #9 of 130

Question ID: 1573394

Consider the following information on the past year's operating performance and current capital structure for the following two companies:

<i>Supple Moves</i>	<i>Perfect Collection</i>
Paid no dividends	Paid common & pref. div.
Ave. Stock Price of \$42.00	Ave. Stock Price of \$22.00
Positive net income	Positive net income
110,000 warrants with an exercise price of \$50.00	Convertible debt with an 8.0% coupon, conversion ratio at 10.0.
	150,000 options outstanding with an exercise price of \$19.50

Based on the information above, which of the companies has a complex capital structure?

A) Supple Moves and Perfect Collection. 

B) Perfect Collection only. 

C) Supple Moves only. 

Explanation

A complex capital structure is one that has *potentially* dilutive elements. Here, Supple Moves and Perfect Collection both meet this criteria. (The warrants for Supple Moves will be dilutive if the average stock prices were over \$50.00.)

(Module 30.4, LOS 30.d)

Question #10 of 130

Question ID: 1573373

A company has the following sequence of events regarding their stock:

- One million shares outstanding at the beginning of the year.
- On June 30th, they declared and issued a 10% stock dividend.
- On September 30th, they sold 400,000 shares of common stock at par.

Basic earnings per share at year-end will be computed on how many shares?

A) 1,200,000.



B) 1,100,000.



C) 1,000,000.



Explanation

$$\begin{aligned} 1,000,000(12) &= 12,000,000 \\ 100,000(12) &= 1,200,000 \\ 400,000(3) &= 1,200,000 \\ \text{Total} &= \frac{14,400,000}{12} = 1,200,000 \end{aligned}$$

(Module 30.4, LOS 30.d)

Question #11 of 130

Question ID: 1573403

Which type of a capital structure contains no dilutive securities?

A) Simple.



B) Basic.



C) Complex.



Explanation

A complex capital structure contains potentially dilutive securities such as options, warrants, or convertible securities. There is no *basic* capital structure but there are basic earnings per share which does NOT consider the effects of any dilutive securities in the computation of EPS.

(Module 30.4, LOS 30.d)

Question #12 of 130

Question ID: 1573370

Changes in asset lives and salvage values are changes in accounting:

- A) estimates and are applied prospectively.
- B) principle and are applied retrospectively.
- C) estimates and are applied retrospectively.



Explanation

Changes in asset lives and salvage value are changes in accounting estimates and are not considered changes in accounting principle. Changes in accounting estimates are applied prospectively.

(Module 30.3, LOS 30.c)

Question #13 of 130

Question ID: 1573481

Selected information from Feder Corp.'s financial activities for the year is as follows:

- Net income was \$7,650,000.
- 1,100,000 shares of common stock were outstanding on January 1.
- The average market price per share was \$62.
- Dividends were paid during the year.
- The tax rate was 40%.
- 10,000 shares of 6% \$1,000 par value preferred shares convertible into common shares at a rate of 20 common shares for each preferred share were outstanding for the entire year.
- 70,000 options, which allow the holder to purchase 10 shares of common stock at an exercise price of \$50 per common share, were outstanding the entire year.

Feder Corp.'s diluted earnings per share (EPS) was *closest* to:

- A) \$4.91.
- B) \$5.87.
- C) \$5.32.



Explanation

Feder's basic earnings per share ((net income – preferred dividends) / weighted average shares outstanding) was $((\$7,650,000 - (\$1,000 \times 10,000 \times 0.06)) / 1,100,000 =) \6.41 .

If the convertible preferred stock was converted to common stock at January 1, $(10,000 \times 20 =) 200,000$ additional common shares would have been issued, dividends on the preferred stock would not have been paid, and Diluted EPS would have been $(\$7,650,000 / (1,100,000 + 200,000) =) \5.88 . Because \$5.88 is less than basic EPS of \$6.41, the preferred shares are dilutive.

Using the treasury stock method, if the options were exercised cash inflow would be $(70,000 \times 10 \times \$50 =) \$35,000,000$. The number of Feder shares that can be purchased with the inflow (cash inflow divided by the average share price) is $(\$35,000,000 / \$62 =) 564,516$.

The number of shares that would have been created is $(700,000 - 564,516 =) 135,484$. Diluted EPS was $[(\$7,650,000 - (\$1,000 \times 10,000 \times 0.06)) / (1,100,000 + 135,484) =) \5.71 . Because this is less than the EPS of \$6.41, the options are dilutive.

Combining the calculations, Diluted EPS was $(\$7,650,000) / (1,100,000 + 200,000 + 135,484) = \5.32 .

(Module 30.4, LOS 30.d)

Question #14 of 130



Question ID: 1573468

Advantage Corp.'s capital structure was as follows:

	December 31, 2005	December 31, 2004
Outstanding shares of stock:		
Common	110,000	110,000
Convertible Preferred	10,000	10,000
% Convertible Bonds	\$1,000,000	\$1,000,000

During 2005, Advantage paid dividends of \$3 per share on its preferred stock. The preferred shares are convertible into 20,000 shares of common stock. The 8% bonds are convertible into 30,000 shares of common stock. Net income for 2005 was \$850,000. Assume the income tax rate is 30%.

Calculate Advantage's basic and diluted earnings per share (EPS) for 2005.

	<u>Basic EPS</u>	<u>Diluted EPS</u>	
A) \$7.45	\$5.66		
B) \$6.31	\$5.66		

C) \$7.45

\$6.26



Explanation

Basic EPS = net income – pref div / wt. ave. shares of common

$$[850,00 - (3 \times 10,000)] / 110,000 = \$7.45$$

Diluted EPS = [(net income – preferred dividends) + convertible preferred dividends + (convertible debt interest)(1 – t)] / [(weighted average shares) + (shares from conversion of conv. pfd shares) + (shares from conversion of conv. debt) + (shares issuable from stock options)]

$$[(850,000 - (3 \times 10,000)) + 30,000 + (80,000)(1 - 0.3)] / [(110,000) + (20,000) + (30,000)] = \$5.66.$$

(Module 30.4, LOS 30.d)

Question #15 of 130

Question ID: 1573420

At the beginning of the year, BJC Company had 40,000 shares of \$1 par common stock outstanding. On April 1, BJC issued a 2-for-1 stock split and on July 1, BJC reacquired 20,000 shares. On October 1, BJC issued 8,000 shares of \$10 par, 5% cumulative preferred stock. How many shares should BJC use to calculate diluted earnings per share?

A) 60,000.



B) 62,000.



C) 70,000.



Explanation

The stock split is applied from the beginning of the year. Because the preferred stock is not convertible, it has no impact on the number of common shares for calculating diluted EPS. Beginning shares (40,000 shares × 12 months) + split shares (40,000 shares × 12 months) – reacquired shares (20,000 shares × 6 months) = 840,000, and 840,000 / 12 months = 70,000 shares.

(Module 30.4, LOS 30.d)

Question #16 of 130

Question ID: 1573380

Last year, the AKB Company had net income equal to \$5 million. Combined state and local taxes were 45%. The firm paid \$1 million to holders of its 1 million common shares and \$250,000 to 100,000 preferred shareholders. What was AKB's earnings per share (EPS) last year?

A) \$4.75.



B) \$2.50.



C) \$2.25.



Explanation

EPS = earnings available to common shareholders divided by the weighted average number of common shares outstanding. Earnings available to common shareholders is net income minus preferred dividends, or \$4,750,000 (= \$5 million – 250,000) for AKB.

(Module 30.4, LOS 30.d)

Question #17 of 130

Question ID: 1573360

The approach to revenue recognition in the converged accounting standards that were issued in May 2014 is *best* described as:

A) objectives-based.



B) principles-based.



C) rules-based.



Explanation

The converged accounting standards concerning revenue recognition, issued in May 2014 by the IASB and FASB, are principles-based.

(Module 30.1, LOS 30.a)

Question #18 of 130

Question ID: 1573377

Maine Company's stock transactions during the year are described below:

	100,000
January 1	common shares outstanding
March 1	2 for 1 stock split
August 1	10% stock dividend

The weighted average number of shares outstanding used to calculate earnings per share is:

A) 211,111.



B) 220,000.



C) 201,666.



Explanation

The January 1 balance of common shares outstanding is adjusted retroactively for both stock dividends and stock splits. The weighted average shares outstanding for the year = $100,000 \times 2 \times 1.1 = 220,000$.

(Module 30.4, LOS 30.d)

Question #19 of 130

Question ID: 1573478

Examples of potentially dilutive securities *least likely* include:

A) convertible preferred stock.



B) stock options.



C) premium bonds.



Explanation

Whether a bond is issued or valued at a premium or discount is not relevant to whether the bond is potentially dilutive to earnings per share. Bonds and preferred stock are only potentially dilutive if they are convertible to common shares. Stock options and warrants are potentially dilutive because they will increase common shares outstanding if they are exercised.

(Module 30.4, LOS 30.d)

Selected information from Baltimore Corp's financial activities in the year 2004 is as follows:

- Net income was \$4,200,000.
- 750,000 shares of common stock were outstanding on January 1.
- The average market price per share was \$50 in 2004.
- Dividends were paid in 2004.

10,000 warrants, which allowed the holder to purchase 10 shares of common stock for each warrant held at a price of \$40 per common share, were outstanding the entire year.

Baltimore's diluted earnings per share (Diluted EPS) for 2004 is *closest* to:

A) \$4.94.



B) \$5.45.



C) \$5.60.



Explanation

Baltimore's basic earnings per share (EPS) (net income / weighted average shares outstanding) for 2004 was $\$4,200,000 / 750,000 = \5.60 .

To calculate diluted EPS, we use the treasury stock method to account for the warrants:

- Number of common shares created if options are exercised = $10,000 \times 10 = 100,000$
- Cash inflow if warrants are exercised = $\$40 \times 100,000 = \$4,000,000$
- Shares purchased with these funds = $\$4,000,000 / 50 = 80,000$
- Net increase in shares outstanding = $100,000 - 80,000 = 20,000$

Diluted EPS = $\$4,200,000 / (750,000 + 20,000) = \5.45 .

(Module 30.4, LOS 30.d)

A firm had the following numbers of shares outstanding during the year:

Beginning of year	8,000,000 shares
Issued on April 1	750,000 shares
Paid stock dividend of 20% on July 1	
Issued on October 1	100,000 shares
Purchased Treasury stock November 1	1,000,000 shares
Split 2 for 1 on December 31	

Based on this information, what is the weighted number of shares outstanding for the year?

A) 20,266,667.



B) 20,783,333.



C) 42,444,444.



Explanation

Outstanding all year	$8,000,000 \times 1.2 \times 2 \times 1.0$	19,200,000
Outstanding for 0.75 years	$750,000 \times 1.2 \times 2 \times 0.75$	1,350,000
Outstanding for 0.25 years	$100,000 \times 2 \times 0.25$	50,000
Retired for 2 months	$-1,000,000 \times 2 \times (2/12)$	
Weighted average number of shares for year:		20,266,667

(Module 30.4, LOS 30.d)

Question #22 of 130

Question ID: 1573391

A simple capital structure is *least likely* to include:

A) callable preferred stock.



B) convertible bonds.



C) treasury stock.



Explanation

Simple capital structures do not include any potentially dilutive securities (a security that could decrease earnings per share if exercised). Convertible bonds are potentially dilutive.

(Module 30.4, LOS 30.d)

Question #23 of 130

Question ID: 1573431

Stanley Corp. had 100,000 shares of common stock outstanding throughout 2004. It also had 20,000 stock options with an exercise price of \$20 and another 20,000 options with an exercise price of \$28. The average market price for the company's stock was \$25 throughout the year. The stock closed at \$30 on December 31, 2004. What are the number of shares used to calculate diluted earnings per share for the year?

A) 105,000.



B) 110,000.



C) 104,000.

**Explanation**

Only the stock options with an exercise price of \$20 are dilutive. The additional shares of 4,000 ($20,000 - [(20,000 \times 20) / 25]$) are added to the 100,000 common shares outstanding.

(Module 30.4, LOS 30.d)

Question #24 of 130

Question ID: 1573364

Under accrual accounting, revenues are recognized in the same period in which the associated:

A) cash is collected.



B) expenses are incurred.



C) invoices are billed.

**Explanation**

Accrual accounting is based on the matching principle, under which revenues are recognized in the same period that the expenses are incurred to generate those revenues.

(Module 30.2, LOS 30.b)

Question #25 of 130

Question ID: 1573485

BWT, Inc. shows the following data in its financial statements at the end of the year. Assume all securities were outstanding for the entire year.

- 6.125% convertible bonds, convertible into 33 shares of common stock. Issue price \$1,000, 100 bonds outstanding.
- 6.25% convertible preferred stock, \$100 par, 2,315 shares outstanding. Convertible into 3.3 shares of common stock, Issue price \$100.
- 8% convertible preferred stock, \$100 par, 2,572 shares outstanding. Convertible into 5 common shares, Issue price \$80.
- 9,986 warrants are outstanding with an exercise price of \$38. Each warrant is convertible into 1 share of common. Average market price of common is \$52.00 per share.
- Common shares outstanding at the beginning of the year were 40,045.
- Net Income for the period was \$200,000, while the tax rate was 40%.

What are the basic and diluted EPS for the year?

	<u>Basic EPS</u>	<u>Diluted EPS</u>	
A)	\$4.12	\$3.06	
B)	\$4.12	\$2.95	
C)	\$3.97	\$3.06	

Explanation

Basic EPS = Net income – preferred dividends / Weighted average shares of common

Preferred dividends:

- 6.25% convertible preferred stock:

$$(0.0625)(\$100)(2,315) = \$14,469$$

- 8% convertible preferred stock:

$$(0.08)(\$100)(2,572) = \$20,576$$

- Preferred dividends = \$14,469 + \$20,576 = \$35,045.

$$\text{Basic EPS} = (\$200,000 - \$35,045) / 40,045 = 164,955 / 40,045 = \$4.12$$

Diluted EPS:

First, check each of the potentially dilutive securities for dilution.

- 6.125% convertible bonds:

$$(\text{Convertible debt interest})(1 - \text{tax rate}) / \text{Common shares if converted}$$

$$= (0.06125)(\$1,000)(100)(1 - 0.4) / (33)(100)$$

$$= \$1.1136$$

Because this is less than basic EPS, these convertible bonds are dilutive.

- 6.25% convertible preferred stock:

$$\text{Preferred dividend} / \text{Common shares if converted}$$

$$= (0.0625)(\$100) / 3.3 = \$1.8939$$

Because this is less than basic EPS, this convertible preferred stock is dilutive.

- 8% convertible preferred stock:

$$\text{Preferred dividend} / \text{Common shares if converted}$$

$$= (0.08)(\$100) / 5 = \$1.60$$

Because this is less than basic EPS, this convertible preferred stock is dilutive.

- Warrants:

Because the exercise price \$38 is less than average share price \$52, the warrants are dilutive.

Next, determine the number of common shares that would be created by exercise of each dilutive security:

- 6.125% convertible bonds:

$$(100 \text{ bonds})(33) = 3,300 \text{ common shares}$$

- 6.25% convertible preferred stock:

$$(2,315 \text{ preferred shares})(3.3) = 7,640 \text{ common shares}$$

- 8% convertible preferred stock:

$(2,572 \text{ preferred shares})(5) = 12,860 \text{ common shares}$

- Warrants:

$[(\$52 - \$38) / \$52] \times 9,986 = 2,689 \text{ common shares}$

Diluted EPS = (Net income – preferred dividends + convertible preferred dividends + after-tax convertible debt interest) / Weighted average shares of common adjusted for exercise
 $[(\$200,000 - \$35,045) + \$35,045 + (0.06125)(\$1,000)(100)(1 - 0.4)] / (40,045 + 3,300 + 7,640 + 12,860 + 2,689) = \$203,675 / 66,534 \text{ shares} = \3.06

(Module 30.4, LOS 30.d)

Question #26 of 130

Question ID: 1573466

Securities that improve basic per share earnings, or reduce per share losses, if they are exercised or converted to common stock are called:

A) dilutive securities.



B) antidilutive securities.



C) embedded securities.



Explanation

Antidilutive securities, upon exercise, increase basic EPS or decrease per share losses. Shares from conversion are not included in the calculation of basic or diluted EPS.

(Module 30.4, LOS 30.d)

Question #27 of 130

Question ID: 1573432

When considering convertible preferred stock which of the following components of the earnings per share (EPS) equation needs to be adjusted to calculate diluted earnings per share?

A) The denominator.



B) The numerator and denominator.



C) The numerator.



Explanation

The numerator will increase because earnings available to the common shareholder are increased by the reduction in preferred dividends. The denominator increases because the weighted average number of shares increases upon conversion of the preferred stock.

(Module 30.4, LOS 30.d)

Question #28 of 130

Question ID: 1573440

The Gaffe Company had net income of \$1,500,000. Gaffe paid preferred dividends of \$5 on each of the 100,000 preferred shares. Each preferred share is convertible into 20 common shares. There are 1 million Gaffe common shares outstanding. In addition to the common and preferred stock, Gaffe has \$25 million of 4% bonds outstanding. If Gaffe's tax rate is 40%, what is its diluted earnings per share?

A) \$0.33.



B) \$0.50.



C) \$1.00.



Explanation

The preferred shares are convertible into $100,000 \times 20 = 2$ million common shares. They are dilutive since:

$$\text{Basic EPS} = \frac{\$1,000,000}{1,000,000} = \$1.00$$

$$\text{Diluted EPS} = \frac{\$1,500,000}{3,000,000} = \$0.50 \text{ which is less.}$$

(Module 30.4, LOS 30.d)

Question #29 of 130

Question ID: 1573445

On December 31, 2004, JME Corporation had 350,000 shares of common stock outstanding. On September 1, 2005, an additional 150,000 shares of common stock were issued. In addition, JME had \$10 million of 8% convertible bonds outstanding at December 31, 2004, which are convertible into 200,000 shares of common stock. Net income for 2005 was \$3 million. Assuming an income tax rate of 40%, what amount should be reported as the diluted earnings per share for 2005?

A) \$5.00.



B) \$6.00.



C) \$5.80.



Explanation

If bonds are converted, then net income will increase by 480,000 [$10 \text{ million} \times 0.08 \times (1 - 0.4)$] and shares outstanding will increase by 200,000.

$$\text{numerator} = 3,000,000 + 480,000 = 3,480,000$$

$$\text{denominator} = 350,000 + (150,000 \times 4/12) + 200,000 = 600,000$$

$$\text{diluted EPS} = 3,480,000 / 600,000 = 5.80$$

(Module 30.4, LOS 30.d)

Question #30 of 130

Question ID: 1573483

Valuable Corp.'s basic earnings per share (EPS) and diluted EPS for the year are different. Given this information, which of the following statements is *least accurate*?

A) All of Valuable's potentially dilutive securities are antidilutive.



B) Diluted EPS is less than basic EPS.



C) Valuable Corp.'s capital structure may include both options and warrants.



Explanation

If all of Valuable's potentially dilutive securities were antidilutive, then EPS would equal diluted EPS.

(Module 30.4, LOS 30.d)

Question #31 of 130

Question ID: 1573374

The following data pertains to the Megatron company:

- Net income equals \$15,000.
- 5,000 shares of common stock issued on January 1.
- 10% stock dividend issued on June 1.
- 1000 shares of common stock were repurchased on July 1.
- 1000 shares of 10%, par \$100 preferred stock each convertible into 8 shares of common were outstanding the whole year.

How many common shares should be used in computing the company's basic earnings per share (EPS)?

A) 4,500.



B) 5,500.



C) 5,000.



Explanation

1/1 5,500 shares issued (includes 10% stock dividend on 6/1) $\times 12 = 66,000$

7/1 1,000 shares repurchased $\times 6$ months = 6,000

$66,000 - 6,000 = 60,000$ shares

$60,000 \text{ shares} / 12 \text{ months} = 5,000$ average shares

(Module 30.4, LOS 30.d)

Question #32 of 130

Question ID: 1573378

An analyst gathered the following information about a company:

- 01/01/06 - 20,000 shares issued and outstanding
- 04/01/06 - 5.0% stock dividend
- 07/01/06 - 5,000 shares repurchased
- 10/01/06 - 2:1 stock split

What is the company's weighted average number of shares outstanding at the end of 2006?

A) 37,000.



B) 39,500.



C) 47,000.



Explanation

The end-of-period weighted average number of common shares outstanding is the number of shares outstanding during the year weighted by the portion of the year they were outstanding. Dividends and splits are applied to all shares issued or repurchased and all original or adjusted shares outstanding *prior* to the split or dividend.

Step 1) Apply the 04/01/06 dividend to the beginning of year shares:

$$\text{Adjusted shares} = 1.05 \times 20,000 = 21,000$$

Step 2) Apply the 10/01/06 split to the adjusted beginning-of-year shares and the repurchase.

$$\text{Adjusted beginning-of-year shares} = 42,000 (= 2 \times 21,000)$$

$$\text{Adjusted repurchase} = 10,000 (= 2 \times 5,000)$$

Step 3) Compute the weighted average number of shares.

$$42,000(12/12) - 10,000(6/12) = 37,000 \text{ shares}$$

(Module 30.4, LOS 30.d)

Question #33 of 130

Question ID: 1573439

The Fischer Company had net income of \$1,500,000. Fischer paid preferred dividends of \$5 on each of the 100,000 preferred shares. There are 1 million Fischer common shares outstanding. In addition to the common and preferred stock, Fischer has \$25 million of 4% bonds outstanding. The face value of each bond is \$1,000. Each bond is convertible into 40 common shares. If Fischer's tax rate is 40%, determine its basic and diluted earnings per share (EPS)?

	<u>Basic EPS</u>	<u>Diluted EPS</u>	
A) \$1.00	\$1.25		
B) \$1.00	\$0.80		
C) \$1.50	\$1.25		

Explanation

$$\text{Basic EPS} = \frac{(\$1,500,000 - \$500,000)}{1,000,000} = \$1.00$$

$$\text{Diluted EPS} = \frac{(\$1,500,000 - \$500,000) + \$1,000,000(1 - 0.4)}{1,000,000 + 1,000,000} = \frac{\$1,600,000}{2,000,000} = \$0.80$$

(Module 30.4, LOS 30.d)

Question #34 of 130

Question ID: 1573416

Zichron, Inc., had the following equity accounts on December 31:

- Common stock: 20,000 shares.
- Preferred stock A: 10,000 shares convertible into common on a 2 for 1 basis, dividend of \$40,000 was declared during the year.
- Preferred stock B: 10,000 shares, convertible to common on a 4 for 1 basis, dividend of \$5,000 was declared during the year.
- The company reported net income of \$120,000 and paid a \$20,000 dividend to its common shareholders.

Diluted earnings per share for the year are:

- A) \$1.33.** 
- B) \$1.50.** 
- C) \$3.00.** 

Explanation

Basic EPS = $(\$120,000 - \$40,000 - \$5,000) / 20,000 = \3.75 .

Convertible preferred stock A: $\$40,000 / 2(10,000) = \2.00 , which is less than basic EPS so the convertible preferred stock is dilutive.

Convertible preferred stock B: $\$5,000 / 4(10,000) = \0.125 , which is less than basic EPS so the convertible preferred stock is dilutive.

Diluted EPS = $\$120,000 / [20,000 + 2(10,000) + 4(10,000)] = \1.50 .

(Module 30.4, LOS 30.d)

Question #35 of 130

Question ID: 1573422

During 20X3, Rory, Inc., reported net income of \$15,000 and had 2,000 shares of common stock outstanding for the entire year. Rory also had 2,000 shares of 10%, \$50 par value preferred stock outstanding during 20X3. During 20X1, Rory issued 100, \$1,000 par, 6% bonds for \$100,000. Each of the bonds is convertible to 50 shares of common stock. Rory's tax rate is 40%. Assuming these bonds are dilutive, 20X3 diluted EPS for Rory is *closest* to:

A) \$2.50.



B) \$1.23.



C) \$0.71.



Explanation

Diluted EPS = [NI – preferred dividends + convertible interest (1 – t)] / [weighted average shares + convertible debt shares]

$100(1,000)(6\%)(1 - 0.4) = \$3,600$; convertible debt shares = $50(100) = 5,000$

$$\frac{\$15,000 - \$10,000 + \$3,600}{2,000 + 5,000} = \$1.23$$

(Module 30.4, LOS 30.d)

Question #36 of 130

Question ID: 1573381

An analyst gathered the following information about a company:

- 01/01/04 - 50,000 shares issued and outstanding at the beginning of the year
- 04/01/04 - 5% stock dividend
- 10/01/04 - 10% stock dividend

What is the company's weighted average number of shares outstanding at the end of 2004?

A) 55,000.



B) 57,500.



C) 57,750.



Explanation

The weighted average number of common shares outstanding is the number of shares outstanding during the year weighted by the portion of the year they were outstanding. Dividends and splits are applied to all shares issued or repurchased and all original or adjusted shares outstanding prior to the split or dividend.

Step 1) Apply the 04/01/04 dividend to the beginning-of-year shares: Adjusted shares = $1.05 \times 50,000 = 52,500$

Step 2) Apply the 10/01/04 dividend the adjusted beginning-of-year shares. Adjusted beginning of year shares = 57,750 ($= 1.1 \times 52,500$).

Step 3) Compute the weighted average number of shares. $57,750 \times (12/12) = 57,750$ shares.

(Module 30.4, LOS 30.d)

Question #37 of 130

Question ID: 1573363

At the beginning of its first year of business, Digmore Corporation acquires a fixed asset for \$90 million and estimates that it will have a useful life of eight years and a salvage value of \$10 million. Digmore expects the asset to produce 150 million units of output over its life, including 30 million units in each of the first three years, 20 million units in each of years 4 to 7, and 10 million units in year 8. If depreciation expense in the first year is \$10 million, what method of depreciation did Digmore *most likely* use?

A) Double-declining-balance.



B) Units of production.



C) Straight Line.



Explanation

Using straight-line depreciation, the amount to be depreciated over the asset's life is $\$90 - \$10 \text{ million} = \$80 \text{ million}$, and depreciation expense in each year is $\$80 \text{ million} / 8 = \10 million .

If the firm had used double-declining balance, depreciation expense in the first year would have been $2/8 \times \$90 \text{ million} = \22.5 million . Based on units of production, depreciation expense in the first year would have been $(30 \text{ million} / 150 \text{ million}) \times \$80 \text{ million} = \$16 \text{ million}$.

(Module 30.2, LOS 30.b)

Question #38 of 130

Question ID: 1573405

Jersey, Inc.'s financial information included the following for its year ended December 31:

- 160,000 shares of common stock were outstanding for the entire year.
- 18,000 shares of 10%, \$100 par value cumulative preferred stock were outstanding for the entire year.
- Common stock dividends paid during the current year were \$240,000.
- All preferred stock dividends were paid for the current year.
- Net income was \$720,000.

Basic earnings per share for Jersey, Inc. for the year ended December 31 are *closest to*:

A) \$3.38.



B) \$2.81.



C) \$4.50.



Explanation

Jersey, Inc.'s basic EPS = (net income – preferred dividends) / (weighted average number of common shares outstanding) was $(\$720,000 - \$180,000)/160,000 = \$3.38$.

(Module 30.4, LOS 30.d)

Question #39 of 130

Question ID: 1573457

The Allen Corporation had 100,000 shares of common stock outstanding at the beginning of the year. Allen issued 30,000 shares of common May 1. On July 1, the company issued a 10% stock dividend. On September 1, Allen issued 1,000, 10% bonds convertible into 21 shares of stock each. What is the weighted average number of shares to be used in computing basic and diluted earnings per share (EPS), assuming the convertible bonds are dilutive?

Basic Shares

Diluted Shares

A) 130,000

132,000



B) 132,000

139,000



C) 132,000

146,000



Explanation

Calculating Basic Shares:

Jan 1 100,000 shares outstanding

May 1 30,000 shares issued

July 1 10% stock dividend issued

The 10% stock dividend is retroactive therefore:

$110,000 \text{ shares} \times 12 \text{ months} = 1,320,000$

$33,000 \text{ shares} \times 8 \text{ months} = 264,000$

Total share-month = 1,584,000

Average shares = $(1,584,000 / 12) = 132,000$

Calculating diluted shares:

$(1,000 \text{ bonds}) \times (21 \text{ shares each}) \times (4 \text{ months}) = 84,000 \text{ total share-month}$

$84,000 / 12 = 7,000 \text{ Average shares}$

Total diluted shares = 7,000 (from convertible bonds) + 132,000 (from stock) = 139,000

(Module 30.4, LOS 30.d)

Question #40 of 130

Question ID: 1573412

Lawson, Inc.'s net income for the year was \$1,060,000 with 420,000 shares of common stock outstanding. Lawson has 2,000 shares of 8%, \$1,000 par value convertible preferred stock that were outstanding the entire year. Each share of preferred is convertible into 50 shares of common stock. Lawson's diluted earnings per share are *closest* to:

A) \$1.94.



B) \$2.04.



C) \$2.14.



Explanation

Lawson's basic EPS ((net income – preferred dividends) / weighted average common shares outstanding) is $(\$1,060,000 - (2,000 \times \$1,000 \times 0.08)) / 420,000 = \2.14 . To calculate diluted EPS the convertible preferred shares are presumed to have been converted, the preferred dividends paid are added back to the numerator of the EPS equation, and the additional common shares are added to the denominator of the equation. Lawson's diluted EPS is $\$1,060,000 / (420,000 + 100,000) = \2.04 .

(Module 30.4, LOS 30.d)

Question #41 of 130

Question ID: 1573392

The ZZT Company went public on June 1, 2004, by issuing 25 million shares of common stock. In 2005, the firm raised additional capital by issuing 2 million shares of preferred stock. What is the weighted average number of common shares outstanding for the year ending December 31, 2005?

A) 10,416,667.



B) 25,000,000.



C) 14,583,333.

**Explanation**

The weighted average number of common shares outstanding is the number of shares outstanding during the year weighted by the portion of the year they were outstanding. Since no new common shares were issued in 2005, and there were 25 million shares at the end of 2004, there are 25 million shares at the end of 2005. Note that the preferred stock shares do not affect the common shares outstanding.

(Module 30.4, LOS 30.d)

Question #42 of 130

Question ID: 1573382

A firm has a weighted average number of 20,000 common shares selling at an average of \$10 throughout the year and 11,000, 10%, \$100 par value preferred shares. If the firm earns \$210,000 after taxes, what is its Basic EPS?

A) \$10.50 / share.



B) \$5.00 / share.



C) \$7.50 / share.

**Explanation**

$(210,000 - 110,000) / 20,000 = \5 share

(Module 30.4, LOS 30.d)

Question #43 of 130

Question ID: 1573428

Firewalz, Inc., had 500,000 shares of common stock and 20,000 shares of 6%, \$100 par preferred stock outstanding at the beginning of the year. Each share of the preferred can be converted into two shares of common stock. On July 1, the company repurchased 100,000 shares of its common stock. If net income for the year is \$1.2 million, the reported diluted EPS for the year is *closest* to:

A) \$2.42.



B) \$2.40.



C) \$2.45.



Explanation

Preferred dividends = $6\% \times \$100 \times 20,000 = \$120,000$.

Basic EPS = $(\$1.2 \text{ million} - \$120,000) / [500,000 - (0.5)100,000] = \2.40 .

The preferred dividend per common share that results from conversion = $\$120,000 / (2 \times 20,000) = \3.00 , which is greater than \$2.40. The preferred is antidilutive (conversion would not reduce EPS). Therefore, reported diluted EPS will be the same as basic EPS: \$2.40.

(Module 30.4, LOS 30.d)

Question #44 of 130

Question ID: 1573404

Juniper Corp's stock transactions during the year 20X4 were as follows:

January 1 540,000 shares issued and outstanding

March 1 50 percent stock dividend

July 1 180,000 treasury shares reacquired

October 1 60,000 treasury shares reissued

When computing for earnings per share (EPS) computation purposes, what was Juniper's weighted average number of shares outstanding during 20X4?

A) 735,000.



B) 870,000.



C) 930,000.



Explanation

The January 1 balance is adjusted retroactively for the stock dividend and $(540,000 \times 1.5) = 810,000$ shares are treated as outstanding from January 1. The weighted average number of shares is computed by multiplying the shares by the number of months held, as follows:

January 1	Initial shares	$(810,000 \times 12) =$	9,720,000
July 1	Reacquired shares	$(-180,000 \times 6) =$	1,080,000
October 1	Reissued shares	$(60,000 \times 3) =$	<u>180,000</u>
			8,820,000

Weighted average shares was $(8,820,000 / 12) = 735,000$ shares.

(Module 30.4, LOS 30.d)

Question #45 of 130

Question ID: 1573437

Assume that the exercise price of an option is \$6, and the average market price of the stock is \$10. Assuming 802 options are outstanding during the entire year, the number of shares to be added to the denominator of diluted earnings per share (EPS) is *closest* to:

A) 802.



B) 321.



C) 481.



Explanation

Proceeds from the exercise of the options would be:

$$(802)(\$6) = \$4,812$$

The number of shares that could be repurchased with the proceeds at the average price is:

$$4,812 / 10 = 481.2$$

The additional number of shares the company would need to issue to fulfill the stock options is:

$$802 - 481 = 321$$

(Module 30.4, LOS 30.d)

Question #46 of 130

Question ID: 1573396

Robinson Company had 1 million shares outstanding at the beginning of the year. On April 1, Robinson issued an additional 300,000 shares. On July 1, Robinson issued 200,000 more shares. What is Robinson's weighted average number of shares outstanding for the calculation of earnings per share?

A) 1,200,000 shares.



B) 1,325,000 shares.



C) 1,500,000 shares.



Explanation

The 300,000 shares issued on April 1 were outstanding for 9 months, or $9 / 12 = 75\%$ of the year. The 200,000 shares issued on July 1 were outstanding for 6 months, or $6 / 12 = 50\%$ of the year. Weighted average shares = $1,000,000 + (0.75) 300,000 + (0.5) 200,000 = 1,325,000$ shares

(Module 30.4, LOS 30.d)

Question #47 of 130

Question ID: 1573402

A firm with a capital structure consisting of only common stock and non-convertible bonds is said to have a:

A) simple capital structure.



B) non-diluted capital structure.



C) straight capital structure.



Explanation

A *simple capital structure* is one that contains *no* securities that have the potential to dilute a firm's earnings per share. For example, convertible bonds, convertible preferred stock, options, and warrants have the potential to dilute earnings per share upon conversion or exercise.

(Module 30.4, LOS 30.d)

Question #48 of 130

Question ID: 1573411

Savannah Corp.'s financial accounts for the year ended December 31 included the following information:

- Net Income: \$122,000
- Preferred Stock Dividends Paid: \$35,000
- Common Stock Dividends Paid: \$42,000
- Common Shares outstanding at January 1: 50,000
- 10% preferred \$100 par value shares outstanding at January 1: 3,500

No stock transactions occurred during the year and all preferred stock dividends were paid. Basic earnings per share for Savannah are *closest* to:

- A) \$2.44. 
- B) \$0.90. 
- C) \$1.74. 

Explanation




Savannah Corp.'s basic EPS ((net income – preferred dividends) / weighted average number of common shares outstanding) was $((\$122,000 - \$35,000) / \$50,000 =) \1.74 .

(Module 30.4, LOS 30.d)

Question #49 of 130

Question ID: 1573407

A complex capital structure, for purposes of determining disclosure of diluted earnings per share, is distinguished from a simple capital structure by the company having outstanding:

- A) warrants, convertible securities, or options. 
- B) preferred stock, warrants, or options. 
- C) debt securities or convertible securities. 

Explanation



A complex structure contains potentially dilutive securities. These include any securities that can potentially be converted into common shares, such as options, warrants, convertible preferred stock, or convertible bonds. Simple capital structures contain no potentially dilutive securities but may include non-convertible debt securities or non-convertible preferred stock.

(Module 30.4, LOS 30.d)

Question #50 of 130

Question ID: 1573446

A 12 percent \$100,000 convertible bond was issued on October 1, 2004. It is dilutive and can be converted into 18,000 shares. The effective income tax rate for the year was 40%. What adjustments should be made to calculate diluted earnings per share?

	<u>Interest added to the numerator</u>	<u>Shares added to the denominator</u>	
A) \$3,000	4,500		
B) \$1,800	4,500		
C) \$3,000	18,000		

Explanation

The interest expense for three months net of tax is added to the numerator ($12\% \times \$100,000 \times 3/12 \times 60\%$) = \$1,800. The number of shares added to the denominator are 4,500. ($18,000 \times 3 / 12$).

(Module 30.4, LOS 30.d)

Question #51 of 130

Question ID: 1573479

All of the following are considered a potentially dilutive securities EXCEPT:

- | | |
|---------------------|---|
| A) warrants. |  |
| B) preferred stock. |  |
| C) stock options. |  |

Explanation

Not all preferred stock is dilutive. Only *convertible* preferred stock is potentially dilutive.

(Module 30.4, LOS 30.d)

Question #52 of 130

Question ID: 1573472

Protocol, Inc.'s net income for 2005 was \$4,800,000. Protocol had 800,000 shares of common stock outstanding for the entire year. The tax rate was 40 percent. The average share price in 2005 was \$37.00. Protocol had 5,000 8 percent \$1,000 par value convertible bonds that were issued in 2004. Each bond is convertible into 25 shares of common stock. Protocol, Inc.'s basic and diluted earnings per share for 2005 were *closest* to:

	<u>Basic EPS</u>	<u>Diluted EPS</u>	
A)	\$5.19	\$4.92	
B)	\$6.00	\$5.45	
C)	\$6.00	\$4.92	

Explanation

Protocol's basic EPS (net income / weighted average common shares outstanding) was $\$4,800,000 / 800,000 = \6.00 . Diluted EPS is calculated under the assumption that the convertible bonds were converted into common stock, and the bond interest net of tax was restored to net income. The common shares from the conversion of the bonds are added to the denominator of the equation. Protocol's Diluted EPS was $[\$4,800,000 + (5,000 \times \$1,000 \times 0.08)(1 - 0.40)] / [800,000 + (5,000 \times 25)] = \5.45 .

(Module 30.4, LOS 30.d)

Question #53 of 130

Question ID: 1573418

The following information is for Trotters Diversified as of year-end:

- Average common shares outstanding of 5.0 million.
- Average market price for common stock of \$35.00 per share.
- Net income of \$9.0 million.
- Common stock dividends paid of \$1.2 million.
- Tax rate of 40%.
- 500,000 shares of cumulative convertible preferred stock with \$30 par value and 10% dividend. Each preferred share is convertible into 5 common shares. Preferred dividends of \$1.5 million were paid.
- 10,000 convertible \$1,000 par bonds with a 6.0% coupon, each convertible into 8 shares of common stock.
- 400,000 stock options with an exercise price of \$32.00 per share.
- All of these securities were outstanding for the full year.

Diluted EPS for Trotters Diversified is *closest* to:

A) \$1.19.



B) \$1.50.



C) \$1.23.



Explanation

Only the options and convertible preferred stock are dilutive. First, calculate basic EPS to use as a benchmark to determine dilutive capital components.

$$\text{Basic EPS} = (\text{net income} - \text{preferred dividends}) / \text{weighted average common shares outstanding} = (9.0 - 1.5) / 5.0 = \$1.50.$$

Next, check for dilution.

- The stock options are dilutive because the exercise price is less than the average stock price. There is no numerator impact from the options. The denominator impact = # options - [(# options × exercise price) / average stock price] = 400,000 - [(400,000 × 32) / 35] = 34,286 or 0.034 million.
- To check whether the convertible preferred stock is dilutive we need to determine whether it decreases EPS. To the numerator, we add back the preferred dividend. The denominator impact = (# preferred shares × conversion rate) = 500,000 × 5 = 2,500,000, or 2.5 million. Then, EPS = (9.0 - 1.5 + 1.5) / (5.0 + 2.5) = \$1.20. Thus the convertible preferred stock is dilutive.
- To check whether the convertible bonds are dilutive we need to determine whether they decrease EPS. To the numerator, we add back the after-tax impact of the coupon, or (face value × coupon × (1 - t)), or (10,000 bonds × 1,000 par × 0.06 coupon × 0.6) = 360,000, or \$0.360 million. The denominator impact = (# convertible bonds × conversion rate) = 10,000 × 8 = 80,000, or 0.080 million. Then, EPS = (9.0 - 1.5 + 0.360) / (5.0 + 0.080) = \$1.55. Thus the bonds are antidilutive.

Finally, calculate diluted EPS:

$$\text{Diluted EPS} = (9.0 - 1.5 + 1.5) / (5.0 + 2.5 + 0.034) = \$1.1946.$$

(Module 30.4, LOS 30.d)

Question #54 of 130

Question ID: 1573480

In applying the treasury stock method, if warrants allow the purchase of 1 million shares at \$42 per share when the average price is \$56 per share, how many shares will be added to the firm's weighted average number of shares outstanding?

A) 250,000.



B) 420,000.



C) 1,000,000.



Explanation




The treasury stock method would allow the 1 million additional shares to be partially offset by the number of shares that could be repurchased with the amount of money received for those shares. In this case, the 1 million shares issued would be offset by $(1,000,000 \times \$42 / \$56)$ or 750,000 shares. Shares added = $1,000,000 - 750,000 = 250,000$.

(Module 30.4, LOS 30.d)

Question #55 of 130

Question ID: 1573366

Which costs are *least likely* to be reported as an expense in the current accounting period?

- A) Costs of producing inventory. 
- B) Loan interest that has not yet been paid. 
- C) Period costs. 

Explanation

Inventory costs are expensed when items are sold under the matching principle. As an extreme example, if no sales are made, no costs of inventory production are expensed for the period. Period costs are expensed during the period. Under the accrual method, interest accrued during the period is expensed, regardless of whether it has been paid during the period. (Module 30.2, LOS 30.b)

Question #56 of 130

Question ID: 1573484

Moulding Company's net income was \$13,820,000 with 2,600,000 shares outstanding. The average share price for the year was \$58.00. Moulding had 10,000 options to purchase 10 shares each at \$40 per share outstanding the entire year. Moulding Company's diluted earnings per share are *closest* to:

- A) \$3.71. 
- B) \$5.25. 
- C) \$5.32. 

Explanation

Moulding's basic EPS (net income / weighted average common shares outstanding) was $\$13,820,000 / 2,600,000 = \5.32 .

Using the treasury stock method to compute diluted EPS, if the options were exercised, cash inflow would be $10,000 \times 10 \times \$40 = \$4,000,000$. Based on the average share price of \$58.00, the number of Moulding shares that can be purchased with the cash flow is $\$4,000,000 / \$58 = 68,966$. The number of shares that would have been created is $100,000 - 68,966 = 31,034$. Diluted EPS was $\$13,820,000 / (2,600,000 + 31,034) = \5.25 .

(Module 30.4, LOS 30.d)

Question #57 of 130

Question ID: 1573473

Selected information from Gerrard, Inc.'s financial activities in the most recent year was as follows:

- Net income was \$330,000.
- The tax rate was 40%.
- 700,000 shares of common stock were outstanding on January 1.
- The average market price per share for the year was \$6.
- Dividends were paid during the year.
- 2,000 shares of 8% \$500 par value preferred shares, convertible into common shares at a rate of 200 common shares for each preferred share, were outstanding for the entire year.
- 200,000 shares of common stock were issued on March 1.

Gerrard, Inc.'s diluted earnings per share (diluted EPS) was *closest* to:

A) \$0.197.



B) \$0.289.



C) \$0.261.



Explanation

To compute Gerrard's basic earnings per share (EPS) ((net income – preferred dividends) / weighted average common shares outstanding), the weighted average common shares outstanding must be computed. 700,000 shares were outstanding from January 1, and 200,000 shares were issued on March 1, so the weighted average is $700,000 + (200,000 \times 10 / 12) = 866,667$. Basic EPS was $\$330,000 - (2,000 \times \$500 \times 0.08) / 866,667 = \0.289 .



If the convertible preferred shares were converted to common stock, $2,000 \times 200 = 400,000$ additional common shares would have been issued and dividends on the preferred stock would not have been paid. Diluted EPS was $\$330,000 / (866,667 + 400,000) = \0.261 .

(Module 30.4, LOS 30.d)

Question #58 of 130

Question ID: 1573477

Which of the following statements regarding the treasury stock method of computing diluted shares is *least* accurate? The treasury stock method:

- assumes that the hypothetical funds received by the company from the exercise
- A)** of the options are used to sell shares of the company's common stock in the market at the average market price. 
- B)** increases the total number of shares by less than the number that the exercise of the options would create. 
- C)** is used when the exercise price of the option is less than the average market price. 

Explanation

The treasury stock method assumes any funds received by the company from the exercise of the options are used to *purchase* shares (**not** sell shares) of the company's common stock in the market at the average market price.

(Module 30.4, LOS 30.d)

Question #59 of 130

Question ID: 1573474

Selected information from Doors, Inc.'s financial activities in the year 2005 included the following:

- Net income was \$372,000.
- 100,000 shares of common stock were outstanding on January 1.
- The average market price per share was \$18 in 2005.
- Dividends were paid in 2005.
- 2,000, 6 percent \$1,000 par value convertible bonds, which are convertible at a ratio of 25 shares for each bond, were outstanding the entire year.
- Doors, Inc.'s tax rate is 40%.

Doors, Inc.'s diluted earnings per share (Diluted EPS) for 2005 was *closest* to:

- A)** \$2.96. 
- B)** \$3.28. 
- C)** \$3.72. 

Explanation

Doors basic earnings per share (EPS) was $(\$372,000 / 100,000 =) \3.72 . If the bonds were converted, interest payments would not have been made. Net income is increased by the interest paid on the bonds net of taxes: $\$372,000 + ((\$1000 \times 2,000 \times 0.06) \times (1 - 0.40)) = \$444,000$.

Diluted EPS was $\$444,000 / (100,000 + (2,000 \times 25)) = \2.96 .

(Module 30.4, LOS 30.d)

Question #60 of 130

Question ID: 1573429

An analyst gathered the following data about a company:

- The company had 500,000 shares of common stock outstanding for the entire year.
- The company's beginning stock price was \$40, its ending price was \$60, and its average price over the year was \$50.
- The company has 120,000 warrants outstanding for the entire year.
- Each warrant allows the holder to buy one share of common stock at \$45 per share.

How many shares of common stock should the company use in computing its diluted earnings per share?

A) 500,000.



B) 488,000.



C) 512,000.



Explanation

Dilution occurs since the exercise price for the warrants (\$45) is less than the average market price for the shares (\$50). The incremental number of shares outstanding is found from:

$$\left(\frac{\text{market price} - \text{exercise price}}{\text{market price}} \right) \times \# \text{ warrants} = \left(\frac{50 - 45}{50} \right) \times 120,000 = 12,000$$

Number of shares to use in diluted EPS calculation = $500,000 + 12,000 = 512,000$. (Module 30.4, LOS 30.d)

Question #61 of 130

Question ID: 1573430

Using the following information for Boxes, Inc.:

- Net income \$53,000,000
- Outstanding 7% preferred stock, par value \$30,000,000
- Outstanding convertible bonds, face value of \$10,000,000, Issued on January 1 at par with a coupon rate of 6% and convertible at the rate of 20 shares per 1,000 of face value
- 100,000 options at 55 outstanding all year
- Tax rate 30%
- 3,000,000 common shares outstanding all year
- Stock price 60 at year-end, average stock price over the year 50.

Diluted EPS is *closest* to:

A) \$15.00.



B) \$16.00.



C) \$17.00.



Explanation

$$\text{Basic EPS} = \frac{53,000,000 - (0.07 \times 30,000,000)}{3,000,000} = \$16.97$$

The options are not dilutive because the exercise price is greater than the average price over the period.

$$\text{Diluted EPS} = \frac{53,000,000 - (0.07 \times 30,000,000) + [10,000,000 \times 0.06 \times (1 - 0.30)]}{3,000,000 + 200,000} = \$16.04$$

(Module 30.4, LOS 30.d)

Question #62 of 130

Question ID: 1573438

Assume that the exercise price of an option is \$9, and the average market price of the stock is \$12. Assuming 992 options are outstanding during the entire year, what is the number of shares to be added to the denominator of the Diluted EPS?

A) 992.



B) 248.



C) 744.



Explanation

$$(992)(\$9) = \$8928$$

$$\$8928 / 12 = 744$$

$$992 - 744 = 248 \text{ new shares or } [(12 - 9) / 12]992 = 248$$

(Module 30.4, LOS 30.d)

Question #63 of 130

Question ID: 1573452

Nichols Company's net income for 20X6 was \$978,000 with 1,250,000 shares outstanding. The average share price in 20X6 was \$8.50. Nichols issued 2,000 warrants to purchase 100 shares each for \$10 per share in 20X5. Nichols Company's diluted earnings per share (diluted EPS) for 20X6 is *closest* to:

A) \$0.793.



B) \$0.777.



C) \$0.782.



Explanation

Nichols basic EPS (net income / weighted average common shares outstanding) was:

$$\$978,000 / 1,250,000 = \$0.782.$$

Because the exercise price of the warrants is higher than the average share price, the warrants are antidilutive and are excluded from diluted EPS. Because there were no other potentially dilutive securities, Nichols' diluted EPS in 20X6 is the same as basic EPS.

(Module 30.4, LOS 30.d)

Question #64 of 130

Question ID: 1573383

Washington, Inc.'s stock transactions during the year 20X4 were as follows:

	720,000
January 1	shares issued and outstanding
May 1	2 for 1 stock split occurred

What was Washington's weighted average number of shares outstanding during 20X4, for earnings per share (EPS) computation purposes?

A) 1,440,000.



B) 1,500,000.



C) 1,666,667.



Explanation

The January 1 balance is adjusted retroactively for the stock split and $(720,000 \times 2 =)$ 1,440,000 shares are treated as outstanding from January.

(Module 30.4, LOS 30.d)

Question #65 of 130

Question ID: 1573386

The following data pertains to the McGuire Company:

- Net income equals \$15,000.
- 5,000 shares of common stock issued on January 1.
- 10% stock dividend issued on June 1.
- 1000 shares of common stock were repurchased on July 1.
- 1000 shares of 10%, par \$100 preferred stock each convertible into 8 shares of common were outstanding the whole year.

What is the company's basic earnings per share (EPS)?

A) \$2.50.



B) \$1.00.



C) \$1.20.



Explanation

Number of average shares:

$$1/1 \text{ 5,500 shares issued (includes 10\% stock dividend on 6/1)} \times 12 = 66,000$$

$$7/1 \text{ 1,000 shares repurchased} \times 6 \text{ months} = 6,000$$

$$66,000 - 6,000 = 60,000$$

$$60,000 \text{ shares} / 12 \text{ months} = 5,000 \text{ average shares}$$

$$\text{Preferred dividends} = (\$10)(\$1,000) = \$10,000$$

$$\text{Basic EPS} = [\$15,000(\text{NI}) - \$10,000(\text{preferred dividends})] / 5,000 \text{ shares} = \$5,000 / 5,000 \text{ shares} = \$1/\text{share}$$

(Module 30.4, LOS 30.d)

Question #66 of 130

Question ID: 1573414

During 2004, Covax Corp. reported net income of \$2.4 million and 2 million shares of common stock. Covax paid cash dividends of \$14,000 to its preferred shareholders and \$30,000 to its common shareholders. In 2004, Covax issued 900, \$1,000 par, 5.5 percent bonds for \$900,000. Each bond is convertible to 50 shares of common stock. Assume the tax rate is 40%. Compute Covax's basic and diluted EPS.

Basic EPS Diluted EPS

A) \$1.19 \$1.18



B) \$1.19 \$1.22



C) \$1.22 \$1.22



Explanation

2004 Basic EPS:

$$\text{Basic EPS} = \frac{2,400,000 - 14,000}{2,000,000} = \$1.19$$

2004 Diluted EPS:




$$\text{Diluted EPS} = \frac{(2,400,000 - 14,000) + (49,500)(1 - 0.40)}{(2,000,000) + (45,000)} = \$1.18$$

(Module 30.4, LOS 30.d)

Question #67 of 130

Question ID: 1573447

A company has convertible preferred stock outstanding. In the computation of diluted earnings per share, common shares issued when convertible preferred stock is converted are added to the denominator of the basic EPS equation, and the numerator is:

- A) adjusted by adding back convertible preferred stock dividends. 
- B) adjusted by adding back non-convertible preferred stock dividends. 
- C) not adjusted. 

Explanation

If convertible preferred stock is dilutive, the preferred dividends that would not have been paid if the preferred stock is converted must be added back to the numerator. Note that any nonconvertible preferred stock dividends are still subtracted from net income in the numerator.

(Module 30.4, LOS 30.d)

Question #68 of 130

Question ID: 1573450

Selected information from Jupiter Corp.'s financial activities in the year 20X5 is as follows:

- Net income is \$18,300,000.
- 115,000 shares of common stock were outstanding on January 1.
- The average market price per share was \$150 in 20X5.
- 200 warrants, which each allow the holder to purchase 100 shares of common stock at an exercise price of \$100 per common share, were outstanding the entire year.
- 60,000 shares of common stock were issued on April 1.
- 45,000 shares of common stock were purchased by the company as treasury stock on October 1.

Jupiter Corp.'s diluted earnings per share for 20X5 are *closest* to:

- A) \$117.75. 
- B) \$123.02. 
- C) \$159.13. 

Explanation

To compute Jupiter's basic earnings per share (EPS) use the formula: (net income – preferred dividends) / weighted average common shares outstanding. Weighted average common shares outstanding = $[(115,000 \times 12) + (60,000 \times 9) - (45,000 \times 3)] / 12 = 148,750$. Basic EPS = $\$18,300,000 / 148,750 = \123.02 .

Using the treasury stock method, if the warrants were exercised cash inflow would be $200 \times \$100 \times 100 = \$2,000,000$. The number of Jupiter shares that can be purchased with this cash at the average share price is $\$2,000,000 / \$150 = 13,333$. The net number of shares that would have been created is $20,000 - 13,333 = 6,667$. Diluted EPS = $\$18,300,000 / (148,750 + 6,667) = \117.75 . Since diluted EPS is less than basic EPS, the warrants are dilutive.

(Module 30.4, LOS 30.d)


Question #69 of 130

Question ID: 1573443

An analyst has gathered the following information about Zany Corp.

- Net income of \$200,000 for the year ended December 31, 2004.
- During 2004, 50,000 common shares were outstanding.
- Zany has 10,000 shares of 7%, \$50 par convertible preferred stock outstanding, each convertible into two shares of common.
- 5,000 warrants are outstanding with an exercise price of \$24. Each warrant is convertible into one common share.
- The average market price per common share during 2004 was \$20.

Calculate Zany's basic and diluted earnings per share (EPS) for 2004.

	<u>Basic EPS</u>	<u>Diluted EPS</u>	
A)	\$3.30	\$2.86	
B)	\$4.00	\$2.86	
C)	\$3.30	\$2.00	

Explanation

Basic EPS = (net income – preferred dividends) / number of common shares = $(200,000 - 35,000) / 50,000 = \3.30 per share

The preferred shares are converted into 20,000 common shares, the firm does not pay preferred dividends. Diluted EPS = $200,000 / (50,000 + 20,000) = \2.86 per share. The warrants are out of the money at a stock price of \$20.

(Module 30.4, LOS 30.d)

Question #70 of 130

Question ID: 1573433

When considering the impact of warrants on earnings per share, the method to calculate the number of shares added to the denominator is derived using which method?

- A) Cost recovery method.
- B) Treasury Stock method.
- C) Weighted average method.

**Explanation**

The treasury stock method assumes the hypothetical funds received by the company from the exercise of the options are used to purchase shares of the company's common stock in the market at the average market price.

(Module 30.4, LOS 30.d)

Question #71 of 130

Question ID: 1573460

In calculating the numerator for diluted earnings per share, the dividends on convertible preferred stock (if it is dilutive) are:

- A) added to earnings available to common shareholders without an adjustment for taxes.
- B) subtracted from earnings available to common shareholders without an adjustment for taxes.
- C) added to earnings available to common shareholders with an adjustment for taxes.

**Explanation**

Diluted EPS = [(Net income – Preferred dividends) + Convertible preferred dividends + (Convertible debt interest)(1 – t)] / [(Weighted average shares) + (Shares from conversion of conv. pfd shares) + (Shares from conversion of conv. debt) + (Shares issuable from stock options)]

(Module 30.4, LOS 30.d)

Question #72 of 130

Question ID: 1573427

A company has 1,000,000 warrants outstanding at the beginning of the year, each convertible into one share of stock with an exercise price of \$50. No new warrants were issued during the year. The average stock price during the period was \$60, and the year-end stock price was \$45. What adjustment for these warrants should be made, under the treasury stock method, to the number of shares used to calculate diluted earnings per share (EPS)?

A) 0.



B) 200,000.



C) 166,667.



Explanation

Diluted EPS uses average price. Since the average price is greater than the exercise price, the warrants are dilutive.

$$\frac{60-50}{60} \times 1,000,000 = 166,667$$

(Module 30.4, LOS 30.d)

Question #73 of 130

Question ID: 1573426

A company had the following changes in its stock:

- The company had 2 million shares outstanding on December 31, 20X6.
- On March 31, 20X7, the company paid a 10% stock dividend.
- On June 30, 20X7, the company sold \$10 million face value of 7% convertible debentures, convertible into common at \$5 per share.
- On September 30, 20X7, the company issued and sold 100,000 shares of common stock.

The company should compute its 20X7 basic earnings per share based on:

A) 2,225,000 shares.



B) 2,250,000 shares.



C) 3,225,000 shares.



Explanation

Basic EPS does not consider potential dilution from convertible bonds.

Original shares = 2,000,000(12) = 24,000,000

+ Stock dividend = 200,000(12) = 2,400,000

+ New shares = 100,000(3) = 300,000

26,700,000

$$\frac{26,700,000}{12} = 2,225,000$$

Alternatively, 2 million (1.1) + (1/4) (100,000) = 2.225 million. (Module 30.4, LOS 30.d)

Question #74 of 130

Question ID: 1573475

Based on the following data, how many shares of common stock should be used to calculate diluted earnings per share?

- Net income of \$1,500,000, tax retention rate of 60%.
- 1,000,000 shares of common are outstanding at the beginning of the year.
- 10,000, 6% convertible bonds with each bond convertible into 20 shares of common stock were issued at par (\$100) on June 30th of this year.
- The firm has 100,000 warrants outstanding all year with an exercise price of \$25 per share.
- The average stock price for the period is \$20, and the ending stock price is \$30.

A) 1,100,000.



B) 1,000,000.



C) 1,266,667.



Explanation

First, Check for dilution: Basic EPS = $1,500,000 / 1,000,000 = 1.50$

Warrants: anti-dilutive since the average stock price is less than the exercise price

Convertible bonds: **numerator impact** = (# bonds) × (par value) × (interest rate) × (tax retention rate) × (0.5 for 1/2 year outstanding) = $(10,000) \times (100) \times (0.06) \times (0.6) \times (0.5) = 18,000$, so the numerator = 1,518,000 **Denominator impact:** increase in average shares = $[(\# \text{ bonds}) \times (\text{conversion factor}) \times (\# \text{ months outstanding})] / 12 = (1,200,000 / 12 = 100,000)$ so, the denominator = 1,100,000 and EPS with conversion = $1,518,000 / 1,100,000 = 1.38$, which is less than 1.50. The bonds are dilutive and the diluted EPS calculation should use 1,100,000 shares of common stock in the denominator. The warrants are out of the money based on the average price of \$20.

(Module 30.4, LOS 30.d)

Question #75 of 130

Question ID: 1573464

Antidilutive securities should be assumed to have been converted to common shares when calculating:

- A) basic EPS but not diluted EPS.
- B) diluted EPS but not basic EPS.
- C) neither basic nor diluted EPS.



Explanation

Antidilutive securities would increase EPS if exercised or converted to common stock. Therefore we do not assume they are converted when we calculate diluted EPS. Basic EPS is calculated before assuming any potentially dilutive securities are converted.

(Module 30.4, LOS 30.d)

Question #76 of 130

Question ID: 1573419

Roome Corp. has 5,000,000 common shares outstanding. There are 500,000 warrants outstanding to purchase the stock at \$20, and there are 200,000 options outstanding to buy the stock at \$50. The average market price for the stock over the year was \$40, and the current stock price is \$60. The number of shares used to calculate diluted EPS is:

- A) 5,300,000 shares.
- B) 5,700,000 shares.



C) 5,250,000 shares.



Explanation

Applying the treasury stock method to the warrants, $5,000,000 + [500,000 - (500,000 \times \$20) / \$40] = 5,250,000$ shares. The options are antidilutive because their exercise price is higher than the average stock price for the year.

(Module 30.4, LOS 30.d)

Question #77 of 130

Question ID: 1573459

An analyst has gathered the following information about Barnstabus, Inc., for the year:

- Reported net income of \$30,000.
- 5,000 shares of common stock and 2,000 shares of 8%, \$90 par preferred stock outstanding during the whole year.
- Barnstabus, has \$60,000 of 6.0% convertible bonds outstanding, with each of the 60 bonds convertible into 110 shares of Barnstabus common stock.

If Barnstabus's effective tax rate is 40%, what will Barnstabus report for diluted earnings per share (EPS)?

A) \$1.53.



B) \$1.66.



C) \$2.36.



Explanation

Diluted EPS = adjusted earnings after conversion (EAC) / weighted average plus potential common shares outstanding.

Step 1: *Calculate Adjusted EAC*

<i>adjusted EAC:</i>		net
		income -
		preferred
		dividends
		<u>after-tax</u>
	+	<u>interest on</u>
		<u>convertible</u>
		<u>debt</u>
		adjusted
		earnings
	=	available
		for
		common
		shares

$$\text{preferred dividends} = (0.08)(90)(2,000) = 14,400$$

$$\text{convertible debt interest} = (60,000)(0.06)(1 - 0.40) = 2,160$$

$$\text{adjusted EAC} = (30,000 - 14,400 + 2,160) = \mathbf{\$17,760}$$

Step 2: *Calculate Weighted average plus potential common shares outstanding.*

weighted			
average		=	5,000
common			
shares			
shares			
from			
conversion	= (60 × 110)	=	<u>6,600</u>
of			
convertible			
bonds			
<i>weighted</i>			
<i>ave. plus</i>			
<i>potential</i>		=	11,600
<i>common</i>			
<i>shares</i>			
<i>outst.</i>			

Step 3: *Calculate Diluted EPS*

$$\text{Diluted EPS} = 17,760 / 11,600 = \mathbf{\$1.53}.$$

(Module 30.4, LOS 30.d)

Selected information from Able Company's financial activities is as follows:

- Net Income was \$720,000.
- 1,000,000 shares of common stock were outstanding on January 1.
- 1,000 shares of 8%, \$1,000 par value preferred shares were outstanding on January 1.
- The tax rate was 40%.
- The average market price per share for the year was \$20.
- 6,000 shares of 3%, \$500 par value preferred shares, convertible into common shares at a rate of 40 common shares for each preferred share, were outstanding for the entire year.

Able's basic and diluted earnings per share (EPS) are *closest* to:

Basic EPS Diluted EPS

A) \$0.55 \$0.55



B) \$0.55 \$0.52



C) \$0.64 \$0.64



Explanation

Able's basic earnings per share ((Net Income – Preferred Stock Dividends) / weighted average shares outstanding) for 2004 was $[(\$720,000 - (\$500 \times 6,000 \times 0.03) - (\$1,000 \times 1,000 \times 0.08))] / 1,000,000 = \0.55 . If the convertible preferred were converted to common stock on January 1, $6,000 \times 40 = 240,000$ additional shares would have been issued. Also, dividends on the convertible preferred would not have been paid.

So diluted EPS was $(\$720,000 - 80,000) / (1,000,000 + 240,000) = \0.52 .

(Module 30.4, LOS 30.d)

Matrix, Inc.'s common size income statement for the years ended December 31, 20X1 and 20X2 included the following information (percent of net sales):

	20X1	20X2
Sales	100	100
Cost of Goods Sold	(55)	(60)
	45	40
Selling General & Administrative	(5)	(5)
Depreciation	(7)	(8)
	33	27
Interest Expense	(15)	(6)
	18	21
Income Tax Expense	(6)	(7)
	12	14

Analysis of this data indicates that from 20X1 to 20X2:

- A) cost of goods sold increased. ✗
- B) interest expense per dollar of sales declined. ✓
- C) the effective tax rate increased. ✗

Explanation

On a common size income statement, all amounts are stated as a percentage of sales. Interest expense per dollar of sales has declined from 0.15 to 0.06. The other interpretations listed are not necessarily correct. COGS increased as a percentage of sales, but if sales decreased, COGS may have decreased as well. The company's effective tax rate (income tax expense / pretax income) can be calculated from a common-size income statement. Here the effective tax rate was 33% in both years.

(Module 30.5, LOS 30.e)

An analyst gathers the following data about a company:

- The company had 1 million shares of common stock outstanding for the entire year.
- The company's beginning stock price was \$50, its ending price was \$70, and its average price was \$60.
- The company had 100,000 warrants outstanding for the entire year. Each warrant allows the holder to buy one share of common stock at \$50 per share.

How many shares of common stock should the company use in computing its diluted earnings per share?

A) 1,100,000.



B) 1,016,667.



C) 1,083,333.



Explanation

Use the Treasury stock method:

Step 1: Determine the number of common shares created if the warrants are exercised = 100,000.

Step 2: Calculate the cash inflow if the warrants are exercised: $(100,000)(\$50 \text{ per share}) = \$5,000,000$.

Step 3: Calculate the number of shares that can be purchased with these funds using the average market price (\$60 per share): $5,000,000 / 60 = 83,333$ shares.

Step 4: Calculate the net increase in common shares outstanding from the exercise of the warrants: $100,000 - 83,333 = 16,667$.

Step 5: Add the net increase in common shares from the exercise of the warrants to the number of common shares outstanding for the entire year: $1,000,000 + 16,667 = 1,016,667$.

(Module 30.4, LOS 30.d)

Question #81 of 130

Question ID: 1573463

How will dilutive securities affect earnings per share (EPS) when determining diluted earnings per share?

A) Either decrease or increase EPS depending upon if the security is dilutive or antidilutive.



B) Increase EPS.



C) Decrease EPS.



Explanation

Dilutive securities such as convertibles and options are found in a complex capital structure and always decrease EPS. Convertibles and options may also be antidilutive, which will increase EPS hence the name antidilutive. The only way to know if a security is dilutive or antidilutive is to compare the basic EPS to diluted EPS. If the diluted EPS is higher than the basic EPS then the security is antidilutive and should not be included when determining diluted EPS.

(Module 30.4, LOS 30.d)

Question #82 of 130

Question ID: 1573367

Gus Davy, CFA, is reviewing an industry that has been experiencing rising prices as well as unit volume growth. Davy's investment criteria include selecting companies generating the highest profit margins. If Davy does not adjust companies' financial statements for their inventory cost assumptions, he is *most likely* to select companies that use:

A) FIFO.



B) LIFO.



C) weighted average cost.



Explanation

The FIFO method recognizes the oldest costs in the cost of goods sold. With rising prices, COGS will be lower and net income will be higher using FIFO as compared to the LIFO or average cost methods. Higher net income relative to sales (which are not affected by the inventory cost method) means higher profit margins. (Module 30.2, LOS 30.b)

Question #83 of 130

Question ID: 1573465

Which of the following statements about the earnings per share calculation are *most accurate*?

A) If the diluted EPS is less than the basic EPS, then the diluted EPS is said to be anti-dilutive.



B) None of these choices are correct.



When calculating diluted EPS you must add the shares created from the

C) conversion of the bonds to the denominator and the interest expense times the tax rate to the numerator.



Explanation

Anti-dilutive is when dilutive EPS > basic EPS. When calculating diluted EPS, you must add the shares created from the conversion of the bonds to the denominator and the interest $(1 - \text{tax rate})$ to the numerator.

(Module 30.4, LOS 30.d)

Question #84 of 130

Question ID: 1573384

As of the beginning of the year HalfPass Productions, Inc., had the following complex capital structure:

- 3,000,000 common shares outstanding.
- 175,000 options with an exercise price of \$22.
- 250,000 warrants with an exercise price of \$18.

During the year:

- On March 1, the company issued 100,000 new shares of common stock.
- On July 1, the board of directors declared a 15% stock dividend.
- On September 1, the company repurchased 125,000 shares.
- Net income (after-tax) for the year was \$7,500,000.
- The company paid common dividends of \$2,750,000 and preferred dividends of \$1,300,000.
- The average market price for the common stock was \$25 per share.

Assume the fiscal year is January 1 through December 31. At year end, HalfPass's basic EPS is *closest* to:

A) \$1.66.



B) \$1.77.



C) \$1.94.



Explanation

The question is asking for basic *EPS*. Thus we can ignore the dilutive options and warrants.

Basic EPS = (net income – preferred dividends) / weighted average common shares outstanding

- The numerator = \$7.5 million – \$1.3 million = \$6.2 million
- Calculating the denominator is a bit more work (calculation detailed in table below):

Event	Notes	Million Shares	# Months Outstanding	Total
Beginning Bal. (BB)		3.000	12	36.000
New issue (March 01)		0.100	10	1.00
Stock Dividend	15% on BB	0.450	12	5.400
Stock Dividend	15% on new issue	0.015	10	0.150
Repurchase (Sept .1)		-0.125	4	-0.500
			<i>Total</i>	<i>42.050</i>

Average shares = 42,050,000 / 12 = 3,504,167

Basic EPS = \$6.2 million / 3.504 million = \$1.77

(Module 30.4, LOS 30.d)

Question #85 of 130

Question ID: 1573406

Bluff, Inc.'s stock transactions during the year were as follows:

January 1 90,000 common shares outstanding.

April 1 20% stock dividend is declared and issued.

October 1 10,000 shares are reacquired as treasury stock.

What is Bluff's weighted average number of shares outstanding during the year?

A) 98,000.



B) 101,000.



C) 105,500.



Explanation




Initial shares: $90,000 \times 1.20 =$ 108,000
– Reacquired treasury shares: $10,000 \times 3/12 =$ -2,500
105,500

(Module 30.4, LOS 30.d)

Question #86 of 130

Question ID: 1573390

Ajax Company has a simple capital structure. Which of the following will NOT be found on its balance sheet?

- A) 10%, secured mortgage bond denominated in Swiss francs. 
- B) 3%, \$100 par value convertible bond. 
- C) 6%, \$50 par value callable bond. 

Explanation




If convertible bonds exist, the firm has a complex capital structure.

(Module 30.4, LOS 30.d)

Question #87 of 130

Question ID: 1573369

Which of the following statements regarding making changes in accounting principles is *least* accurate?

- A) Changes in accounting estimates are now treated the same as changes in accounting principles. 
- B) A change in accounting principle is a change from one generally accepted accounting principle to another generally accepted principle. The firm making the change must justify the change. 
- C) The general rule is retrospective application. 

Explanation

Changes in accounting estimates are not treated the same as changes in principles. Changes in principles are treated retrospectively, whereas changes in accounting estimates are accounted for in the current and future periods. Both remaining statements are accurate.

(Module 30.3, LOS 30.c)

Question #88 of 130

Question ID: 1573389

An analyst has gathered the following information about a company:

- 110,000 shares of common outstanding at the beginning of the year.
- The company repurchases 20,000 of its own common shares on July 1.
- Net income is \$300,000 for the year.
- 10,000 shares of existing 10 percent cumulative \$100 par preferred outstanding that is not in arrears at the beginning or ending of the year.
- The company also has \$1 million in 10 percent callable bonds outstanding.
- The company has declared a \$0.50 dividend on the common.

What is the company's basic Earnings Per Share?

A) \$1.00.



B) \$2.00.



C) \$3.00.

**Explanation**

Interest is already deducted from earnings.

$$\frac{300,000 - (0.10)(\$100)(10,000)}{110,000 - (6/12)(20,000)} = \$2.00$$

(Module 30.4, LOS 30.d)


Question #89 of 130

Question ID: 1573486

An analyst prepares the following common-size income statements for Perez Company:

	20X1	20X2	20X3
Sales	100%	100%	100%
Cost of goods sold	50%	52%	53%
Selling and administrative expense	16%	12%	9%
Interest income	4%	4%	4%
Pretax income	30%	32%	34%
Income tax expense	15%	16%	17%
Net income	15%	16%	17%

Based only on this information, Perez's improving net profit margin is *most likely* a result of:

- A) improving gross margins. 
- B) greater financial leverage. 
- C) controlling operating expenses. 

Explanation

The improvement in net profit margin from 15% to 17% appears to result mainly from the firm reducing selling and administrative expense from 16% of sales to 9% of sales, thus decreasing operating expenses from 66% to 62% of sales. Gross margin is decreasing over this period because cost of goods sold is increasing as a percentage of sales. While financial leverage cannot be determined directly from the income statement, the fact that interest expense is a constant percentage of sales suggests financial leverage is stable.

(Module 30.5, LOS 30.e)

Question #90 of 130

Question ID: 1573359

According to the standards for revenue recognition, a promise to transfer a distinct good or service is *most accurately* described as a:

A) contract.



B) performance obligation.



C) transaction.



Explanation

Performance obligations within a contract are defined as promises to transfer distinct goods or services.

(Module 30.1, LOS 30.a)

Question #91 of 130

Question ID: 1573372

Retrospective presentation is *least likely* required for a change from:

A) LIFO to average cost inventory valuation.



B) percentage-of-completion to completed contract revenue recognition.



C) zero salvage value to positive salvage value.



Explanation

Changes in accounting principle require retrospective presentation. A change in the salvage value of an asset is a change in accounting estimate, which does not apply retrospectively.

(Module 30.3, LOS 30.c)

Question #92 of 130

Question ID: 1573371

A company changes from an incorrect method of accounting to an acceptable one. Which of the following statements about this change is *most accurate*?

A) It requires restatement of any prior period results that are presented in the current financial statements.



B) It is a change in accounting principle and is reported below the line net of taxes.



C) It is an unusual or infrequent item and is reported in net income from continuing operations.



Explanation

If a company changes from an incorrect method of accounting to an acceptable one, the company must disclose the nature of the error and its effect on net income, and restate any prior period results that are presented in the current financial statements.

(Module 30.3, LOS 30.c)

Question #93 of 130

Question ID: 1573401

Which of the following debt securities issued by a company would give it a complex capital structure?

- A) Convertible bonds.
- B) Floating rate notes.
- C) Asset-backed securities.



Explanation

A complex capital structure means a firm has securities outstanding that can be converted to common shares, and therefore have the potential to dilute a firm's earnings per share. For example, convertible bonds, convertible preferred stock, options, and warrants have the potential to dilute earnings per share upon conversion or exercise.

(Module 30.4, LOS 30.d)

Question #94 of 130

Question ID: 1573400

The SSP Company had 5 million shares outstanding on January 1. On February 15 the board of directors approved a 3:2 stock split, effective April 1. What is the weighted average number of shares outstanding for the SSP Company for year-end?

- A) 5,625,000 shares.
- B) 6,875,000 shares.
- C) 7,500,000 shares.



Explanation

Stock splits and stock dividends are applied to all shares that existed at the beginning of the period and shares that were issued or repurchased during the period, *but prior to the split or dividend*. For SSP, the 5 million beginning-of-year shares outstanding are adjusted to 7.5 million shares ($5.0 \times 3/2$) as a result of the 3:2 split.

(Module 30.4, LOS 30.d)

Question #95 of 130

Question ID: 1573395

At the beginning of 2004, Osami Corporation had 1.4 million shares of common stock outstanding and no preferred stock. At the end of August 2004, Osami issued 1.2 million new shares of common stock. If Osami reported net income equal to \$7.2 million, what were its earnings per share (EPS) for 2004?

A) \$2.77.**B) \$3.33.****C) \$4.00.****Explanation**

The new shares were only outstanding 4 months of the year. Thus, the weighted average number of shares outstanding is $[1.4 + (4/12)(1.2)]$ million = 1.8 million shares. So basic EPS = \$7.2 million / 1.8 million = \$4.00.

(Module 30.4, LOS 30.d)

Question #96 of 130

Question ID: 1573365

When a firm recognizes revenue in excess of expenses on a product before cash is collected, what is the impact on the firm's assets and liabilities, ignoring taxes?

Assets Liabilities

A) Increase No effect**B) No effect Increase****C) Increase Increase****Explanation**

When a firm recognizes revenue before cash is collected, equity increases (retained earnings) and assets increase (accounts receivable). When a product is sold on credit, accounts receivable (an asset) increases and inventory (also an asset) decreases. As long as the sale price of the product is more than the expense (reduction of inventory on the balance sheet), total assets will increase. Liabilities are not affected.

(Module 30.2, LOS 30.b)

Question #97 of 130

Question ID: 1573425

CXW, Inc. has issued 9,986 warrants, which were outstanding for the entire year, with an exercise price of \$38. Each warrant is convertible into 1 share of common. The average market price of CXW's common stock for the year is \$52.00 per share and its price at the end of the year is \$45.00 per share. In the calculation of CXW's diluted earnings per share, how many new shares would theoretically need to be issued to facilitate warrant conversion?

A) 2,689.



B) 8,433.



C) 9,986.

**Explanation**

If the warrants were exercised, the firm would receive the exercise price for each warrant:

$$9,986 \times \$38 = \$379,468$$

Using the treasury stock method, we assume the firm uses this cash to repurchase shares at the average price for the year:

$$\$379,468 / \$52 = 7,297 \text{ common shares}$$

If these repurchased shares were used toward fulfilling the warrants, the firm would need to issue $9,986 - 7,297 = 2,689$ new common shares to fulfill the rest of the warrants.

(Module 30.4, LOS 30.d)

Question #98 of 130

Question ID: 1573387

Connecticut, Inc.'s stock transactions during the year 20X5 were as follows:

- January 1: 360,000 common shares outstanding.
- April 1: 1 for 3 reverse stock split.
- July 1: 60,000 common shares issued.

When computing for earnings per share (EPS) computation purposes, what is Connecticut's weighted average number of shares outstanding during 20X5?

A) 210,000.



B) 140,000.



C) 150,000.



Explanation

Connecticut's January 1 balance of common shares outstanding is adjusted retroactively for the 1 for 3 reverse stock split, meaning there are $(360,000 / 3) = 120,000$ "new" shares treated as if they had been outstanding since January 1. The weighted average of the shares issued in July, $(60,000 \times 6 / 12) = 30,000$ is added to that figure, for a total of 150,000.

(Module 30.4, LOS 30.d)

Question #99 of 130

Question ID: 1573368

Capitalizing interest costs related to a company's construction of assets for its own use is *required* by:

A) both IFRS and U.S. GAAP.



B) U.S. GAAP only.



C) IFRS only.



Explanation

Both U.S. GAAP and IFRS require companies to capitalize the interest that accrues during the construction of capital assets for their own use.

(Module 30.2, LOS 30.b)

Question #100 of 130

Question ID: 1573408

Which of the following securities would *least likely* be found in a simple capital structure?

A) 3%, \$100 par value convertible preferred.



B) 6%, \$5000 par value putable bond.



C) 7%, \$100 par value non convertible preferred.



Explanation

A simple capital structure contains no potentially dilutive securities such as stock options, warrants, or convertible preferred stock.

(Module 30.4, LOS 30.d)

Question #101 of 130

Question ID: 1573453

Young Distributors, Inc. issued convertible bonds two years ago, and those bonds are the only potentially dilutive security Young has issued. In 20X5, Young's basic earnings per share (EPS) and diluted EPS were identical, but in 20X4 they were different. Which of the following factors is *least likely* to explain the difference between basic and diluted EPS? The:

A) bonds were redeemed by Young Distributors at the beginning of 20X5.



B) average market price of Young common stock increased in 20X5.



C) bonds were antidilutive in 20X5 but not in 20X4.

**Explanation**

Average stock price is not a factor in determining whether convertible bonds are dilutive or antidilutive.

If Young redeemed the bonds, they would have no potentially dilutive securities outstanding in 20X5 and diluted EPS, if the company reported it, would equal basic EPS. Basic and diluted EPS would also be equal in 20X5 if the bonds were antidilutive in that year.

(Module 30.4, LOS 30.d)

Question #102 of 130

Question ID: 1573399

A firm has had the following numbers of shares outstanding during the year:

Beginning of year	10,000,000 shares
Issued on April 1	500,000 shares
Split 2 for 1 on July 1	
Issued on October 1	100,000 shares
Split 2 for 1 on December 31	

Based on this information, what is the weighted number of shares outstanding for the year?

A) 20,780,000.



B) 42,400,000.



C) 41,550,000.



Explanation

Outstanding all year	$10,000,000 \times 2 \times 2 \times 1$	40,000,000
Outstanding for 0.75 years	$500,000 \times 2 \times 2 \times 0.75$	1,500,000
Outstanding for 0.25 years	$100,000 \times 2 \times 0.25$	50,000
Weighted average number of shares for year:		41,550,000

(Module 30.4, LOS 30.d)

Question #103 of 130

Question ID: 1573469

Orange Company's net income for 2004 was \$7,600,000 with 2,000,000 shares outstanding. The average share price in 2004 was \$55. Orange had 10,000 shares of eight percent \$1,000 par value convertible preferred stock outstanding since 2003. Each preferred share was convertible into 20 shares of common stock. Orange Company's diluted earnings per share (Diluted EPS) for 2004 is *closest* to:

A) \$3.80.



B) \$3.40.



C) \$3.45.



Explanation

Orange's basic EPS ((net income – preferred dividends) / weighted average common shares outstanding) is $[(\$7,600,000 - (10,000 \times \$1,000 \times 0.08)] / 2,000,000 = \3.40 . To check for dilution, EPS is calculated under the assumption that the convertible preferred shares are converted into common shares at the beginning of the year. The preferred dividends paid are added back to the numerator of the Diluted EPS equation, and the additional common shares are added to the denominator of the equation. Orange's if-converted EPS is $\$7,600,000 / (2,000,000 + 200,000) = \3.45 . Because if-converted EPS is higher than basic EPS, the preferred stock is antidilutive and no adjustment is made to basic EPS.

(Module 30.4, LOS 30.d)

Question #104 of 130

Question ID: 1573448

Zachary Company's warrants issued in 2000 are Zachary's only outstanding potentially dilutive security. In 2005, EPS and Dilutive EPS differed for the first time. A possible explanation for the change is the:

A) average market price of Zachary decreased.



B) average market price of Zachary increased.



C) year-end market price of Zachary increased.



Explanation

An increase in average market price could cause Zachary's warrants to go from antidilutive to dilutive. If the average price of the stock increases during the year, the warrants are likely to be exercised at some point during the year. Neither of the other choices would do this.

(Module 30.4, LOS 30.d)

Question #105 of 130

Question ID: 1573476

Which of the following statements is CORRECT regarding the reporting of earnings per share (EPS)?

A) The EPS when antidilutive securities are converted into shares of common stock is less than basic EPS.



B) Basic EPS can be less than diluted EPS.



C) Diluted EPS must be less than or equal to basic EPS.



Explanation

Antidilutive securities are securities that would increase EPS if exercised or converted to common stock.

(Module 30.4, LOS 30.d)

Question #106 of 130

Question ID: 1573441

The Widget Company had net income of \$1 million for the period. There were 1 million shares of widget common stock outstanding for the entire period. If there are 100,000 options outstanding with an exercise price of \$40, what is the diluted earnings per share for Widget common stock if the average price per share over the period was \$50?

A) \$1.00.



B) \$0.98.



C) \$0.99.



Explanation

Use the Treasury stock method

$$\text{Proceeds} = 100,000 (\$40) = \$4,000,000$$

$$\text{Shares assumed purchased with proceeds} = \$4,000,000 / \$50 = 80,000 \text{ shares}$$

$$\text{Potential dilution} = 100,000 - 80,000 = 20,000 \text{ shares}$$

$$\text{Basic EPS} = \$1/\text{share}$$

$$\text{Diluted EPS} = \$1,000,000 / 1,020,000 = \$0.98/\text{share}$$

(Module 30.4, LOS 30.d)

Question #107 of 130

Question ID: 1573449

Rushford Corp.'s net income is \$16,500,000 with 300,000 shares outstanding. The tax rate is 40%. The average share price for the year was \$372. Rushford has 50,000, 9%, \$1,000 par value convertible bonds outstanding. Each bond is convertible into two shares of common stock.

Rushford Corp.'s basic and diluted earnings per share (EPS) are *closest* to:

	<u>Basic EPS</u>	<u>Diluted EPS</u>	
A) \$55.00	\$48.00		✓
B) \$65.63	\$48.00		✗
C) \$55.00	\$51.56		✗

Explanation




Rushford's basic EPS (net income / weighted average common shares outstanding) is $\$16,500,000 / 300,000 = \55.00 . Diluted EPS is calculated under the assumption that the convertible bonds were converted into common stock, the bond interest net of tax is restored to net income, and the additional common shares are added to the denominator of the equation. Rushford's diluted EPS is $[\$16,500,000 + (50,000 \times \$1,000 \times 0.09)(1 - .40)] / (300,000 + (50,000 \times 2)) = \48.00 .

(Module 30.4, LOS 30.d)

Question #108 of 130

Question ID: 1573424

Which of the following statements about the calculation of earnings per share (EPS) is *least accurate*?

- A)** Shares issued after a stock split must be adjusted for the split. 
- B)** Reacquired shares are excluded from the computation from the date of reacquisition. 
- C)** Options outstanding may have no effect on diluted EPS. 

Explanation

Shares issued post-split need not be adjusted for the split as they are already "new" shares. Options with an exercise price greater than the average share price do not affect diluted EPS. (Module 30.4, LOS 30.d)

Question #109 of 130

Question ID: 1573444

Ajax Company's capital structure was as follows:

	<i>December 31, 2004</i>	<i>December 31, 2003</i>
<i>Outstanding shares of stock:</i>		
<i>Common</i>	200,000	200,000
<i>Convertible preferred</i>	5,000	5,000
<i>6% Convertible Bonds</i>	\$500,000	\$500,000

- During 2004, Ajax paid dividends of \$2.00 per share on its preferred stock.
- The preferred shares are convertible into 10,000 shares of common stock.
- The 6% bonds are convertible into 15,000 shares of common stock.
- Net income for 2004 was \$400,000.
- Assume that income tax rate is 40%.

Ajax's basic and diluted earnings per share for 2004 are:

- | | <u>Basic EPS</u> | <u>Diluted EPS</u> | |
|-----------|------------------|--------------------|---|
| A) | \$1.80 | \$1.86 |  |
| B) | \$1.95 | \$1.86 |  |
| C) | \$1.95 | \$1.95 |  |

Explanation

Basic EPS: $[400,000 - 10,000] / 200,000 \text{ shares} = \1.95 per share

Diluted EPS: $[400,000 + (30,000 \times 0.6)] / [200,000 + 10,000 + 15,000] = \1.86 per share

(Module 30.4, LOS 30.d)

Question #110 of 130

Question ID: 1573436

Assume that the exercise price of an option is \$10, and the average market price of the stock is \$13. Assuming 999 options are outstanding during the entire year, what is the number of shares to be added to the denominator of the diluted earnings per share (EPS)?

A) 231.



B) 768.



C) 999.



Explanation

$$(999)(10) = 9,990$$

$$9,990 / 13 = 768$$

$$999 - 768 = 231$$

(Module 30.4, LOS 30.d)

Question #111 of 130

Question ID: 1573435

Assume that the exercise price of an option is \$11, and the average market price of the stock is \$16. Assuming 1,039 options are outstanding during the entire year, what is the number of shares to be added to the denominator of the Diluted EPS?

A) 1,039.



B) 325.



C) 714.



Explanation

$(1,039 \text{ options})(\$11) = \$11,429$

$\$11,429 / \16 per share

$1039 - 714 = 325 \text{ shares or } [(16 - 11) / 16]1,039 = 325.$

(Module 30.4, LOS 30.d)

Question #112 of 130

Question ID: 1573415

Zichron, Inc., had the following equity accounts on December 31:

- Common stock: 20,000 shares.
- Preferred stock A: 10,000 shares convertible into common on a 2 for 1 basis, dividend of \$40,000 was declared during the year.
- Preferred stock B: 10,000 shares, convertible to common on a 4 for 1 basis, dividend of \$5,000 was declared during the year.
- The company reported net income of \$120,000 and paid a \$20,000 dividend to its common shareholders.

Basic earnings per share for the year are:

A) \$2.00.



B) \$2.75.



C) \$3.75.



Explanation

Basic EPS = $(\$120,000 - 40,000 - 5,000) / 20,000 \text{ shares} = \$3.75.$

(Module 30.4, LOS 30.d)

Question #113 of 130

Question ID: 1573421

A company has the following sequence of events regarding its stock:

- The company had 1,000,000 shares outstanding at the beginning of the year.
- On June 30, the company declared and issued a 10% stock dividend.
- On September 30, the company sold 400,000 shares of common stock at par.

The number of shares that should be used to compute basic earnings per share at year end is:

A) 1,100,000.



B) 1,000,000.



C) 1,200,000.



Explanation

original shares of common stock = 1,000,000(12) = 12,000,000

stock dividend = 100,000(12) = 1,200,000

new shares of common stock = 400,000(3) = 1,200,000

total shares of common stock = $\frac{14,400,000}{12}$ = 1,200,000

Stock dividends are assumed to have been outstanding since the beginning of the year.
(Module 30.4, LOS 30.d)

Question #114 of 130

Question ID: 1573397

At the beginning of this year Aristotle Co. had 400,000 shares of common stock outstanding. During the year, Aristotle paid a 10 percent stock dividend on May 31, issued 90,000 new common shares on June 30, and repurchased 12,000 shares on December 1. The number of shares Aristotle should use in computing earnings per share at the end of the year is:

A) 476,000.



B) 475,000.



C) 484,000.



Explanation

[400,000 shares × 12 months + 40,000 × 12 months + 90,000 × 6 months - (12,000 × 1 months)] divided by 12 = 484,000 shares.

(Module 30.4, LOS 30.d)

Question #115 of 130

Question ID: 1573456

Quad Associates, Inc.'s net income for 2005 was \$892,000 with 400,000 shares outstanding. The tax rate was 40 percent. Quad had 2,000 six percent \$1,000 par value convertible bonds that were issued in 2004. Each bond was convertible into 40 shares of common stock. Quad, Inc.'s diluted earnings per share (Diluted EPS) for 2005 was *closest* to:

A) \$2.23.



B) \$2.41.



C) \$2.01.



Explanation

Quad's basic EPS (net income / weighted average common shares outstanding) was $\$892,000 / 400,000 = \2.23 .

Diluted EPS is calculated under the assumption that the convertible bonds are converted into common stock, the bond interest net of tax is restored to net income, and the additional common shares are added to the denominator of the equation. Quad's diluted EPS was $[\$892,000 + (2,000 \times \$1,000 \times 0.06)(1 - 0.40)] / [400,000 + (2,000 \times 40)] = \2.01 . Since diluted EPS is less than basic EPS, we know that the bonds are dilutive and should be considered in calculating diluted EPS.

(Module 30.4, LOS 30.d)

Question #116 of 130

Question ID: 1573467

Securities are considered to be dilutive to earnings per share if:

A) they can be converted to common shares now or at any time in the future.



B) converting them to common shares would actually reduce earnings per share, compared to basic earnings per share.



C) converting them to common shares would decrease earnings available to common shareholders.



Explanation

Securities are dilutive if they would decrease EPS (compared to basic EPS) if they are exercised or converted to common stock. *Potentially dilutive* securities include any that can be converted to common shares now or at any time in the future. Assuming conversion of securities such as convertible bonds or convertible preferred stock typically increases earnings available to common shareholders; these securities are dilutive to EPS if they increase common shares relatively more than they increase earnings available to common.

(Module 30.4, LOS 30.d)

Question #117 of 130

Question ID: 1573417

Trotters Diversified has 10,000 convertible bonds with a 6.0% coupon and \$1,000 par value, each convertible into 8 shares of common stock. How many shares related to the convertible bonds should be included in the denominator of basic EPS?

A) 0.



B) 10,000.



C) 80,000.



Explanation

The calculation for basic EPS is not adjusted for the impact of potentially dilutive securities.

(Module 30.4, LOS 30.d)

Question #118 of 130

Question ID: 1573451

Selected information from Indigo Corp.'s financial activities in the year 20X9 included the following:

- Net income is \$5,600,000.
- The tax rate is 40%.
- 500,000 shares of common stock were outstanding on January 1.
- The average market price per share was \$82 in 20X9.
- 6,000 5% coupon \$1,000 par value convertible bonds, which are convertible at a ratio of 20 shares for each bond, were outstanding the entire year.
- 200,000 shares of common stock were issued on July 1.
- 100,000 shares of common stock were purchased by the company as treasury stock on October 1.

Indigo Corp.'s diluted earnings per share for 20X9 are *closest* to:

A) \$8.32.



B) \$8.49.



C) \$9.74.



Explanation

Indigo's weighted average common shares = $[(500,000 \times 12) + (200,000 \times 6) - (100,000 \times 3)] / 12 = 575,000$. Basic EPS = $\$5,600,000 / 575,000 = \9.74 .




For diluted EPS, assume the bonds were converted on January 1, and that interest payments were not made on the bonds. Increasing net income by the amount of bond interest net of tax = $\$5,600,000 + [6,000 \times \$1,000 \times 0.05 \times (1 - 0.40)] = \$5,780,000$. Diluted EPS = $\$5,780,000 / (575,000 + 120,000) = \8.32 .

(Module 30.4, LOS 30.d)

Question #119 of 130

Question ID: 1573361

The first-in-first-out (FIFO) expense recognition method for inventories *best* describes the physical flow of goods if customers typically purchase units:

- A) from the top of a stack. 
- B) in the same order the units are produced. 
- C) selectively from among all units for sale. 

Explanation

The FIFO cost flow method best approximates the physical flow of goods if customers typically purchase units in the order the units are produced, such as goods with a limited shelf life. Last-in-first-out (LIFO) best approximates the flow of goods if customers purchase units from the top of a stack, as with raw materials such as coal or gravel. If customers choose individual units selectively from among all the units for sale, the flow of goods may be unclear and the average cost method may describe it best.

(Module 30.2, LOS 30.b)

Question #120 of 130

Question ID: 1573455

Kendall Company's net income for 20X4 is \$830,000 with 200,000 shares outstanding. Kendall has 1,000 6% convertible bonds (each bond \$1,000 face value and convertible into 20 common shares) outstanding for the entire year. Kendall's tax rate is 40%. What is Kendall Company's diluted earnings per share for 20X4?

- A) \$3.77. 
- B) \$3.94. 
- C) \$4.15. 

Explanation

Kendall's basic EPS is $\$830,000 / 200,000 = \4.15 . To compute diluted EPS, bond interest paid net of taxes is added to net income, and the number of shares that would be issued in the conversion is added to the denominator. Kendall's diluted EPS = $[\$830,000 + (1,000 \times \$1,000 \times 0.06) \times (1 - 0.4)] / (200,000 + 20,000) = \3.94 . Since diluted EPS is less than basic EPS, we know that the bonds are dilutive and should be considered in calculating diluted EPS.

(Module 30.4, LOS 30.d)

Question #121 of 130

Question ID: 1573442

Assume that the exercise price of an option is \$5, and the average market price of the stock is \$8. Assuming 816 options are outstanding during the entire year, what is the number of shares to be added to the denominator of the diluted EPS?

A) 306.



B) 510.



C) 816.



Explanation

$(816)(5) = \$4,080$. $\$4,080 / \$8 = 510$ shares. $816 - 510 = 306$ new shares or $[(8 - 5) / 8]816 = 306$.

(Module 30.4, LOS 30.d)

Question #122 of 130

Question ID: 1573376

A firm's financial statements reflect the following:

Net income	\$1,700,000
EBIT	\$2,900,000
Effective tax rate	35%
Interest payments	\$285,000
Common equity	\$3,100,000

Total assets	\$6,600,000
Preferred dividends paid	\$1,100,000
Weighted avg. shares outstanding	523,000

Based on this information, what is the firm's basic EPS?

A) \$1.15.



B) \$3.25.



C) \$2.75.



Explanation

The firm's basic EPS = $(\$1,700,000 - \$1,100,000) / (523,000) = \1.147 .

(Module 30.4, LOS 30.d)

Question #123 of 130

Question ID: 1573487

Selected financial ratios from Mulroy Company's common-size income statements are as follows:

	20X1	20X2	20X3
Gross profit margin	22%	24%	26%
Operating profit margin	18%	20%	22%
Pretax margin	15%	14%	13%
Net profit margin	11%	10%	9%

Relative to sales, it is *most likely* that Mulroy's:

A) nonoperating expenses are increasing.



B) operating expenses are increasing.



C) income tax expense is increasing.



Explanation




Nonoperating expenses are equal to the difference between operating profit and pretax profit. Based on the given profit margins, Mulroy's nonoperating expenses increased from 3% of sales in 20X1 to 9% of sales in 20X3. Because gross profit margin is increasing, cost of goods sold is decreasing as a percentage of sales. Other operating expenses and income tax expense, as a percentage of sales, were stable over the period shown.

(Module 30.5, LOS 30.e)

Question #124 of 130

Question ID: 1573385

For a firm with a simple capital structure, all of the following are necessary to measure basic earnings per share (EPS) EXCEPT:

- A) dividends paid to common shareholders. 
- B) the timing and number of shares issued or repurchased during the year. 
- C) dividends paid to preferred shareholders. 

Explanation

Basic EPS = earnings available to common shareholders divided by the weighted average number of common shares outstanding. Earnings available to common shareholders equals net income minus preferred dividends.

(Module 30.4, LOS 30.d)

Question #125 of 130

Question ID: 1573434

The following data pertains to the Sapphire Company:

- Net income equals \$15,000.
- 5,000 shares of common stock issued on January 1st.
- 10% stock dividend issued on June 1st.
- 1,000 shares of common stock were repurchased on July 1st.
- 1,000 shares of 10%, \$100 par preferred stock each convertible into 8 shares of common were outstanding the whole year.

What is the company's diluted earnings per share (EPS)?

- A) \$1.15. 
- B) \$2.50. 

C) \$1.00.



Explanation

Number of average common shares:

1/1 5,500 shares issued (includes 10% stock dividend on 6/1) $\times 12 = 66,000$

7/1 1,000 shares repurchased $\times 6$ months = -6,000

= 60,000

60,000 shares / 12 months = 5,000 average shares

Preferred dividends = $(\$10)(1,000) = \$10,000$

Number of shares from the conversion of the preferred shares = $(1,000 \text{ preferred shares})(8 \times 1.1 \text{ shares of common/share of preferred}) = 8,800 \text{ common}$

Diluted EPS = $[\$15,000(\text{NI}) - \$10,000(\text{pfd}) + \$10,000(\text{pfd})] / (5,000 \text{ common shares} + 8,800 \text{ shares from the conv. pfd.}) = \$15,000 / 13,800 \text{ shares} = \$1.09/\text{share}$

This number needs to be compared to basic EPS to see if the preferred shares are antidilutive.

Basic EPS = $[\$15,000(\text{NI}) - \$10,000(\text{preferred dividends})] / 5,000 \text{ shares} = \$5,000 / 5,000 \text{ shares} = \$1/\text{share}$

Since the EPS after the conversion of the preferred shares is greater than before the conversion the preferred shares are antidilutive and they should not be treated as common in computing diluted EPS. Therefore diluted EPS is the same as basic EPS or \$1/share.

(Module 30.4, LOS 30.d)

Question #126 of 130

Question ID: 1573388

The following information pertains to Bender, Inc., for last year:

- Net income of \$25 million.
- 1 million shares of \$10 par value preferred stock outstanding paying a 10% dividend.
- 50 million shares of common stock outstanding at the beginning of the year.
- Issued an additional 5 million shares of common stock on 7/1.

What is Bender, Inc.'s basic earnings per share (EPS)?

A) \$0.384.



B) \$0.457.



C) \$0.476.



Explanation

$50,000,000 \text{ common shares} \times 12 \text{ months} = 600,000,000$

$5,000,000 \text{ common shares} \times 6 \text{ months} = 30,000,000 = 630,000,000$

$630,000,000 / 12 = 52,500,000 \text{ average shares}$

$[\$25,000,000(\text{NI}) - \$1,000,000(\text{preferred dividends})] / 52,500,000 \text{ shares} = \$24,000,000 / 52,500,000 = \0.457

(Module 30.4, LOS 30.d)

Question #127 of 130

Question ID: 1573482

An analyst compiled the following information from Hampshire, Inc.'s financial activities in the most recent year:

- Net income was \$2,800,000.
- 100,000 shares of common stock were outstanding on January 1.
- The average market price per share for the year was \$250.
- 10,000 shares of 6%, \$1,000 par value preferred shares were outstanding the entire year.
- 10,000 warrants, which allow the holder to purchase 10 shares of common stock for each warrant held at a price of \$150 per common share, were outstanding the entire year.
- 30,000 shares of common stock were issued on September 1.

Hampshire, Inc.'s diluted earnings per share are *closest* to:

A) \$20.00.



B) \$14.67.



C) \$18.38.



Explanation

To compute Hampshire's basic EPS ((net income – preferred dividends) / weighted average common shares outstanding), the weighted average common shares must be computed. 100,000 shares were outstanding from January 1, and 30,000 shares were issued on September 1, so the weighted average is $100,000 + (30,000 \times 4 / 12) = 110,000$. Basic EPS is $(\$2,800,000 - (10,000 \times \$1,000 \times 0.06)) / 110,000 = \20.00 .

If the warrants were exercised, cash inflow would be $10,000 \times \$150 \times 10 = \$15,000,000$ for $10 \times 10,000 = 100,000$ shares. Using the treasury stock method, the number of Hampshire shares that can be purchased with the cash inflow (cash inflow / average share price) is $\$15,000,000 / \$250 = 60,000$. The number of shares that would be created is $100,000 - 60,000 = 40,000$. Diluted EPS is $\$2,200,000 / (110,000 + 40,000) = \14.67 .

(Module 30.4, LOS 30.d)

Question #128 of 130

Question ID: 1573409

Sampson Corp. had 500,000 shares of common stock outstanding at the beginning of the year. The average market price was \$20.

- On April 1, Sampson issued 100,000 shares of \$1000 par value 10 percent preferred stock.
- On July 1, Sampson issued 200,000 warrants to purchase 10 shares of common stock each at \$22 per share.
- On October 1, Sampson repurchased 60,000 of common stock as treasury stock for \$15 per share.

The weighted average common shares outstanding Sampson should use to compute basic earnings per share (EPS) was:

A) 515,000.



B) 600,000.



C) 485,000.



Explanation

Only the October 1 transaction affects the weighted average common shares outstanding because the April 1 transaction would not affect the number of shares outstanding and the July 1 transaction involves warrants which would not be included in the basic EPS calculation. The computation for basic EPS is $[(500,000 \times 12) - (60,000 \times 3)] / 12 = 485,000$.

(Module 30.4, LOS 30.d)

Question #129 of 130

Question ID: 1573410

Oregon Corp.'s stock transactions during the year were as follows:

- January 1: 320,000 shares outstanding.
- April 1: 1-for-2 reverse stock split occurred.
- July 1: Acquisition of Smith, Inc. in exchange for issuance of 60,000 shares.
- October 1: 30,000 shares issued for cash.

What is Oregon's weighted average number of shares outstanding?

A) 197,500.



B) 167,500.



C) 250,000.



Explanation

The January 1 balance is adjusted retroactively for the reverse stock split and 320,000 / 2 = 160,000 shares are treated as outstanding from January 1. Issuance of stock is included from the date of issuance. The weighted average shares are computed by multiplying the share amounts by the number of months the shares were outstanding, then adding these amounts and dividing the sum by 12.

January 1: initial shares	$160,000 \times 12 =$	1,920,000
July 1: Smith acquisition	$60,000 \times 6 =$	360,000
October 1: cash issuance	$30,000 \times 3 =$	<u>90,000</u>
Total:		2,370,000

Oregon's weighted average shares = 2,370,000 / 12 = 197,500.

(Module 30.4, LOS 30.d)

Question #130 of 130

Question ID: 1573471

Which of the following statements about a firm with convertible preferred stock outstanding is *most* accurate?

A) If diluted and basic EPS are equal, the firm must report both basic and diluted EPS.



B) Diluted EPS is calculated with net income minus preferred dividends in the numerator.



C) If diluted EPS is less than basic EPS then the convertible preferred is said to be antidilutive.



Explanation

A firm with any potentially dilutive securities outstanding must report both basic and diluted EPS, even if the two are equal. If convertible preferred stock is dilutive to earnings per share, the preferred dividend is added back to the numerator as if the preferred has been converted to common shares. If diluted EPS is less than basic EPS then the convertible preferred is said to be dilutive.

(Module 30.4, LOS 30.d)