

Question 1

L2R25TB-AC007-1512

LOS: LOS-7500

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

A company is *most likely* justified in cutting its common stock dividend if:

- ☐ it has cumulative preference shares.
- ☒ maintaining the dividend would result in a downgrade of the company's bond rating.
- ☐ the company's common shares have fallen 20 percent in the past month, while the overall market has risen.

Rationale

 **it has cumulative preference shares.**

The best reason is that the bond rating will decline, which increases the cost of debt. The fact that it has preference shares does not mean it is justified in cutting its common stock dividend. If it has insufficient funds to invest in positive NPV projects and meet its preference dividend requirements, only then it is justified in cutting its common dividend. A decline in the stock price does not justify the cutting of the dividend. In fact, the company may want to maintain or increase its dividend as a way to reassure investors in the shares.

Rationale

 **maintaining the dividend would result in a downgrade of the company's bond rating.**

The best reason is that the bond rating will decline, which increases the cost of debt. The fact that it has preference shares does not mean it is justified in cutting its common stock dividend. If it has insufficient funds to invest in positive NPV projects and meet its preference dividend requirements, only then it is justified in cutting its common dividend. A decline in the stock price does not justify the cutting of the dividend. In fact, the company may want to maintain or increase its dividend as a way to reassure investors in the shares.

Rationale

 **the company's common shares have fallen 20 percent in the past month, while the overall market has risen.**

The best reason is that the bond rating will decline, which increases the cost of debt. The fact that it has preference shares does not mean it is justified in cutting its common stock dividend. If it has insufficient funds to invest in positive NPV projects and meet its preference dividend requirements, only then it is justified in cutting its common dividend. A decline in the stock price does not justify the cutting of the dividend. In fact, the company may want to maintain or increase its dividend as a way to reassure investors in the shares.

Question 2

L2R25TB-AC026-1512

LOS: LOS-7510

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

A country's marginal tax rates on dividend income and capital gains are 40 percent and 30 percent, respectively. The amount of capital gains equivalent on an after-tax basis to \$1.00 in dividends is *closest* to:

- ☐ \$0.60
- ☒ \$0.86
- ☐ \$1.17

Rationale

✗ \$0.60

The first step is to determine how much the share price should decline per each \$1 of dividends paid. This can be done using the price change formula as follows:

$$P_w - P_x = D \frac{1 - T_D}{1 - T_{CG}} = \$1.00 \frac{1 - 0.40}{1 - 0.30} = \$0.857$$

This outcome shows that \$.0857 (approximately \$0.86) in capital gains is equivalent on an after-tax basis to \$1.00 in dividend income.

Rationale

✓ \$0.86

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Rationale

✗ \$1.17

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Question 3

L2R25TB-AC016-1512

LOS: LOS-7500

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

With respect to flotation costs and their effect on dividend policy, it is *most likely* that flotation costs are:

- ☐ generally lower in total as the size of the issuance rises.
- ☐ not important to a firm that is already publicly traded.
- ☒ a more crucial factor to small firms than large firms.

Rationale

 **generally lower in total as the size of the issuance rises.**

Flotation costs are a more crucial factor to small firms because costs per dollar of proceeds are higher for smaller issues. Flotation (issuance) costs make it more costly for smaller companies to raise new funds by issuing new shares of common stock.

Rationale

 **not important to a firm that is already publicly traded.**

Flotation costs are a more crucial factor to small firms because costs per dollar of proceeds are higher for smaller issues. Flotation (issuance) costs make it more costly for smaller companies to raise new funds by issuing new shares of common stock.

Rationale

 **a more crucial factor to small firms than large firms.**

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Question 4

L1CF-PQ3804-1410

LOS: LOS-7471

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

Alpha Inc. has 5 million shares outstanding. The stock is currently trading for \$40 with an EPS of \$1.60 and a P/E multiple of 25. The company's directors announce a 10% stock dividend.

Given that Sonia had initially purchased 1,200 shares of Alpha Inc. for \$36/share, her cost per share after the stock dividend will be *closest to*:

- ☐ \$30.37
- ☐ \$36.00
- ☒ \$32.73

Rationale

✔ **This Answer is Correct**

Number of share held after the stock dividend = $1,200 \times 1.1 = 1,320$

Therefore, cost per share after the stock dividend = $(36 \times 1,200) / 1,320 = \32.7273

Question 5

L2R25TB-AC025-1512

LOS: LOS-7520

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

Hebron Figs paid a regular dividend of £0.50 out of £3.00 earnings for the year that just ended. The company estimates earnings per share of £5.50 for the upcoming year. Assuming the company has a target payout ratio of 45 percent and it uses a four-year period to adjust its dividend, the dividend expected for the upcoming year is *closest* to:

- ☐ £1.30
- ☒ £1.00
- ☐ £0.80

Rationale

✔ **This Answer is Correct**

Because the company wants to gradually increase the payout ratio over four years to 45 percent, it will need to use a 25 percent (1/4) adjustment factor. The expected dividend and dividend payout ratio are calculated as follows:

Expected dividend = Previous dividend + [((Expected earnings × Target payout ratio) – Previous dividend) × Adjustment factor]

Expected dividend = £0.50 + [((£5.50 × 0.45) – £0.50) × (1/4)] = £0.99375

Question 6

L2R25TB-AC024-1512

LOS: LOS-7510

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

A company pays a corporate tax rate of 25 percent and has a 100 percent dividend payout ratio. If shareholders pay a 30 percent tax rate on dividends received, the effective total tax rate on the company's pretax income distributed as dividends is *closest* to:

- ☐ 30.0 percent.
- ☒ 47.5 percent.
- ☐ 55.0 percent.

Rationale

30.0 percent.

This answer is best seen by using some example amounts. If a company has pretax income of \$10 million, then its net income after tax is \$7.5 million (pretax income \times (1 – corporate tax rate)). With a 100 percent payout ratio, the entire \$7.5 million is paid out as dividends. The shareholders have to pay a 30 percent tax rate on this amount, or \$2.25 million ($0.30 \times \7.5 million). Net, the shareholders receive \$5.25 million (\$7.5 million – 2.25). The total taxes paid on the pretax earnings are \$2.5 million (corporate) + \$2.25 (dividend tax), or \$4.75 million, and the effective total tax rate on the company's pretax income is 47.5 percent ($\$4.75/\10).

Rationale

47.5 percent.

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Rationale

55.0 percent.

This answer is best seen by using some example amounts. If a company has pretax income of \$10 million, then its net income after tax is \$7.5 million (pretax income \times (1 – corporate tax rate)). With a 100 percent payout ratio, the entire \$7.5 million is paid out as dividends. The shareholders have to pay a 30 percent tax rate on this amount, or \$2.25 million ($0.30 \times \7.5 million). Net, the shareholders receive \$5.25 million (\$7.5 million – 2.25). The total taxes paid on the pretax earnings are \$2.5 million (corporate) + \$2.25 (dividend tax), or \$4.75 million, and the effective total tax rate on the company's pretax income is 47.5 percent ($\$4.75/\10).

Question 7

L1CF-PQ3806-1410

LOS: LOS-7471

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

Alpha Inc. has 5 million shares outstanding. The stock is currently trading for \$40 with an EPS of \$1.60 and a P/E multiple of 25. The company's directors announce a 10% stock dividend.

A stock dividend will *most likely*:

- ☐ Worsen the company's liquidity ratios.
- ☐ Worsen the company's solvency ratios.
- ☒ Have no effect on either the company's liquidity or solvency ratios.

Rationale

This Answer is Correct

Stock dividends have no effect on a company's capital structure. Retained earnings fall by the value of stock dividends paid, but there is an offsetting increase in contributed capital so there is no change in shareholders' equity.

Question 8

L1CF-PQ3808-1410

LOS: LOS-7471

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

Jeremy Traders has 30 million shares outstanding. The stock is currently trading for \$60, with an EPS of \$2.50 and a P/E multiple of 24. The company earns net income of \$200 million for the year and pays out an annual dividend of \$1.50 per share. The board of directors is considering a 3-for-2 stock split.

The company's stock price after the stock split will be *closest to*:

- ☐ \$60
- ☒ \$40
- ☐ \$45

Rationale

 **This Answer is Correct**

Stock price after the stock split = $(60 \times 30,000,000) / 45,000,000 = \40

Question 9

L1CF-PQ3812-1410

LOS: LOS-7522

Lesson Reference: Lesson 5: Share Repurchases

Difficulty: medium

Pluto Manufacturers plans to repurchase \$10 million worth of common stock with borrowed funds. The following information is provided:

Repurchase price = \$25

Net income after tax = \$120 million

EPS before repurchase = \$1.50

Given that the company finances the repurchase by borrowing at an after-tax interest rate of 12.0%, its EPS after the repurchase will be *closest to*:

☒ \$1.49

☐ \$1.50

☐ \$1.52

Rationale

✔ This Answer is Correct

Number of shares initially outstanding = Net income / EPS = 120,000,000 / 1.5 = 80 million

Number of shares repurchased = 10,000,000 / 25 = 400,000

Therefore, number of shares outstanding after the repurchase:

= 80,000,000 – 400,000 = 79,600,000

EPS after the repurchase:

= (Net income after tax – After-tax interest expense) / Shares outstanding after the repurchase

= [120,000,000 – (10,000,000 × 0.12)] / 79,600,000 = \$1.4924

Question 10

L1CF-PQ3818-1410

LOS: LOS-7522

Lesson Reference: Lesson 5: Share Repurchases

Difficulty: medium

Consider the following statements:

Statement 1: When a company repurchases stock with idle cash, the higher the price at which it repurchases its stock relative to the current market price, the more significant the increase in EPS.

Statement 2: When a company repurchases stock with borrowed funds, if the cost of borrowing is lower than the company's dividend yield, EPS will rise after the repurchase.

Which of the following is *most likely*?

- ☒ Both statements are incorrect.
- ☐ Only one statement is correct.
- ☐ Both statements are correct.

Rationale

This Answer is Correct

When a company repurchases stock with idle cash, the higher the price at which it repurchases its stock relative to the current market price, the **less** significant the increase in EPS.

When a company repurchases stock with borrowed funds, if the cost of borrowing is lower than the company's **earnings** yield, EPS will rise after the repurchase.

Question 11

L2CF-TBX103-1502

LOS: LOS-7520

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: easy

Last year, Ganede Inc. had earnings of \$1.90 per share and paid a regular dividend of \$0.30. For the current year, the company anticipates earnings of \$2.70. It has a 20% target payout ratio and uses a three-year period to adjust the dividend. The expected payout ratio for the current year is closest to:

- ☐ 13%.
- ☒ 14%.
- ☐ 20%.

Rationale

✔ This Answer is Correct

Under the target payout ratio approach:

Expected dividend = Previous dividend + [(Expected earnings × Target payout ratio) – Previous dividend] × Adjustment factor

Expected dividend = \$0.30 + [(\$2.70 × 0.20) – \$0.30] × 1/3

= \$0.30 + \$0.08 = \$0.38

Expected Payout Ratio = Expected dividend/Expected earning = 0.38/2.70 = 14%

Question 12

L2CF-TBB208-1412

LOS: LOS-7340

Lesson Reference: Lesson 3: Factors Affecting Dividend Policy in Practice

Difficulty: medium

A company pays corporation tax of 20%. A higher rate taxpayer has a marginal income tax rate on dividends of 40%. Which of the following is closest to the effective tax rate on the dividend in a tax imputation system?

- ☒ 40%.
- ☐ 50%.
- ☐ 60%.

Rationale

This Answer is Correct

For \$100 of pretax income, the company will pay corporation tax of $0.2 \times \$100 = \20 . The investor will be liable to $0.4 \times \$100 = \40 income tax on this pretax income; however, the company will receive a tax credit for corporate payment of $0.2 \times \$100 = \20 .

Hence, the tax due from the shareholder will be $\$40 - \$20 = \$20$. Effective tax rate on the dividend will then be $\$20 / \$100 = 20\%$.

Question 13

L2FR-PQ2407-1410

LOS: LOS-7500

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

Sarah Parker owns 180,000 shares of Darius Corporation, which are currently selling for \$28 per share. The company has announced a dividend of \$2.25 per share. Dividends are taxed at 32%, while capital gains are taxed at 15%. Given that Sarah reinvests the gross amount of all dividends received to purchase additional shares, the market value of Sarah's investment after she reinvests dividends at the ex-dividend price is *closest to*:

- ☒ \$5.121 million
- ☐ \$5.445 million
- ☐ \$5.742 million

Rationale

✔ This Answer is Correct

Sarah's dividend income amounts to $\$2.25 \times 180,000 = \$405,000$.

In order to calculate the market value of Sarah's shares after reinvesting dividends at the ex-dividend price, we will first need to calculate the stock's ex-dividend price (P_X).

$$P_W - P_X = [(1 - T_D) / (1 - T_{CG})] \times D$$

$$\$28 - P_X = [(1 - 0.32) / (1 - 0.15)] \times \$2.25$$

$$P_X = \$26.20$$

$$\text{Number of shares Sarah will be able to purchase} = \$405,000 / \$26.20 = 15,458.02 \approx 15,458$$

$$\text{Total market value of Sarah's investment} = (180,000 + 15,458) \times 26.20 = \$5,120,999.6$$

Question 14

L1CF-PQ3813-1410

LOS: LOS-7522

Lesson Reference: Lesson 5: Share Repurchases

Difficulty: medium

Pluto Manufacturers plans to repurchase \$10 million worth of common stock with borrowed funds. The following information is provided:

Repurchase price = \$25

Net income after tax = \$120 million

EPS before repurchase = \$1.50

Given that the company finances the repurchase by borrowing at an after-tax interest rate of 6.0%, its EPS after the repurchase will *most likely* be:

- ☐ Higher than before the repurchase.
- ☐ Lower than before the repurchase.
- ☒ Same as that before the repurchase.

Rationale

✔ This Answer is Correct

Earnings yield = $\text{EPS} / \text{Stock price} = 1.5 / 25 = 6.00\%$

If the company's after-tax cost of borrowing equals its earnings yield, its EPS will remain the same after the share repurchase.

Question 15

L2R25TB-AC018-1512

LOS: LOS-7470

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

A firm will *most likely* experience a decline in its cost of capital as its payout ratio increases if:

- ☒ the bird in the hand theory applies.
- ☐ capital gains are taxed at a lower rate than dividend income.
- ☐ the company's current shareholder clientele has a preference for capital gains.

Rationale

☒ **the bird in the hand theory applies.**

Under the bird in hand theory, shareholders prefer a certain stream of cash flows in the form of cash dividends to an uncertain stream of cash flows in the form of uncertain capital gains. As a result, the cost of capital to a dividend paying company declines as the company raises its dividend payout ratio and a lower cost of capital should cause the stock price to rise.

Rationale

☐ **capital gains are taxed at a lower rate than dividend income.**

Under the bird in hand theory, shareholders prefer a certain stream of cash flows in the form of cash dividends to an uncertain stream of cash flows in the form of uncertain capital gains. As a result, the cost of capital to a dividend paying company declines as the company raises its dividend payout ratio and a lower cost of capital should cause the stock price to rise.

Rationale

☐ **the company's current shareholder clientele has a preference for capital gains.**

Under the bird in hand theory, shareholders prefer a certain stream of cash flows in the form of cash dividends to an uncertain stream of cash flows in the form of uncertain capital gains. As a result, the cost of capital to a dividend paying company declines as the company raises its dividend payout ratio and a lower cost of capital should cause the stock price to rise.

Question 16

L1CF-PQ3801-1410

LOS: LOS-7471

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

Alpha Inc. has 5 million shares outstanding. The stock is currently trading for \$40 with an EPS of \$1.60 and a P/E multiple of 25. The company's directors announce a 10% stock dividend.

The company's EPS after the stock dividend will be *closest to*:

- ☒ \$1.45
- ☐ \$1.36
- ☐ \$1.76

Rationale

✔ This Answer is Correct

Shares outstanding after the stock dividend = $5,000,000 \times 1.1 = 5,500,000$

Therefore, EPS after the stock dividend = $(1.6 \times 5,000,000) / 5,500,000 = \1.4545

Question 17

L1CF-PQ3810-1410

LOS: LOS-7471

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

Jeremy Traders has 30 million shares outstanding. The stock is currently trading for \$60 with an EPS of \$2.50 and a P/E multiple of 24. The company earns net income of \$200 million for the year and pays out an annual dividend of \$1.50 per share. The board of directors is considering a 3-for-2 stock split.

Given that an investor initially purchased 1,000 shares of the company at \$50 per share, her cost per share after the split will be *closest to*:

- ☐ \$25.00
- ☐ \$50.00
- ☒ \$33.33

Rationale

✓ **This Answer is Correct**

Number of shares held after the stock split = $1,000 \times 3/2 = 1,500$

Therefore, cost per share after the stock split = $(50 \times 1,000) / 1,500 = \33.33

Question 18

L2R25TB-ITEMSET-AC001-1512

LOS: LOS-7520

LOS: LOS-7530

LOS: LOS-7490

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

Use the following information to answer the next 3 questions:

An analyst has gathered the following selected 2014 financial information for Nabu Baklava Bakeries (NBB):

Net income	\$4,800,000
Cash flow from operations (CFO)	\$6,000,000
Capital expenditures	\$23,500,000
Total assets	\$200,000,000
Net new debt	\$19,300,000
Cost of new debt	6.0 percent
Dividends paid	\$1,200,000
Share repurchases	\$1,000,000
Number of shares outstanding	1,000,000

NBB's sales have increased significantly over the last few years and are expected to continue to increase through exports. As a result, NBB's president expects the company's net income to rise to \$5,400,000 in the next year and to \$9,800,000 in five years. For many years, in light of its shareholders base, NBB has pursued a stable dividend policy.

The president of NBB tells the analyst investigating the stock that the company's dividend is extremely safe for the following reasons:

1. The dividend coverage ratio is 4.0x, which is better than its competitors' coverage ratios.
2. We can always suspend our share repurchases if we need the funds to maintain the dividend.
3. It is highly unlikely we will need to raise additional capital by issuing new securities to continue to fund both the dividends and the share repurchases.

The president notes that the current shareholders seem to prefer growth over dividends. But he expects the shareholder base to change over time to reflect a class of shareholders who want dividends. Since he expects the company's growth to virtually stop at the end of five years, he has set a target dividend payout ratio of 80 percent to be achieved at the end of five year period. This high payout ratio will better meet the desires of the class of investors expected to own the shares in five years.

i.

Given NBB's dividend policy, the expected dividend per share for the company in 2015 is *closest to*:

- ☒ \$1.30
- ☐ \$1.35
- ☐ \$2.00

Rationale

 **This Answer is Correct**

Because the company wants to gradually increase the payout ratio over five years to 80 percent, it will need to use a 20 percent (1/5) adjustment factor. The company's 2014 earnings per share (EPS) and dividends per share (DPS) are \$4.80 (\$4,800,000/1,000,000) and \$1.20 (\$1,200,000/1,000,000). The expected EPS in the next year (2015) is \$5.60 (\$5,400,000/1,000,000). Given the EPS amounts, the target payout ratio, and the adjustment factor, the expected dividend and dividend payout ratio are calculated as follows:

$$\begin{aligned}\text{Expected increase in dividends per share} &= \text{Increase in EPS} \times \text{Target payout ratio} \times \text{Adjustment factor} \\ &= (\$5.40 - \$4.80) \times 0.80 \times 0.20 = \$0.096 \\ \text{Expected dividend in upcoming year} &= \$1.20 + 0.096 \approx \$1.30\end{aligned}$$

Rationale

✔ This Answer is Correct

Because the company wants to gradually increase the payout ratio over five years to 80 percent, it will need to use a 20 percent (1/5) adjustment factor. The company's 2014 earnings per share (EPS) and dividends per share (DPS) are \$4.80 (\$4,800,000/1,000,000) and \$1.20 (\$1,200,000/1,000,000). The expected EPS in the next year (2015) is \$5.60 (\$5,400,000/1,000,000). Given the EPS amounts, the target payout ratio, and the adjustment factor, the expected dividend and dividend payout ratio are calculated as follows:

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Rationale

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Because the company wants to gradually increase the payout ratio over five years to 80 percent, it will need to use a 20 percent (1/5) adjustment factor. The company's 2014 earnings per share (EPS) and dividends per share (DPS) are \$4.80 (\$4,800,000/1,000,000) and \$1.20 (\$1,200,000/1,000,000). The expected EPS in the next year (2015) is \$5.60 (\$5,400,000/1,000,000). Given the EPS amounts, the target payout ratio, and the adjustment factor, the expected dividend and dividend payout ratio are calculated as follows:

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ii.

Of the three statements made by NBB's president, the statement that is *least likely* correct is:

- ☐ Statement 1.
- ☐ Statement 2.
- ☒ Statement 3.

Rationale

✖ This Answer is Incorrect

The best way to see if new securities will need to be issued to fund the dividend and share repurchases is to determine NBB's free cash flow to equity (FCFE) to dividends and repurchases coverage ratio. The calculations are as follows:

$$\text{FCFE} = \text{CFO} - \text{Capital expenditures} + \text{Net new debt} = \$6,000,000 - 23,500,000 + 19,300,000$$

$$=\$1,800,000$$

$$\begin{aligned} \text{FCFE}/(\text{Dividends} + \text{Share repurchases})\text{Coverage ratio} &= \$1,800,000/(\$1,200,000 + 1,000,000) \\ &= 0.82 \end{aligned}$$

Since this coverage ratio is less than one, NBB may need to issue securities to raise cash in order to maintain its dividend and share repurchase programs.

Rationale

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$$=\$1,800,000$$

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$$\text{FCFE} = \text{CFO} - \text{Capital expenditures} + \text{Net new debt} = \$6,000,000 - 23,500,000 + 19,300,000$$

$$=\$1,800,000$$

$$\begin{aligned} \text{FCFE}/(\text{Dividends} + \text{Share repurchases})\text{Coverage ratio} &= \$1,800,000/(\$1,200,000 + 1,000,000) \\ &= 0.82 \end{aligned}$$

Since this coverage ratio is less than one, NBB may need to issue securities to raise cash in order to maintain its dividend and share repurchase programs.

iii.

When describing the expected change in the shareholder base over the next five years, NBB's president is *best* describing a change in:

- ☒ clientele.
- ☐ tax rates.

☐ flotation costs.

Rationale

This Answer is Incorrect

The clientele effect describes how differing classes of investors have differing dividend preferences. He is stating that the classes of shareholders holding the company's shares will be changing from growth investors to income investors. Hence, he is describing a change in clientele.

Rationale

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Question 19

L2R25TB-AC011-1512

LOS: LOS-7530

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

For a company whose sales are very sensitive to the business cycle, the *most* appropriate dividend policy is a:

- ☐ constant payout ratio.
- ☐ residual dividend policy.
- ☒ small cash dividend combined with occasional share repurchases.

Rationale

constant payout ratio.

If a company's sales are cyclical, it is likely that its cash flows are cyclical as well. The shareholders of such a company are best served through a regular small dividend and an occasional share repurchase program. Through this policy, the company can distribute some of its profits on a continuous basis without making a commitment to pay a large dividend during a weak economic period when its sales and cash flows are weak. Should sales and cash flows increase, the company can implement a stock repurchase program.

Rationale

residual dividend policy.

If a company's sales are cyclical, it is likely that its cash flows are cyclical as well. The shareholders of such a company are best served through a regular small dividend and an occasional share repurchase program. Through this policy, the company can distribute some of its profits on a continuous basis without making a commitment to pay a large dividend during a weak economic period when its sales and cash flows are weak. Should sales and cash flows increase, the company can implement a stock repurchase program.

Rationale

small cash dividend combined with occasional share repurchases.

If a company's sales are cyclical, it is likely that its cash flows are cyclical as well. The shareholders of such a company are best served through a regular small dividend and an occasional share repurchase program. Through this policy, the company can distribute some of its profits on a continuous basis without making a commitment to pay a large dividend during a weak economic period when its sales and cash flows are weak. Should sales and cash flows increase, the company can implement a stock repurchase program.

Question 20

L2R25TB-AC028-1512

LOS: LOS-7510

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

A company is based in a country where the shareholder tax rate on dividends received is lower than the capital gains tax rate for shareholders. When a company shares go ex-dividend, the share price should *most likely* decline by an amount that is:

- ☐ equal to the dividend amount.
- ☐ less than the dividend amount.
- ☒ greater than the dividend amount.

Rationale

✗ **equal to the dividend amount.**

The price should decline by more than the dividend amount. This is based on the following formula:

$$\text{Price decline} = P_w - P_x = D \frac{1 - T_D}{1 - T_{CG}}$$

Rationale

✗ **less than the dividend amount.**

The price should decline by more than the dividend amount. This is based on the following formula:

$$\text{Price decline} = P_w - P_x = D \frac{1 - T_D}{1 - T_{CG}}$$

Rationale

✓ **greater than the dividend amount.**

The price should decline by more than the dividend amount. This is based on the following formula:

$$\text{Price decline} = P_w - P_x = D \frac{1 - T_D}{1 - T_{CG}}$$

Question 21

L2R25TB-AC023-1512

LOS: LOS-7550

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

European Zan Perfumery (EZP) plans to invest €50 million in new research and development equipment. The company's expected profits are €40 million. Its optimal capital structure is 35 percent debt and 65 percent equity. If EZP applies a residual dividend policy, the dividend payout ratio is *closest to*:

- ☐ 0.0 percent.
- ☒ 18.8 percent.
- ☐ 42.3 percent.

Rationale

 **0.0 percent.**

First, the amount of new R&D equipment that will be financed with equity is calculated:

$$\text{Equity financing required for the capital budget} = 0.65 \times \text{€50 million} = \text{€32.5 million}$$

Next, the dividend is determined as being the amount that remains from net income (NI) after taking into account the amount of net income retained to meet the capital budget requirements:

$$\text{Dividend} = \text{NI} - \text{equity financing of capital budget} = \text{€40} - 32.5 = \text{€7.5 million}$$

Finally, the dividend payout ratio is calculated:

$$\text{Payout ratio} = \text{€7.5}/\text{€40} = 18.75 \text{ percent}$$

Rationale

 **18.8 percent.**

First, the amount of new R&D equipment that will be financed with equity is calculated:

$$\text{Equity financing required for the capital budget} = 0.65 \times \text{€50 million} = \text{€32.5 million}$$

Next, the dividend is determined as being the amount that remains from net income (NI) after taking into account the amount of net income retained to meet the capital budget requirements:

$$\text{Dividend} = \text{NI} - \text{equity financing of capital budget} = \text{€40} - 32.5 = \text{€7.5 million}$$

Finally, the dividend payout ratio is calculated:

$$\text{Payout ratio} = \text{€7.5}/\text{€40} = 18.75 \text{ percent}$$

Rationale

 **42.3 percent.**

First, the amount of new R&D equipment that will be financed with equity is calculated:

$$\text{Equity financing required for the capital budget} = 0.65 \times \text{€50 million} = \text{€32.5 million}$$

Next, the dividend is determined as being the amount that remains from net income (NI) after taking into account the amount of net income retained to meet the capital budget requirements:

$$\text{Dividend} = \text{NI-equity financing of capital budget} = €40 - 32.5 = €7.5 \text{ million}$$

Finally, the dividend payout ratio is calculated:

$$\text{Payout ratio} = €7.5/€40 = 18.75 \text{ percent}$$

Question 22

L2FR-PQ2401-1410

LOS: LOS-7480

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

Which of the following *least likely* suggests that dividend policy is relevant?

- ☒ The concept of homemade dividends
- ☐ Higher tax rates on dividends
- ☐ Bird-in-the-hand argument

Rationale

This Answer is Correct

The theory of homemade dividends suggests that dividend policy is irrelevant.

Question 23

L2R25TB-AC027-1512

LOS: LOS-7510

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

A company is based in a country with a split-rate tax system. The corporate tax rate on earnings distributed as dividends is 30 percent, and the tax rate on pretax earnings retained is 50 percent. Shareholders have to pay a tax rate of 40 percent on dividends received. If the company sets aside 60 percent of its \$200 million in pretax earnings for dividends, then the effective total tax rate on the company's pretax income distributed as dividends is *closest* to:

- ☐ 35 percent.
- ☐ 55 percent.
- ☒ 58 percent.

Rationale

 **35 percent.**

The pretax income set aside for dividends will be \$120 million ($\$200 \text{ million} \times 0.60$) and the company will have to pay \$36 million ($\$120 \text{ million} \times 0.30$) on these pretax earnings. Thus, the net dividends distributed are \$84 million. The shareholders have to pay a 40 percent tax rate on these dividends, which comes to \$33.6 million in taxes at the shareholder level. The net dividend to the shareholders is \$50.4 million ($\$84 - 33.6$).

Out of \$120 in pretax earnings distributed as dividends, taxes of \$36 million and \$33.6 million, or \$69.6 million in total, were paid. Therefore, the effective total tax rate on the company's pretax income distributed as dividends is $\$69.6 / \$120.0 = 58$ percent.

Rationale

 **55 percent.**

The pretax income set aside for dividends will be \$120 million ($\$200 \text{ million} \times 0.60$) and the company will have to pay \$36 million ($\$120 \text{ million} \times 0.30$) on these pretax earnings. Thus, the net dividends distributed are \$84 million. The shareholders have to pay a 40 percent tax rate on these dividends, which comes to \$33.6 million in taxes at the shareholder level. The net dividend to the shareholders is \$50.4 million ($\$84 - 33.6$).

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Rationale

 **58 percent.**

The pretax income set aside for dividends will be \$120 million ($\$200 \text{ million} \times 0.60$) and the company will have to pay \$36 million ($\$120 \text{ million} \times 0.30$) on these pretax earnings. Thus, the net dividends distributed are \$84 million. The shareholders have to pay a 40 percent tax rate on these dividends, which comes to

\$33.6 million in taxes at the shareholder level. The net dividend to the shareholders is \$50.4 million (\$84 – 33.6).

Out of \$120 in pretax earnings distributed as dividends, taxes of \$36 million and \$33.6 million, or \$69.6 million in total, were paid. Therefore, the effective total tax rate on the company's pretax income distributed as dividends is $\$69.6 / \$120.0 = 58$ percent.

Question 24

L2CF-TB0007-1412

LOS: LOS-7470

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

An increase in income taxes applied to dividends versus capital gains tax will result in the price decrease in a share when it goes ex-dividend being:

- ☒ Lower.
- ☐ Higher.
- ☐ Unchanged.

Rationale

This Answer is Correct

The drop in price of a share when it goes ex-dividend is equal to the dividend multiplied by the ratio of $(1 - \text{income taxes}) / (1 - \text{capital gains taxes})$. An increase in income taxes would therefore lower the drop in price when the share goes ex-dividend.

Question 25

L1CF-PQ3807-1410

LOS: LOS-7471

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

Jeremy Traders has 30 million shares outstanding. The stock is currently trading for \$60 with an EPS of \$2.50 and a P/E multiple of 24. The company earns net revenue of \$200 million for the year and pays out an annual dividend of \$1.50 per share. The board of directors is considering a 3-for-2 stock split.

The company's earnings per share after the stock split will be *closest to*:

- ☒ \$1.67
- ☐ \$2.50
- ☐ \$1.00

Rationale

✔ **This Answer is Correct**

Number of shares after the stock split = $30,000,000 \times \frac{3}{2} = 45,000,000$

Therefore, EPS after the stock split = $(2.5 \times 30,000,000) / 45,000,000 = \1.6667

Question 26

L2R25TB-AC017-1512

LOS: LOS-7470

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

Dividend policy is *most likely* irrelevant in the Miller and Modigliani theorem because:

- ☒ investors can easily substitute capital gains for dividends.
- ☐ the value of the firm is determined by the value of its assets if sold immediately.
- ☐ the transactions costs of issuing common stock to pay for a dividend that the firm needs to pay are minimal.

Rationale

☒ **investors can easily substitute capital gains for dividends.**

The Miller and Modigliani dividend irrelevance theorem assumes perfect markets where there are no transactions costs, no taxes, and no information asymmetry. The value of a firm is determined by the present value of its free cash flows and shareholders have the same ending wealth whether a firm pays a dividend or buys back shares.

Rationale

☒ **the value of the firm is determined by the value of its assets if sold immediately.**

The Miller and Modigliani dividend irrelevance theorem assumes perfect markets where there are no transactions costs, no taxes, and no information asymmetry. The value of a firm is determined by the present value of its free cash flows and shareholders have the same ending wealth whether a firm pays a dividend or buys back shares.

Rationale

☒ **the transactions costs of issuing common stock to pay for a dividend that the firm needs to pay are minimal.**

The Miller and Modigliani dividend irrelevance theorem assumes perfect markets where there are no transactions costs, no taxes, and no information asymmetry. The value of a firm is determined by the present value of its free cash flows and shareholders have the same ending wealth whether a firm pays a dividend or buys back shares.

Question 27

L1CF-PQ3802-1410

LOS: LOS-7471

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

Alpha Inc. has 5 million shares outstanding. The stock is currently trading for \$40 with an EPS of \$1.60 and a P/E multiple of 25. The company's directors announce a 10% stock dividend.

The company's stock price after the stock dividend will be *closest to*:

- ☐ \$44.00
- ☒ \$36.36
- ☐ \$40.00

Rationale

✓ **This Answer is Correct**

Stock price after the stock dividend = $(40 \times 5,000,000) / 5,500,000 = \36.3636

Question 28

L2R25TB-AC013-1512

LOS: LOS-7530

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

Investors are *most likely* to be indifferent between share repurchases and cash dividends when the:

- ☐ corporation is prohibited by law from engaging in share repurchases.
- ☐ capital gains tax rate exceeds the tax rate on dividend income.
- ☒ capital gains tax rate equals the tax rate on dividend income.

Rationale

corporation is prohibited by law from engaging in share repurchases.

The profit on a stock repurchase is considered a capital gain and is taxed at capital gains tax rates, while dividends are not capital gains and are taxed at the rate that is applied to dividend income. When the two tax rates are the same, investors will be indifferent as to how the company distributes the cash. If the corporation is prohibited from repurchasing shares, then investors will prefer dividends since they are the only allowed distribution.

Rationale

capital gains tax rate exceeds the tax rate on dividend income.

The profit on a stock repurchase is considered a capital gain and is taxed at capital gains tax rates, while dividends are not capital gains and are taxed at the rate that is applied to dividend income. When the two tax rates are the same, investors will be indifferent as to how the company distributes the cash. If the corporation is prohibited from repurchasing shares, then investors will prefer dividends since they are the only allowed distribution.

Rationale

capital gains tax rate equals the tax rate on dividend income.

The profit on a stock repurchase is considered a capital gain and is taxed at capital gains tax rates, while dividends are not capital gains and are taxed at the rate that is applied to dividend income. When the two tax rates are the same, investors will be indifferent as to how the company distributes the cash. If the corporation is prohibited from repurchasing shares, then investors will prefer dividends since they are the only allowed distribution.

Question 29

L1CF-PQ3816-1410

LOS: LOS-7471

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

Consider the following statements:

Statement 1: Stock dividends may result in an investor having to pay tax on cash that he does not actually receive.

Statement 2: A 3-for 2 stock split would leave an investor with the same number of shares as a 50% stock dividend.

Which of the following is *most likely*?

- ☐ Both statements are incorrect.
- ☒ Only one statement is correct.
- ☐ Both statements are correct.

Rationale

 **This Answer is Correct**

Statement 2 is correct.

Stock dividends are generally not taxable. Investments made through Dividend Reinvestment Plans may cause an investor to have to pay taxes on cash that he does not actually receive.

Question 30

L1CF-PQ3809-1410

LOS: LOS-7471

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

Jeremy Traders has 30 million shares outstanding. The stock is currently trading for \$60, with an EPS of \$2.50 and a P/E multiple of 24. The company earns net income of \$200 million for the year and pays out an annual dividend of \$1.50 per share. The board of directors is considering a 3-for-2 stock split.

The company's dividend yield after the stock split will be *closest to*:

- ☐ 1.00%
- ☐ 2.22%
- ☒ 2.50%

Rationale

✔ **This Answer is Correct**

Dividend yield = Dividend per share / Stock price per share

Dividend per share = $(1.5 \times 30,000,000) / 45,000,000 = \1

Therefore, dividend yield = $1 / 40 = 2.50\%$

Question 31

L1CF-PQ3815-1410

LOS: LOS-7471

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

The payment of which of the following *least likely* results in a decrease in retained earnings?

- ☐ Stock dividend
- ☒ Stock split
- ☐ Special dividend

Rationale

✔ **This Answer is Correct**

A stock split has no impact on any shareholders' equity accounts.

A stock dividend transfers reserves from retained earnings to contributed capital.

A cash dividend reduces retained earnings and cash.

Question 32

L2R25TB-AC021-1512

LOS: LOS-7550

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

An analyst has gathered the following information for a company:

Net income	\$1,000,000
Cash flow from operations (CFO)	\$600,000
Capital expenditures	\$250,000
Net new debt	\$200,000
Dividends paid	\$125,000
Share repurchases	\$175,000

The dividend coverage ratio for the company is *closest to*:

☐ 0.13x

☐ 0.30x

☒ 8.00x

Rationale

 0.13x

The dividend coverage ratio equals net income/dividends = $\$1,000,000 / \$125,000 = 8.0x$.

Rationale

 0.30x

The dividend coverage ratio equals net income/dividends = $\$1,000,000 / \$125,000 = 8.0x$.

Rationale

 8.00x

The dividend coverage ratio equals net income/dividends = $\$1,000,000 / \$125,000 = 8.0x$.

Question 33

L2FR-PQ2402-1410

LOS: LOS-7480

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

Consider the following statements:

Statement 1: It is difficult to apply the theory of homemade dividends in the real world because stock prices are volatile.

Statement 2: Miller and Modigliani (MM) suggest that current dividends reduce the risk of future cash flows.

Which of the following is *most likely*?

- ☒ Only Statement 1 is correct.
- ☐ Only Statement 2 is correct.
- ☐ Both statements are incorrect.

Rationale

 **This Answer is Correct**

Statement 1 is correct.

Miller and Modigliani counter the bird-in-the-hand argument by saying that paying or increasing current dividends has no impact on the risk of future cash flows; cash dividends only lower the ex-dividend price of the share.

Question 34

L1CF-PQ3817-1410

LOS: LOS-7471

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

Which of the following is *least likely* to result in a decrease in a company's stock price?

- ☒ Reverse stock split
- ☐ Stock dividend
- ☐ Regular dividend

Rationale

 **This Answer is Correct**

A reverse stock split increases a company's stock price.

Question 35

L2R25TB-AC022-1512

LOS: LOS-7550

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

An analyst has gathered the following information for a company:

Net income	\$1,000,000
Cash flow from operations (CFO)	\$600,000
Capital expenditures	\$250,000
Net new debt	\$200,000
Dividends paid	\$125,000
Share repurchases	\$175,000

The free cash flow to equity/(dividend + share repurchases) coverage ratio is *closest* to:

☒ 1.8x

☐ 2.6x

☐ 3.2x

Rationale

☒ 1.8x

First, the free cash flow to equity (FCFE) is calculated and then the coverage ratio is calculated:

$$\begin{aligned}\text{FCFE} &= \text{CFO} - \text{capital expenditures} + \text{net new debt} \\ &= \$600,000 - 250,000 + 200,000 = \$550,000\end{aligned}$$

$$\text{FCFE}/(\text{dividend} + \text{share repurchases}) \text{ coverage ratio} = \$550,000/(\$125,000 + 175,000) = 1.83 \text{ x}$$

Rationale

☒ 2.6x

First, the free cash flow to equity (FCFE) is calculated and then the coverage ratio is calculated:

$$\begin{aligned}\text{FCFE} &= \text{CFO} - \text{capital expenditures} + \text{net new debt} \\ &= \$600,000 - 250,000 + 200,000 = \$550,000\end{aligned}$$

$$\text{FCFE}/(\text{dividend} + \text{share repurchases}) \text{ coverage ratio} = \$550,000/(\$125,000 + 175,000) = 1.83 \text{ x}$$

Rationale

☒ 3.2x

First, the free cash flow to equity (FCFE) is calculated and then the coverage ratio is calculated:

$$\begin{aligned}\text{FCFE} &= \text{CFO} - \text{capital expenditures} + \text{net new debt} \\ &= \$600,000 - 250,000 + 200,000 = \$550,000\end{aligned}$$

$$\text{FCFE}/(\text{dividend} + \text{share repurchases}) \text{ coverage ratio} = \$550,000/(\$125,000 + 175,000) = 1.83 \text{ x}$$

Question 36

L2R25TB-AC009-1512

LOS: LOS-7520

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

New Design Showrooms (NDS) decided to initiate quarterly dividend payments to shareholders at the beginning of 2015. Its CFO believes NDS's shareholders will be well served by a constant dividend payout ratio of 30 percent. In the following four quarters of 2015, NDS had earnings per share of:

Period	EPS (\$)
2015:Q1	1.80
2015:Q2	-0.80
2015:Q3	2.10
2015:Q4	3.20

The total dividends paid in 2015 is *closest* to:

- ☐ \$0.96
- ☐ \$1.89
- ☒ \$2.13

Rationale

✗ **\$0.96**

The dividends are paid quarterly, so each of the four quarters' dividends is calculated and then summed. Note that no dividend is paid in the second quarter because earnings are negative. Thus, the total dividends paid in for 2015 are:

$$\text{Total dividends} = (\$1.80 \times 0.3) + \$0 \text{ (negative EPS in Q2)} + (\$2.10 \times 0.3) + (\$3.20 \times 0.3) = \$2.13$$

Rationale

✗ **\$1.89**

The dividends are paid quarterly, so each of the four quarters' dividends is calculated and then summed. Note that no dividend is paid in the second quarter because earnings are negative. Thus, the total dividends paid in for 2015 are:

$$\text{Total dividends} = (\$1.80 \times 0.3) + \$0 \text{ (negative EPS in Q2)} + (\$2.10 \times 0.3) + (\$3.20 \times 0.3) = \$2.13$$

Rationale

✓ **\$2.13**

The dividends are paid quarterly, so each of the four quarters' dividends is calculated and then summed. Note that no dividend is paid in the second quarter because earnings are negative. Thus, the total dividends paid in for 2015 are:

$$\text{Total dividends} = (\$1.80 \times 0.3) + \$0 \text{ (negative EPS in Q2)} + (\$2.10 \times 0.3) + (\$3.20 \times 0.3) = \$2.13$$

Question 37

L2FR-PQ2405-1410

LOS: LOS-7500

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

Norman Gates owns 50,000 shares of Terra Inc. The company has announced a dividend of \$2.50 per share. Given that the tax rate on dividend income is 35% and that capital gains are taxed at 20%, the expected decrease in share price when it goes ex-dividend is *closest to*:

☐ \$3.08

☒ \$2.03

☐ \$1.43

Rationale

✔ This Answer is Correct

$$P_W - P_X = [(1 - T_D) / (1 - T_{CG})] \times D$$

$$P_W - P_X = [(1 - 0.35) / (1 - 0.2)] \times 2.5$$

$$P_W - P_X = \$2.03$$

Question 38

L2R25TB-AC010-1512

LOS: LOS-7520

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

Michelle's Ski Resorts (MSR) plans to invest CHF 100 million in a new resort in 2016. MSR's target capital structure is 30 percent debt and 70 percent equity. Assuming MSR follows a residual dividend policy and its earnings are projected to be CHF 60 million for 2016, the expected 2016 dividend is *closest to*:

- ☒ CHF 0
- ☐ CHF 15
- ☐ CHF 20

Rationale

☒ **CHF 0**

MSR plans to invest CHF 100 of which 70 percent, or CHF 70 million, must be paid for with equity funds. With earnings of CHF 60 million, the company will need to retain all its retained earnings and possibly issue equity in order to maintain its target capital structure. Since all of the CHF 60 million will be retained, no dividends will be paid.

Rationale

☐ **CHF 15**

MSR plans to invest CHF 100 of which 70 percent, or CHF 70 million, must be paid for with equity funds. With earnings of CHF 60 million, the company will need to retain all its retained earnings and possibly issue equity in order to maintain its target capital structure. Since all of the CHF 60 million will be retained, no dividends will be paid.

Rationale

☐ **CHF 20**

MSR plans to invest CHF 100 of which 70 percent, or CHF 70 million, must be paid for with equity funds. With earnings of CHF 60 million, the company will need to retain all its retained earnings and possibly issue equity in order to maintain its target capital structure. Since all of the CHF 60 million will be retained, no dividends will be paid.

Question 39

L2R25TB-AC014-1512

LOS: LOS-7470

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

What is the *most likely* implication of the Modigliani and Miller's dividend irrelevance theory?

- ☐ The dividend decision is determined jointly with the capital budget.
- ☐ The value of the firm to shareholders is related to the company's payout ratio.
- ☒ The dividend decision affects the company's cash budget but not the net wealth of its shareholders.

Rationale

 **The dividend decision is determined jointly with the capital budget.**

Under Modigliani and Miller's dividend irrelevance theory, the dividend decision is not relevant to the net wealth of the company's shareholders. In other words, changing the dividend will not affect the net wealth of the company's shareholders.

Rationale

 **The value of the firm to shareholders is related to the company's payout ratio.**

Under Modigliani and Miller's dividend irrelevance theory, the dividend decision is not relevant to the net wealth of the company's shareholders. In other words, changing the dividend will not affect the net wealth of the company's shareholders.

Rationale

 **The dividend decision affects the company's cash budget but not the net wealth of its shareholders.**

Under Modigliani and Miller's dividend irrelevance theory, the dividend decision is not relevant to the net wealth of the company's shareholders. In other words, changing the dividend will not affect the net wealth of the company's shareholders.

Question 40

L2FR-PQ2403-1410

LOS: LOS-7480

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

Which of the following is *least likely* an assumption of the dividend irrelevance theory?

- ☐ Company insiders and outsiders have the same information about the company.
- ☒ Investors have homogeneous expectations regarding the cash flows from a stock.
- ☐ There are no transaction costs.

Rationale

This Answer is Correct

The assumptions required for MM dividend theory are:

- No taxes.
- No transaction costs.
- Symmetric information, that is, all insiders and outsiders have the same information about the company.

Question 41

L2R25TB-AC020-1512

LOS: LOS-7520

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

The *least likely* common dividend policy practice is for managers to:

- ☒ aim for a target payout ratio relying on forecasts of short-term earnings.
- ☐ care more about changes in dividends than absolute dividend level.
- ☐ tend to smooth dividends over time.

Rationale

☒ **aim for a target payout ratio relying on forecasts of short-term earnings.**

Managers aim for a target payout ratio relying on forecasts of long-term sustainable earnings. Managers do care more about changes in dividends than the absolute level of dividends and they do tend to smooth dividends over time.

Rationale

☐ **care more about changes in dividends than absolute dividend level.**

Managers aim for a target payout ratio relying on forecasts of long-term sustainable earnings. Managers do care more about changes in dividends than the absolute level of dividends and they do tend to smooth dividends over time.

Rationale

☐ **tend to smooth dividends over time.**

Managers aim for a target payout ratio relying on forecasts of long-term sustainable earnings. Managers do care more about changes in dividends than the absolute level of dividends and they do tend to smooth dividends over time.

Question 42

L2CF-TB0009-1412

LOS: LOS-7490

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

In order to address agency costs in a corporation's organizational structure, Jensen's free cash flow hypothesis would be *least likely* to recommend:

- ☐ Payment of all free cash flow out as a dividend.
- ☒ Maximizing free cash flow after dividend payments.
- ☐ Minimizing the use of debt in the capital structure of the firm.

Rationale

This Answer is Correct

Jensen's free cash flow hypothesis states that agency problems can be reduced by minimizing the free cash flow of the company through paying out dividends and having some debt in the capital structure of the firm. This will prevent management from squandering spare cash on nonprofitable projects.

Question 43

L2R25TB-ITEMSET-AC004-1512

LOS: LOS-7510

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

Use the following information to answer the next 3 questions:

The citizens and corporations of the country of Taloza enjoyed the benefits of a tax-free country for many years. However, the government has run budget shortfalls due to economic crises during the past several years. The country's government decided to increase its funding by implementing taxes on both corporations and citizens. A new law established a corporate income tax rate of 30 percent and set personal tax rates of 24 percent on dividends received and 15 percent on capital gains.

Five years later, the citizens of Taloza started to complain about the excessive taxes they were paying on dividends. In response, the government decides to copy tax systems similar to those in France, New Zealand, and Australia. Thus, the government adopts a dividend imputation tax system by giving the shareholders credit for the taxes that companies pay on distributed profits.

i.

For a Taloza-based company, the effective total tax rate on pretax income distributed as dividends in the year the country first implemented taxes is *closest to*:

- ☐ 24 percent.
- ☒ 47 percent.
- ☐ 54 percent.

Rationale

✔ This Answer is Correct

For each \$1.00 of pretax earnings destined to be paid as dividends, a Taloza-based company has to pay a tax rate of 30 percent and the tax is \$0.30. This means \$0.70 of the \$1.00 is available to be paid as dividends. Shareholders have to pay a 24 percent tax on this \$0.70, or \$0.168 in taxes. Thus, the total taxes paid on the \$1.00 in pretax earnings set aside for dividends is \$0.468 (\$0.30 + 0.168) and the total effective tax rate is 46.8 percent (\$0.468/\$1.00).

Rationale

✔ This Answer is Correct

For each \$1.00 of pretax earnings destined to be paid as dividends, a Taloza-based company has to pay a tax rate of 30 percent and the tax is \$0.30. This means \$0.70 of the \$1.00 is available to be paid as dividends. Shareholders have to pay a 24 percent tax on this \$0.70, or \$0.168 in taxes. Thus, the total taxes paid on the \$1.00 in pretax earnings set aside for dividends is \$0.468 (\$0.30 + 0.168) and the total effective tax rate is 46.8 percent (\$0.468/\$1.00).

Rationale

✔ This Answer is Correct

For each \$1.00 of pretax earnings destined to be paid as dividends, a Taloza-based company has to pay a tax rate of 30 percent and the tax is \$0.30. This means \$0.70 of the \$1.00 is available to be paid as dividends. Shareholders have to pay a 24 percent tax on this \$0.70, or \$0.168 in taxes. Thus, the total taxes paid on the

\$1.00 in pretax earnings set aside for dividends is \$0.468 ($\$0.30 + 0.168$) and the total effective tax rate is 46.8 percent ($\$0.468/\1.00).

ii.

For an investor who is otherwise indifferent between dividends and capital gains and all else being equal, the *most likely* consequence of Taloza implementing a higher tax rate on dividend income than on capital gains is that the investor will:

- ☐ gravitate toward dividend paying companies because dividend income is preferred to capital gains.
- ☒ gravitate toward nondividend paying companies because the investor will be able to earn higher after-tax returns.
- ☐ remain indifferent between dividend paying companies and nondividend paying companies because the investor can always create homemade dividends.

Rationale

This Answer is Incorrect

An investor who is otherwise indifferent between earning \$1 in dividends versus earning \$1 in capital gains will gravitate toward nondividend paying companies because the \$1 in capital gains will be taxed at a lower rate than the \$1 in dividends. Thus, with a lower tax rate on capital gains, investors earn higher after-tax returns.

Rationale

This Answer is Incorrect

An investor who is otherwise indifferent between earning \$1 in dividends versus earning \$1 in capital gains will gravitate toward nondividend paying companies because the \$1 in capital gains will be taxed at a lower rate than the \$1 in dividends. Thus, with a lower tax rate on capital gains, investors earn higher after-tax returns.

Rationale

This Answer is Incorrect

An investor who is otherwise indifferent between earning \$1 in dividends versus earning \$1 in capital gains will gravitate toward nondividend paying companies because the \$1 in capital gains will be taxed at a lower rate than the \$1 in dividends. Thus, with a lower tax rate on capital gains, investors earn higher after-tax returns.

iii.

Five years later when the government implements a dividend imputation tax system, the effective total tax rate on pretax income distributed as dividends becomes *closest to*:

- ☒ 24 percent.
- ☐ 30 percent.
- ☐ 36 percent.

Rationale

This Answer is Incorrect

Because the corporate tax rate is 30 percent and the dividend income tax rate is 24 percent, the effective tax rate is 24 percent. In this case, a Taloza-based investor receives a credit of 6 percent on his tax return.

Rationale

This Answer is Incorrect

Because the corporate tax rate is 30 percent and the dividend income tax rate is 24 percent, the effective tax rate is 24 percent. In this case, a Taloza-based investor receives a credit of 6 percent on his tax return.

Rationale

This Answer is Incorrect

Because the corporate tax rate is 30 percent and the dividend income tax rate is 24 percent, the effective tax rate is 24 percent. In this case, a Taloza-based investor receives a credit of 6 percent on his tax return.

Question 44

L2R25TB-AC008-1512

LOS: LOS-7520

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

In 2018, Solar Re paid a dividend of \$0.75 out of \$3.00 in earnings per share (EPS). Solar expects EPS to rise to \$3.60 in 2019. The company's target dividend payout ratio is 50 percent and it wishes to gradually reach this level in five years. Under a stable dividend policy, the expected dividend payout ratio for 2019 is *closest to*:

- ☐ 22.5 percent.
- ☐ 25.0 percent.
- ☒ 27.0 percent.

Rationale

✔ This Answer is Correct

Because the company wants to gradually increase the payout ratio over five years to 50 percent, it will need to use a 20 percent (1/5) adjustment factor. The expected dividend and dividend payout ratio are calculated as follows:

Expected dividend = Previous dividend + [((Expected earnings × Target payout ratio) – Previous dividend) × (Adjustment factor)]

Expected dividend = \$0.75 + [(((\$3.60 × 0.50) – \$0.75) × (1/5)) = \$0.96

Expected payout ratio = Expected dividend/Expected earnings = \$0.96/\$3.60 = 0.2667

Question 45

L1CF-PQ3805-1410

LOS: LOS-7471

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

Alpha Inc. has 5 million shares outstanding. The stock is currently trading for \$40, with an EPS of \$1.60 and a P/E multiple of 25. The company's directors announce a 10% stock dividend.

The company's P/E multiple after the stock dividend will *most likely* be:

- ☐ Higher than before the stock dividend.
- ☐ Lower than before the stock dividend.
- ☒ Same as that before the stock dividend.

Rationale

✓ **This Answer is Correct**

The company's P/E multiple does not change in response to a stock dividend.

Question 46

L2FR-PQ2412-1410

LOS: LOS-7526

Lesson Reference: Lesson 6: Global Trends in Payout Policy and Analysis of Dividend Safety

Difficulty: medium

Sofia gathered the following information regarding Dingo Ltd.:

	2010	2011
Net income available for common stock	\$390 million	\$480 million
Cash flow from operations	\$520 million	\$600 million
Fixed capital investment	\$78 million	\$120 million
Net borrowing	\$120 million	\$190 million
Dividends paid	\$97.5 million	\$144 million
Share repurchases	\$160 million	\$275 million

The company's dividend coverage ratio and FCFE coverage ratio for both years are *closest to*:

	Dividend Coverage Ratio		FCFE Coverage Ratio	
	2010	2011	2010	2011
A	4	1.15	1.68	1.31
B	1.51	1.15	2.18	1.60
C	4	3.33	2.18	1.60

☐ Row A

☐ Row B

☒ Row C

Rationale

✓ This Answer is Correct

Dividend coverage ratio = Net income / Dividends paid

Dividend coverage ratio for 2010 = \$390m / \$97.5m = 4

Dividend coverage ratio for 2011 = \$480m / \$144m = 3.33

FCFE coverage ratio = FCFE / (Dividends + Share repurchases)

FCFE = CFO – FCInv + Net borrowing

FCFE for 2010 = \$520m – \$78m + \$120m = \$562 million

FCFE for 2011 = \$600m – \$120m + \$190m = \$670 million

FCFE coverage ratio for 2010 = \$562m / (\$97.5m + \$160m) = 2.1825

FCFE coverage ratio for 2011 = \$670m / (\$144m + \$275m) = 1.5990

Question 47

L2FR-PQ2415-1410

LOS: LOS-7526

Lesson Reference: Lesson 6: Global Trends in Payout Policy and Analysis of Dividend Safety

Difficulty: medium

Consider the following statements:

Statement 1: If the FCFE coverage ratio is less than 1, the company's liquidity position will improve.

Statement 2: Growth companies are likely to have a higher dividend payout ratio compared to stable, mature companies.

Which of the following is *most likely*?

- ☐ Only Statement 1 is correct.
- ☐ Only Statement 2 is correct.
- ☒ Both statements are incorrect.

Rationale

✔ This Answer is Correct

If the FCFE coverage ratio is less than 1, the company is eating into its liquidity to make dividend payments.

Growth companies are likely to have a **lower** dividend payout ratio compared to stable, mature companies.

Question 48

L2R25TB-AC012-1512

LOS: LOS-7550

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

Mark's Apparel & Accessories (MAA) plans to invest \$100 million in a new line of apparel during the current year. The company's target capital structure is 35 percent debt and 65 percent equity. Assuming MAA follows a residual dividend policy and its current year's earnings are \$70 million, the expected dividend payout ratio for the current year is *closest* to:

- ☒ 7 percent.
- ☐ 56 percent.
- ☐ 71 percent.

Rationale

✔ **7 percent.**

MAA plans to invest \$100 million, of which 65 percent, or \$65 million, must be funded through equity. With earnings of \$70 million, there will \$5 million (\$70 million – 65 million) of earnings remaining after meeting the funding needs for the investment. Therefore, dividends will be \$5 million and the dividend payout ratio will be 7.1 percent (\$5/70).

Rationale

✘ **56 percent.**

MAA plans to invest \$100 million, of which 65 percent, or \$65 million, must be funded through equity. With earnings of \$70 million, there will \$5 million (\$70 million – 65 million) of earnings remaining after meeting the funding needs for the investment. Therefore, dividends will be \$5 million and the dividend payout ratio will be 7.1 percent (\$5/70).

Rationale

✘ **71 percent.**

MAA plans to invest \$100 million, of which 65 percent, or \$65 million, must be funded through equity. With earnings of \$70 million, there will \$5 million (\$70 million – 65 million) of earnings remaining after meeting the funding needs for the investment. Therefore, dividends will be \$5 million and the dividend payout ratio will be 7.1 percent (\$5/70).

Question 49

L2FR-PQ2410-1410

LOS: LOS-7530

Lesson Reference: Lesson 4: Payout Policies

Difficulty: medium

Lovarno Inc.'s EPS for the current year is expected to be \$6.45. Last year, the company's EPS was \$5.20 and it paid 20% of its earnings as dividends. The company's target payout ratio is 40% and it plans to use a 6-year period to adjust the dividend toward this target. The company's expected dividend for the current year under the stable dividend policy is *closest to*:

- ☒ \$1.30
☐ \$0.08
☐ \$1.12

Rationale

 **This Answer is Correct**

Last year's dividend = $\$5.20 \times \$0.2 = \$1.04$

Expected increase in dividends

= (Expected Earnings \times Target Payout Ratio – Previous Dividend \times Adjustment Factor

= $((\$6.45 \times 0.4) - \$1.04) \times (1/6)$

= \$0.257

Hence, next year's dividend = $\$1.04 + \$0.257 = \$1.30$

Question 50

L2FR-PQ2406-1410

LOS: LOS-7500

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

Julia Franklin owns shares in Mega Industries. She observes that on average the share price drops by 70% of the amount of the dividend when the share goes ex-dividend. Given that the marginal tax rate on dividend income is 40%, and assuming that any appropriate corrections for equity market price movements on ex-dividend days have been made, the tax rate on capital gains is *closest to*:

- ☒ 14%
- ☐ 42%
- ☐ 35%

Rationale

✔ This Answer is Correct

$$(P_W - P_X) / D = 0.70$$

$$(P_W - P_X) / D = (1 - T_D) / (1 - T_{CG})$$

Therefore,

$$(1 - T_D) / (1 - T_{CG}) = 0.70$$

$$(1 - 0.40) / (1 - T_{CG}) = 0.70$$

$$T_{CG} = 14.29\%$$

Question 51

L1CF-PQ3803-1410

LOS: LOS-7471

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

Alpha Inc. has 5 million shares outstanding. The stock is currently trading for \$40 with an EPS of \$1.60 and a P/E multiple of 25. The company's directors announce a 10% stock dividend.

The total market value of the company's stock after the stock dividend will *most likely* be:

- ☐ Higher than before the stock dividend.
- ☐ Lower than before the stock dividend.
- ☒ The same as before the stock dividend.

Rationale

✓ **This Answer is Correct**

The market value of a company does not change in response to a stock dividend.

Question 52

L2CF-TB0010-1412

LOS: LOS-7500

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

When considering the factors that shape the dividend policy of a firm, a higher dividend payout rate is *most likely* to occur when the company has:

- ☐ A greater number of profitable investment opportunities.
- ☐ Higher expected volatility of earnings.
- ☒ Lower need for financial flexibility.

Rationale

This Answer is Correct

A greater number of profitable investment opportunities would likely lead to a company paying out a lower dividend and reinvesting the retained earnings. A high expected volatility of earnings would likely lead to a lower dividend in order to be sure that the dividend can be maintained in times of low profitability and losses. A low need for financial flexibility would likely lead to a company being comfortable distributing more capital to investors through a dividend rather than holding capital back in the firm.

Question 53

L2FR-PQ2411-1410

LOS: LOS-7530

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

Shamrock Capital earned \$28.5 million in 2011. The company has decided to invest in two positive NPV projects that require a total investment of \$22 million. Given a debt-to-equity ratio of 1.5, the company's dividend payout ratio under a residual dividend policy is *closest to*:

- ☐ 53.68%
- ☐ 60.00%
- ☒ 69.12%

Rationale

✔ This Answer is Correct

Total investment = \$22 million

Percentage of debt = $1.5 / 2.5 = 60\%$

Percentage of equity = 40%

Therefore, the amount of earnings retained by the company = $0.4 \times \$22\text{m} = \8.8 million

Dividends paid = $\$28.5\text{m} - \$8.8\text{m} = \$19.7\text{ million}$

Dividend payout ratio = $\$19.7\text{m} / \$28.5\text{m} = 69.12\%$

Question 54

L2CF-TBB209-1412

LOS: LOS-7340

Lesson Reference: Lesson 4: Payout Policies

Difficulty: medium

Last year, Fielding Corp. had earnings of \$1.50 per share and paid a dividend of \$0.50. For the current year, the company anticipates earnings of \$2.00. It has a 30% target payout ratio and uses a five-year period to adjust the dividend. Compute the expected dividend for the current year under the target payout adjustment model.

- ☒ \$0.53.
- ☐ \$0.60.
- ☐ \$0.65.

Rationale

 **This Answer is Correct**

Under the target payout adjustment model:

Expected dividend = Last dividend + (Increase in earnings × Target payout ratio × Adjustment factor).

Expected dividend = \$0.50 + (\$0.50 × 0.3 × (1 / 5)) = \$0.53.

Question 55

L2FR-PQ2404-1410

LOS: LOS-7500

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

The clientele effect *most likely*:

- ☐ Asserts that dividend policy has an impact on shareholder wealth.
- ☐ Implies investors tend to prefer capital gains over dividend income.
- ☒ Refers to the types of investors that hold the company's stock.

Rationale

This Answer is Correct

The clientele effect refers to the existence of groups of investors that prefer different dividend policies and lean toward investing in companies that match their desired policies. It does not imply that a change in dividend policy has an effect on shareholder wealth (so it does not contradict dividend irrelevance); it only determines the types of investors that hold the company's stock.

Question 56

L2R25TB-AC015-1512

LOS: LOS-7530

Lesson Reference: Lesson 2: Dividend Policy and Company Value: Theory

Difficulty: medium

The *least likely* reason for a company to implement a share repurchase program is that company management is trying to:

- ☒ decrease financial leverage.
- ☐ convey information about future prospects.
- ☐ increase the cash distribution without making a long-term commitment.

Rationale

☒ **decrease financial leverage.**

Company management uses a repurchase program to increase, not decrease, financial leverage. This is especially the case if it is more efficient for the company to do so.

Rationale

☐ **convey information about future prospects.**

Company management uses a repurchase program to increase, not decrease, financial leverage. This is especially the case if it is more efficient for the company to do so.

Rationale

☐ **increase the cash distribution without making a long-term commitment.**

Company management uses a repurchase program to increase, not decrease, financial leverage. This is especially the case if it is more efficient for the company to do so.

Question 57

L2R25TB-AC019-1512

LOS: LOS-7510

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

A country's capital gains tax is 20 percent and its tax on dividend income is 35 percent. If a company based in this country pays a \$1.00 dividend, the expected decline in the share price is *closest to*:

- ☐ \$0.00
- ☒ \$0.81
- ☐ \$0.85

Rationale

✗ \$0.00

The calculation of the price decline is as follows:

$$\text{Price decline} = P_w - P_x = D \frac{1 - T_D}{1 - T_{CG}}$$

$$P_w - P_x = \$1.00 \frac{1 - 0.35}{1 - 0.20} = \$0.8125$$

Rationale

✓ \$0.81

The calculation of the price decline is as follows:

$$\text{Price decline} = P_w - P_x = D \frac{1 - T_D}{1 - T_{CG}}$$

$$P_w - P_x = \$1.00 \frac{1 - 0.35}{1 - 0.20} = \$0.8125$$

Rationale

✗ \$0.85

The calculation of the price decline is as follows:

$$\text{Price decline} = P_w - P_x = D \frac{1 - T_D}{1 - T_{CG}}$$

$$P_w - P_x = \$1.00 \frac{1 - 0.35}{1 - 0.20} = \$0.8125$$

Question 58

L2FR-PQ2408-1410

LOS: LOS-7520

Lesson Reference: Lesson 3: Factors Affecting Dividend Policy in Practice

Difficulty: medium

Michelle invested in the stock of Sacura Ltd. The corporate tax rate is 35%. Given that Michelle's marginal tax rate on capital gains is 40% and her effective tax rate on dividend distributions is 50%, her marginal tax rate on dividends is *closest to*:

- ☐ 67.50%
- ☐ 43.33%
- ☒ 23.08%

Rationale

✔ This Answer is Correct

$$\text{ETR} = \text{CTR} + [(1 - \text{CTR}) \times \text{MTR}_D]$$

$$50\% = 35\% + [(1 - 35\%) \times \text{MTR}_D]$$

$$\text{MTR}_D = 23.08\%$$

Question 59

L2CF-TB0008-1412

LOS: LOS-7480

Lesson Reference: Lesson 1: Dividends: Forms and Effects on Shareholder Wealth and Issuing Company's Financial Ratios

Difficulty: medium

The costs of mimicking dividend increases by companies with poor future prospects mean that the company will be unable to:

- ☐ Raise their dividend.
- ☒ Maintain a higher dividend in the long term.
- ☐ Pay a dividend.

Rationale

This Answer is Correct

The management of a company could temporarily raise its dividend even though the future prospects of the company were poor; however, over the longer term, in order to maintain this dividend, the company would have to raise costly external finance to fund the dividend, which would result in a downward revision of the share price.

Question 60

L1CF-PQ3814-1410

LOS: LOS-7523

Lesson Reference: Lesson 5: Share Repurchases

Difficulty: medium

Pluto Manufacturers plans to repurchase common stock with borrowed funds. The following information is provided:

Stock price = \$40

Number of shares outstanding = 5 million

Repurchase amount = \$1.2 million

Book value of equity = \$300 million

Pluto Manufacturers' book value per share after the repurchase is *closest to*:

- ☐ \$60.00
- ☒ \$60.12
- ☐ \$60.36

Rationale

✔ This Answer is Correct

Number of share repurchased = $1,200,000 / 40 = 30,000$

Number of shares outstanding after the repurchase = $5,000,000 - 30,000 = 4,970,000$

Book value of equity after the share repurchase = $300,000,000 - 1,200,000 = \298.8 million

Therefore, book value per share after the repurchase = $298.8\text{m} / 4.97\text{m} = \60.1207 .

Question 61

L2FR-PQ2409-1410

LOS: LOS-7520

Lesson Reference: Lesson 3: Factors Affecting Dividend Policy in Practice

Difficulty: medium

Laura, Juan, and Roberto invest an equal amount in the stock of Beta Corporation. The company's net income before tax amounts to \$850,000 per shareholder and it pays taxes at a rate of 30%. Given a dividend payout ratio of 100% and that Laura's marginal tax rate is 25%, Juan's marginal tax rate is 40%, and Roberto's marginal tax rate is 45%, which of the following statements is *least accurate* assuming that the dividend imputation tax system applies:

- ☒ Laura will have to pay taxes amounting to \$42,500.
- ☐ Juan will have to pay taxes amounting to \$85,000.
- ☐ Roberto will have to pay taxes amounting to \$127,500.

Rationale

This Answer is Correct

Since Laura's marginal tax rate is lower than the corporate tax rate, she will actually receive a tax credit amounting to \$42,500.