1. You expect the price of FBG stock to be $69.77 per share a year from now. Its current market price is $60, and you expect it to pay an annual dividend of $1.75 per share a year from now. What is the stock's expected dividend yield? State your answer as a percentage rate rounded off to two digits after the decimal point, i.e. 'x.xx'

   Answer:

   The correct answer is **2.92**.

   The expected dividend yield = $E(D_1)/P_0$

   The expected dividend yield is equal to 1.75/ 60 = 0.029167 = 2.92%

2. Refer back to Question 1. What is your expected total return on FBG stock? State your answer as a percentage rate rounded to one digit after the decimal point, i.e 'x.x'

   Answer:

   The correct answer is **19.2**.

   The expected total return is equal to the expected dividend yield plus the expected rate of capital gain or loss.

   The expected rate of capital gain = $E(P_1 – P_0)/P_0$

   The expected rate of capital gain = (69.77 - 60)/60 = 0.1628 = 16.28%

   The expected total return is equal to $E(D_1 + P1 – P_0)/P_0$ or the sum of the expected dividend yield and the expected rate of capital gain or loss.

   The expected total return = 16.28% + 2.92% = 19.2%.

3. Which one of the following statements is true about the differences between debt and common stock?

   a) Debt is ownership in a firm, but equity is not.

      No. Debt does not represent ownership in a firm. Equity does.

   b) Creditors have voting power, while stockholders do not.

      No. Voting rights come with ownership, and therefore come with equity.

   c) Periodic payments made to either class of security are tax deductible for the issuer.

No. Only interest payments are tax-deductible for the issuer. Dividends to shareholders are paid out of after-tax earnings.

d) Interest payments are promised, while dividend payments are not.

Yes, this is correct. The interest payments on a bond are promised and failure to make these payments is considered as default. Stocks, on the other hand, may or may not pay dividends. They are not promised.

Answer:

The correct answer is **d**.

4. Two of the main indexes that equity investors keep track of are the Dow Jones Averages (DJIA) and the Standard & Poor's Composite 500 (S&P 500). The difference between these two indexes is:

a) The DJIA is a price weighted average of the stocks of 30 companies and (S&P 500) is a market value weighted index of 500 companies.

Yes, the main difference between DJIA is that it is a price weighted average whereas the S&P 500 is a market value weighted index.

b) The DJIA is more volatile than the Standard & Poor's Composite 500 (S&P 500).

No. Certainly, the volatility between these two indices can be different, but this is not how they are different.

c) None of the above.

No, there is a correct answer.

Answer:

The correct answer is **a**.

5. Scubaland, Inc. is experiencing a period of rapid growth. Earnings and dividends per share are expected to grow at a rate of 18 percent during the next two years, 15 percent in the third year, and 6 percent thereafter. Yesterday, Scubaland paid a dividend of $1.15. If the required rate of return on the stock is 12 percent, what is the price of a share of the stock today? Round off your final answer to three digits after the decimal point. State your answer as 'x.xxx'

Answer:

The correct answer is **26.955**.

Recall that we can value a share of stock using the dividend discount model. The share price is equal to the present value of expected future dividends. There are three years of non-constant growth and the required rate of return is 12 %. Let's calculate expected dividends for the first 4 years.

$D_1 = 1.15(1 + 0.18) = 1.357$

$D_2 = 1.357(1 + 0.18) = 1.601$

$D_3 = 1.601(1 + 0.15) = 1.841$

$D_4 = 1.841(1 + 0.06) = 1.952$

Next we calculate the stock price today P_0**,** which is given by:

$P_0 = 1.357/(1.12) + 1.601/(1.12)^2 + 1.841/(1.12)^3 + [1.952/(0.12-0.06)]/(1.12)^3 = 26.955$

6. A firm's preferred stock often has a dividend yield that is lower than its bonds because:

   a) Preferred stock generally carries a higher rating.

      No, preferred stock has similar features to both equity and debt, but it does not have a rating.

   b) Owners of preferred stock have a prior claim on the firm's earnings.

      No, preferred stock ranks after bonds in terms of the priority of its claim on distribution of payments.

   c) Owners of preferred stock have a prior claim on a firm's assets in the event of liquidation.

      No, preferred stock ranks after bonds in terms of the priority of its claims to the assets of the firm in the event of liquidation.

   d) Corporations owning stock may exclude from income taxes most of the dividend income they receive.

Yes, preferred stock often sells at lower yields than corporate bonds because of the value of the dividend exclusion from income taxes provided to corporations.

Answer:

The correct answer is **d**.

7. Gemini Industries has just paid its annual dividend of $3 per share. Analysts expect the dividend to grow at a constant growth rate of 4% indefinitely. If the stock is currently trading at $54, what is the market's required rate of return on this stock? Express your answer as a percentage rate rounded off to two digits after the decimal point, i.e. 'x.xx'

   Answer:

   The correct answer is **9.78**.

   You can back out the discount rate that will make the current market price equal to the present value of the expected future dividends:

   $P_0 = E(Div)/(r-g)$

   $54 = (3 \times (1.04))/(r - 0.04)$

   Solving for $r = 0.097778 = 9.78\%$

8. If GE stock is trading at $19.72 and the last quarterly dividend payment was $0.17 per share, what is GE's annual dividend yield? Express your answer as a percentage rate rounded off to two digits after the decimal point, i.e. 'x.xx'

   Answer:

   The correct answer is **3.45**.

   The annual dividend yield is defined as the annual dividend per share divided by the share price. If the quarterly dividend payment was $0.17, that corresponds to an annual dividend payment of $0.17 x 4 = $0.68.

   This implies that the annual dividend yield is $0.68/$19.72 = 0.3448 = 3.45%

9. What is the value of a preferred stock that pays a fixed dividend of $2 per share if the discount rate is 8%? Round off your final answer to the nearest dollar.

   Answer:

   The correct answer is **25**.

Preferred stock that pays a constant dividend can be valued using the constant growth dividend discount model. This basically is valuing a perpetuity of $2.

$P_0 = \$2/0.08 = 25$

10. Suppose that the company XYZ has just won a major contract. This lucrative contract will enable it to increase the growth rate of its dividends from 5% to 6% without affecting the projected current dividend of $3.00 per share. If the current share price is $57.14, what will happen to the share price upon announcement of this good news?

    a) The price will jump by 6%.
    b) The price will jump by 1%.
    c) The price will increase to $62.28
    d) The price will increase to $70.59

    Answer:

    The correct answer is **d**.

    We can first back out the discount rate using the current price:

    $P_0 = E(Div)/(r-g) = 57.14 = 3/(r - 5\%)$

    Solving for r = 10.25%

    We can now and the new price using the new growth rate:

    $E(Div)/(r-g) = 3/(10.25\% - 6\%) = 70.59$