

Chapter 7 - Homework Questions and Problems Answers

4. Stock Values. Take Time Corporation will pay a dividend of \$3.65 per share next year. The company pledges to increase its dividend by 5.1 percent per year, indefinitely. If you require a return of 11 percent on your investment, how much will you pay for the company's stock today?

Answer: Using the constant growth model, we find the price of the stock today is:

$$P_0 = D_1 / (R - g)$$

$$P_0 = \$3.65 / (.11 - .051)$$

$$P_0 = \$61.86$$

5. Stock Valuation. Mitchell, Inc., is expected to maintain a constant 4.6 percent growth rate in its dividends, indefinitely. If the company has a dividend yield of 5.8 percent, what is the required return on the company's stock?

Answer: The required return of a stock is made up of two parts: The dividend yield and the capital gains yield. So, the required return of this stock is:

$$R = \text{Dividend yield} + \text{Capital gains yield}$$

$$R = .058 + .046$$

$$R = .1040, \text{ or } 10.40\%$$

13. Stock Valuation and PE Ratio. The Sleeping Flower Co. has earnings of \$2.65 per share. The benchmark PE for the company is 18. What stock price would you consider appropriate? What if the benchmark PE were 21?

Answer: Using the equation to calculate the price of a share of stock with the PE ratio:

$$P = \text{Benchmark PE ratio} \times \text{EPS}$$

So, with a PE ratio of 18, we find:

$$P = 18(\$2.65)$$

$$P = \$47.70$$

And with a PE ratio of 21, we find:

$$P = 21(\$2.65)$$

$$P = \$55.65$$