Five Star Corporation will pay a dividend of \$2.86 per share next year. The company pledges to increase its dividend by 3.5 percent per year indefinitely. If you require a return of 10 percent on your investment, how much will you pay for the company's stock today? (Do not round intermediate calculations and round your answer to 2 decimal places, e.g., 32.16.)

## References

Worksheet Learning Objective: 08-

01 Explain how stock prices depend on future dividends and dividend

growth.

**Difficulty: 1 Basic** Section: 8.1 Common

Stock Valuation

Five Star Corporation will pay a dividend of \$2.86 per share next year. The company pledges to increase its dividend by 3.5 percent per year indefinitely. If you require a return of 10 percent on your investment, how much will you pay for the company's stock today? (Do not round intermediate calculations and round your answer to 2 decimal places, e.g., 32.16.)

Stock price	\$	44.00+/-1%
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## **Explanation:**

Note: Intermediate answers are shown below as rounded, but the full answer was used to complete the calculation.

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

$$P_0 = D_1/(R - g)$$
  
 $P_0 = $2.86/(.10 - .035)$   
 $P_0 = $44.00$