Antiques R Us is a mature manufacturing firm. The company just paid a dividend of \$9.65, but management expects to reduce the payout by 4 percent per year indefinitely. If you require a return of 12 percent on this stock, what will you pay for a share today? (Do not round intermediate calculations and round your answer to 2 decimal places, e.g., 32.16.)

Current share price

References

Worksheet Learning Objective: 08-

01 Explain how stock prices depend on future dividends and dividend

growth.

Difficulty: 2 Section: 8.1 Common Stock Valuation

Antiques R Us is a mature manufacturing firm. The company just paid a dividend of \$9.65, but management expects to reduce the payout by 4 percent per year indefinitely. If you require a return of 12 percent on this stock, what will you pay for a share today? (Do not round intermediate calculations and round your answer to 2 decimal places, e.g., 32.16.)

Current share price	\$	57.90+/-1%
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Explanation:

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

The constant growth model can be applied even if the dividends are declining by a constant percentage, just make sure to recognize the negative growth. So, the price of the stock today will be:

$$P_0 = D_0(1+g)/(R-g)$$

$$P_0 = \$9.65(1-.04)/[.12-(-.04)]$$

$$P_0 = \$57.90$$
