

Quiz 163

Simplify. Write your answers in exponential form with positive exponents.

1. $3x^4 \cdot 5x^{-3}$

2. $x^5 \cdot (2x^2)^{-2}$

3. $(27x^3)^{2/3}$

4. $\left(\frac{32x^{1/2}}{x^{1/4}}\right)^{4/5}$

Write an exponential function that models the situation, then solve. Use a calculator.

5. A rare coin costs \$200 and appreciates (increases in value) at a rate of 5% per year. How much will the coin be worth after 5 years? Round to the nearest hundredth.