

Simplify each expression. Write your answer in exponential notation.

$$14 \quad (5^5 \cdot 5^6)^2 \quad 5^{22}$$

$$16 \quad \left[\left(\frac{1}{2} \right) \cdot \left(\frac{1}{2} \right)^3 \right]^5 \quad \left(\frac{1}{2} \right)^{20}$$

$$18 \quad (2^2 \cdot 2^4)^3 \div 2^8 \quad 2^{10}$$

$$20 \quad (s^6 \cdot s)^2 \div s^4 \quad s^{10}$$

$$22 \quad \frac{(8^8 \cdot 8^3)^2}{(8^5)^4} \quad 8^2$$

$$24 \quad \frac{(b \cdot b^3)^5}{(b^2)^4} \quad b^{12}$$

$$26 \quad (q^5 \cdot q^2)^3 \div 5q^5 \quad \frac{q^{16}}{5}$$

$$28 \quad \frac{\left(\frac{2}{3} \right)^2 \cdot \left(\frac{2}{3} \right)^6}{\left(\frac{2^2}{3^2} \right)^3} \quad \left(\frac{2}{3} \right)^2$$

$$15 \quad (p^4 \cdot p^2)^6 \quad p^{36}$$

$$17 \quad \left[\left(-\frac{4}{9} \right)^2 \cdot \left(-\frac{4}{9} \right)^3 \right]^2 \quad \left(\frac{4}{9} \right)^{10}$$

$$19 \quad (7 \cdot 7^2)^5 \div 7^3 \quad 7^{12}$$

$$21 \quad (t^4 \cdot t^4)^4 \div t^4 \quad t^{28}$$

$$23 \quad \frac{(3^4 \cdot 3^2)^4}{(3^5)^2} \quad 3^{14}$$

$$25 \quad \frac{(h^6 \cdot h^4)^2}{(h^3)^5} \quad h^5$$

$$27 \quad (c^7 \cdot c^3)^4 \div 6c^2 \quad \frac{c^{38}}{6}$$

$$29 \quad \frac{\left(\frac{x}{2} \right)^3 \cdot \left(\frac{x}{2} \right)^4}{\left(\frac{x^3}{2} \right)^2} \quad \frac{x}{2^5}$$