



Simplifying Fraction Exponent Expressions
(Division)

Name: _____

Date: _____ Score: _____

$$\frac{\left(\frac{4}{9}\right)^5 \cdot \left(\frac{4}{9}\right)^{-4} \cdot \left(\frac{4}{9}\right)^{11} \cdot \left(\frac{4}{9}\right)^{-3}}{\left(\frac{4}{9}\right)^7 \cdot \left(\frac{4}{9}\right)^{-5}}$$

$$\frac{\left(\frac{1}{7}\right)^8 \cdot \left(\frac{1}{7}\right)^{-10} \cdot \left(\frac{1}{7}\right)^5}{\left(\frac{1}{7}\right)^{10}}$$

$$\frac{\left(\frac{1}{5}\right)^{-3} \cdot \left(\frac{1}{5}\right)^{-8} \cdot \left(\frac{1}{5}\right)^{-6} \cdot \left(\frac{1}{5}\right)^{-4}}{\left(\frac{1}{5}\right) \cdot \left(\frac{1}{5}\right)^{-5}}$$

$$\frac{\left(\frac{3}{5}\right)^{10} \cdot \left(\frac{3}{5}\right)^{-2} \cdot \left(\frac{3}{5}\right)^8 \cdot \left(\frac{3}{5}\right)^{10}}{\left(\frac{3}{5}\right)^8 \cdot \left(\frac{3}{5}\right)^2}$$

$$\left(\frac{1}{7}\right)^4 \cdot \left(\frac{1}{7}\right)^8 \cdot \left(\frac{1}{7}\right)^6$$

$$\left(\frac{1}{5}\right)^{-1} \cdot \left(\frac{1}{5}\right)^{-1} \cdot \left(\frac{1}{5}\right)^{11}$$

$$\frac{\left(\frac{4}{5}\right)^4 \cdot \left(\frac{4}{5}\right)^{11} \cdot \left(\frac{4}{5}\right)^{-5} \cdot \left(\frac{4}{5}\right)^{-2}}{\left(\frac{4}{5}\right)^{11} \cdot \left(\frac{4}{5}\right)^8}$$

$$\frac{\left(\frac{1}{6}\right)^{-6} \cdot \left(\frac{1}{6}\right)^{-9} \cdot \left(\frac{1}{6}\right)^{-2} \cdot \left(\frac{1}{6}\right)^4}{\left(\frac{1}{6}\right)^5 \cdot \left(\frac{1}{6}\right)}$$

$$\frac{\left(\frac{1}{9}\right)^6 \cdot \left(\frac{1}{9}\right)^{-5} \cdot \left(\frac{1}{9}\right)^3 \cdot \left(\frac{1}{9}\right)^{-3}}{\left(\frac{1}{9}\right)^4 \cdot \left(\frac{1}{9}\right)^{-7}}$$

$$\frac{\left(\frac{4}{7}\right)^9 \cdot \left(\frac{4}{7}\right)^9 \cdot \left(\frac{4}{7}\right)^9 \cdot \left(\frac{4}{7}\right)^{-2}}{\left(\frac{4}{7}\right)^9 \cdot \left(\frac{4}{7}\right)^{-8}}$$

$$\frac{\left(\frac{1}{7}\right)^{-1} \cdot \left(\frac{1}{7}\right)^7 \cdot \left(\frac{1}{7}\right)^{-10} \cdot \left(\frac{1}{7}\right)^2}{\left(\frac{1}{7}\right) \cdot \left(\frac{1}{7}\right)^{-1}}$$

$$\left(\frac{1}{6}\right)^{-1} \cdot \left(\frac{1}{6}\right)^{-2} \cdot \left(\frac{1}{6}\right)^{-7}$$

$$\frac{\left(\frac{1}{2}\right)^6 \cdot \left(\frac{1}{2}\right)^{-6} \cdot \left(\frac{1}{2}\right)^{-10}}{\left(\frac{1}{2}\right)^{-9}}$$

$$\frac{\left(\frac{4}{5}\right)^9 \cdot \left(\frac{4}{5}\right)^9 \cdot \left(\frac{4}{5}\right)^3}{\left(\frac{4}{5}\right)^{-5}}$$

$$\frac{\left(\frac{1}{2}\right)^7 \cdot \left(\frac{1}{2}\right)^3 \cdot \left(\frac{1}{2}\right)^{-10} \cdot \left(\frac{1}{2}\right)^{-8}}{\left(\frac{1}{2}\right)^2 \cdot \left(\frac{1}{2}\right)^{-2}}$$