



Simplifying Fraction Exponent Expressions
(Division)

Name: _____

Date: _____ Score: _____

$$\frac{\left(\frac{4}{7}\right)^{-10} \cdot \left(\frac{4}{7}\right)^{-1} \cdot \left(\frac{4}{7}\right)^7}{\left(\frac{4}{7}\right)^3}$$

$$\frac{\left(\frac{1}{8}\right)^{-9} \cdot \left(\frac{1}{8}\right)^8 \cdot \left(\frac{1}{8}\right)^6 \cdot \left(\frac{1}{8}\right)^{-5}}{\left(\frac{1}{8}\right) \cdot \left(\frac{1}{8}\right)^{-7}}$$

$$\left(\frac{1}{2}\right)^5 \cdot \left(\frac{1}{2}\right)^{-10} \cdot \left(\frac{1}{2}\right)^9$$

$$\left(\frac{1}{8}\right)^6 \cdot \left(\frac{1}{8}\right)^7 \cdot \left(\frac{1}{8}\right)^{-9}$$

$$\left(\frac{4}{5}\right)^5 \cdot \left(\frac{4}{5}\right)^8 \cdot \left(\frac{4}{5}\right)^{-7}$$

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

$$\frac{\left(\frac{4}{5}\right)^5 \cdot \left(\frac{4}{5}\right)^{-9} \cdot \left(\frac{4}{5}\right)^{-1} \cdot \left(\frac{4}{5}\right)^{10}}{\left(\frac{4}{5}\right)^{-10} \cdot \left(\frac{4}{5}\right)^{-7}}$$

$$\left(\frac{1}{3}\right)^{11} \cdot \left(\frac{1}{3}\right)^{-8} \cdot \left(\frac{1}{3}\right)^4$$

$$\frac{\left(\frac{1}{3}\right)^{11} \cdot \left(\frac{1}{3}\right)^{-3} \cdot \left(\frac{1}{3}\right)^{-1}}{\left(\frac{1}{3}\right)^2}$$

$$\frac{\left(\frac{1}{7}\right)^8 \cdot \left(\frac{1}{7}\right)^{-3} \cdot \left(\frac{1}{7}\right)^{-7} \cdot \left(\frac{1}{7}\right)^3}{\left(\frac{1}{7}\right)^9 \cdot \left(\frac{1}{7}\right)^{-7}}$$

$$\frac{\left(\frac{2}{3}\right) \cdot \left(\frac{2}{3}\right)^9 \cdot \left(\frac{2}{3}\right)^7 \cdot \left(\frac{2}{3}\right)^{-7}}{\left(\frac{2}{3}\right)^{10} \cdot \left(\frac{2}{3}\right)^6}$$

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

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

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

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



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$$\frac{\left(\frac{4}{7}\right)^{-10} \cdot \left(\frac{4}{7}\right)^{-1} \cdot \left(\frac{4}{7}\right)^7}{\left(\frac{4}{7}\right)^3}$$

$$\left(\frac{4}{7}\right)^{-7}$$

$$\frac{\left(\frac{1}{8}\right)^{-9} \cdot \left(\frac{1}{8}\right)^8 \cdot \left(\frac{1}{8}\right)^6 \cdot \left(\frac{1}{8}\right)^{-5}}{\left(\frac{1}{8}\right) \cdot \left(\frac{1}{8}\right)^{-7}}$$

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

$$\left(\frac{1}{2}\right)^5 \cdot \left(\frac{1}{2}\right)^{-10} \cdot \left(\frac{1}{2}\right)^9$$

$$\left(\frac{1}{2}\right)^4$$

$$\left(\frac{1}{8}\right)^6 \cdot \left(\frac{1}{8}\right)^7 \cdot \left(\frac{1}{8}\right)^{-9}$$

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

$$\left(\frac{4}{5}\right)^5 \cdot \left(\frac{4}{5}\right)^8 \cdot \left(\frac{4}{5}\right)^{-7}$$

$$\left(\frac{4}{5}\right)^6$$

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

$$\left(\frac{1}{6}\right)^{30}$$

$$\frac{\left(\frac{4}{5}\right)^5 \cdot \left(\frac{4}{5}\right)^{-9} \cdot \left(\frac{4}{5}\right)^{-1} \cdot \left(\frac{4}{5}\right)^{10}}{\left(\frac{4}{5}\right)^{-10} \cdot \left(\frac{4}{5}\right)^{-7}}$$

$$\left(\frac{4}{5}\right)^{22}$$

$$\left(\frac{1}{3}\right)^{11} \cdot \left(\frac{1}{3}\right)^{-8} \cdot \left(\frac{1}{3}\right)^4$$

$$\left(\frac{1}{3}\right)^7$$

$$\frac{\left(\frac{1}{3}\right)^{11} \cdot \left(\frac{1}{3}\right)^{-3} \cdot \left(\frac{1}{3}\right)^{-1}}{\left(\frac{1}{3}\right)^2}$$

$$\left(\frac{1}{3}\right)^5$$

$$\frac{\left(\frac{1}{7}\right)^8 \cdot \left(\frac{1}{7}\right)^{-3} \cdot \left(\frac{1}{7}\right)^{-7} \cdot \left(\frac{1}{7}\right)^3}{\left(\frac{1}{7}\right)^9 \cdot \left(\frac{1}{7}\right)^{-7}}$$

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

$$\frac{\left(\frac{2}{3}\right) \cdot \left(\frac{2}{3}\right)^9 \cdot \left(\frac{2}{3}\right)^7 \cdot \left(\frac{2}{3}\right)^{-7}}{\left(\frac{2}{3}\right)^{10} \cdot \left(\frac{2}{3}\right)^6}$$

$$\left(\frac{2}{3}\right)^{-6}$$

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

$$\left(\frac{1}{8}\right)^{-2}$$

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

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

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

$$\left(\frac{1}{3}\right)^{-9}$$

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

$$\left(\frac{2}{3}\right)^{-3}$$