



Simplifying Fraction Exponent Expressions (Division)

Name: _____

Date: _____ Score: _____

$$\left(\frac{2}{3}\right)^{-3} \cdot \left(\frac{2}{3}\right)^{11} \cdot \left(\frac{2}{3}\right)^{-7}$$

$$\frac{\left(\frac{4}{9}\right)^5 \cdot \left(\frac{4}{9}\right)^2 \cdot \left(\frac{4}{9}\right)}{\left(\frac{4}{9}\right)^{11}}$$

$$\frac{\left(\frac{3}{5}\right)^{-1} \cdot \left(\frac{3}{5}\right)^{-4} \cdot \left(\frac{3}{5}\right)^{-10} \cdot \left(\frac{3}{5}\right)^2}{\left(\frac{3}{5}\right)^4 \cdot \left(\frac{3}{5}\right)^5}$$

$$\frac{\left(\frac{1}{2}\right)^{-4} \cdot \left(\frac{1}{2}\right)^3 \cdot \left(\frac{1}{2}\right)^8}{\left(\frac{1}{2}\right)^{11}}$$

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

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

$$\frac{\left(\frac{1}{8}\right)^{-9} \cdot \left(\frac{1}{8}\right)^5 \cdot \left(\frac{1}{8}\right)^{-10}}{\left(\frac{1}{8}\right)^3}$$

$$\frac{\left(\frac{1}{3}\right)^6 \cdot \left(\frac{1}{3}\right)^7 \cdot \left(\frac{1}{3}\right)^5 \cdot \left(\frac{1}{3}\right)^2}{\left(\frac{1}{3}\right)^9 \cdot \left(\frac{1}{3}\right)^{-7}}$$

$$\frac{\left(\frac{1}{5}\right) \cdot \left(\frac{1}{5}\right)^3 \cdot \left(\frac{1}{5}\right)^{-10} \cdot \left(\frac{1}{5}\right)^{-4}}{\left(\frac{1}{5}\right)^{-10} \cdot \left(\frac{1}{5}\right)^{-4}}$$

$$\frac{\left(\frac{2}{7}\right)^{-10} \cdot \left(\frac{2}{7}\right)^5 \cdot \left(\frac{2}{7}\right)^4}{\left(\frac{2}{7}\right)^2}$$

$$\left(\frac{1}{9}\right)^{11} \cdot \left(\frac{1}{9}\right)^8 \cdot \left(\frac{1}{9}\right)^{-6}$$

$$\frac{\left(\frac{4}{5}\right)^8 \cdot \left(\frac{4}{5}\right)^8 \cdot \left(\frac{4}{5}\right)^{-10} \cdot \left(\frac{4}{5}\right)^5}{\left(\frac{4}{5}\right)^2 \cdot \left(\frac{4}{5}\right)^7}$$

$$\frac{\left(\frac{1}{3}\right)^6 \cdot \left(\frac{1}{3}\right)^7 \cdot \left(\frac{1}{3}\right)^{-8}}{\left(\frac{1}{3}\right)^2}$$

$$\frac{\left(\frac{1}{8}\right)^6 \cdot \left(\frac{1}{8}\right)^9 \cdot \left(\frac{1}{8}\right)^{10} \cdot \left(\frac{1}{8}\right)^{-2}}{\left(\frac{1}{8}\right)^{-9} \cdot \left(\frac{1}{8}\right)^9}$$

$$\left(\frac{2}{7}\right)^5 \cdot \left(\frac{2}{7}\right)^{-4} \cdot \left(\frac{2}{7}\right)^{-2}$$



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$$\frac{\left(\frac{2}{3}\right)^{-3} \cdot \left(\frac{2}{3}\right)^{11} \cdot \left(\frac{2}{3}\right)^{-7}}{\left(\frac{2}{3}\right)}$$

$$\frac{\left(\frac{4}{9}\right)^5 \cdot \left(\frac{4}{9}\right)^2 \cdot \left(\frac{4}{9}\right)}{\left(\frac{4}{9}\right)^{11}} \left(\frac{4}{9}\right)^{-3}$$

$$\frac{\left(\frac{3}{5}\right)^{-1} \cdot \left(\frac{3}{5}\right)^{-4} \cdot \left(\frac{3}{5}\right)^{-10} \cdot \left(\frac{3}{5}\right)^2}{\left(\frac{3}{5}\right)^4 \cdot \left(\frac{3}{5}\right)^5} \left(\frac{3}{5}\right)^{-22}$$

$$\frac{\left(\frac{1}{2}\right)^{-4} \cdot \left(\frac{1}{2}\right)^3 \cdot \left(\frac{1}{2}\right)^8}{\left(\frac{1}{2}\right)^{11}} \left(\frac{1}{2}\right)^{-4}$$

$$\frac{\left(\frac{4}{9}\right)^5 \cdot \left(\frac{4}{9}\right)^9 \cdot \left(\frac{4}{9}\right)^{10}}{\left(\frac{4}{9}\right)^{24}}$$

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

$$\frac{\left(\frac{1}{8}\right)^{-9} \cdot \left(\frac{1}{8}\right)^5 \cdot \left(\frac{1}{8}\right)^{-10}}{\left(\frac{1}{8}\right)^3} \left(\frac{1}{8}\right)^{-17}$$

$$\frac{\left(\frac{1}{3}\right)^6 \cdot \left(\frac{1}{3}\right)^7 \cdot \left(\frac{1}{3}\right)^5 \cdot \left(\frac{1}{3}\right)^2}{\left(\frac{1}{3}\right)^9 \cdot \left(\frac{1}{3}\right)^{-7}} \left(\frac{1}{3}\right)^{18}$$

$$\frac{\left(\frac{1}{5}\right) \cdot \left(\frac{1}{5}\right)^3 \cdot \left(\frac{1}{5}\right)^{-10} \cdot \left(\frac{1}{5}\right)^{-4}}{\left(\frac{1}{5}\right)^{-10} \cdot \left(\frac{1}{5}\right)^{-4}} \left(\frac{1}{5}\right)^4$$

$$\frac{\left(\frac{2}{7}\right)^{-10} \cdot \left(\frac{2}{7}\right)^5 \cdot \left(\frac{2}{7}\right)^4}{\left(\frac{2}{7}\right)^2} \left(\frac{2}{7}\right)^{-3}$$

$$\frac{\left(\frac{1}{9}\right)^{11} \cdot \left(\frac{1}{9}\right)^8 \cdot \left(\frac{1}{9}\right)^{-6}}{\left(\frac{1}{9}\right)^{13}}$$

$$\frac{\left(\frac{4}{5}\right)^8 \cdot \left(\frac{4}{5}\right)^8 \cdot \left(\frac{4}{5}\right)^{-10} \cdot \left(\frac{4}{5}\right)^5}{\left(\frac{4}{5}\right)^2 \cdot \left(\frac{4}{5}\right)^7} \left(\frac{4}{5}\right)^2$$

$$\frac{\left(\frac{1}{3}\right)^6 \cdot \left(\frac{1}{3}\right)^7 \cdot \left(\frac{1}{3}\right)^{-8}}{\left(\frac{1}{3}\right)^2} \left(\frac{1}{3}\right)^3$$

$$\frac{\left(\frac{1}{8}\right)^6 \cdot \left(\frac{1}{8}\right)^9 \cdot \left(\frac{1}{8}\right)^{10} \cdot \left(\frac{1}{8}\right)^{-2}}{\left(\frac{1}{8}\right)^{-9} \cdot \left(\frac{1}{8}\right)^9} \left(\frac{1}{8}\right)^{23}$$

$$\frac{\left(\frac{2}{7}\right)^5 \cdot \left(\frac{2}{7}\right)^{-4} \cdot \left(\frac{2}{7}\right)^{-2}}{\left(\frac{2}{7}\right)^{-1}}$$