



Simplifying Fraction Exponent Expressions (Division)

Name: _____

Date: _____ Score: _____

$$\frac{\left(\frac{2}{5}\right)^{-5} \cdot \left(\frac{2}{5}\right)^7 \cdot \left(\frac{2}{5}\right)^{10} \cdot \left(\frac{2}{5}\right)^{-10}}{\left(\frac{2}{5}\right)^{-9} \cdot \left(\frac{2}{5}\right)^{10}}$$

$$\left(\frac{4}{9}\right)^{-10} \cdot \left(\frac{4}{9}\right)^{-8} \cdot \left(\frac{4}{9}\right)^9$$

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

$$\left(\frac{1}{3}\right)^{-10} \cdot \left(\frac{1}{3}\right)^8 \cdot \left(\frac{1}{3}\right)^{11}$$

$$\frac{\left(\frac{1}{2}\right)^2 \cdot \left(\frac{1}{2}\right)^7 \cdot \left(\frac{1}{2}\right)^{11}}{\left(\frac{1}{2}\right)}$$

$$\frac{\left(\frac{1}{3}\right)^4 \cdot \left(\frac{1}{3}\right)^{-7} \cdot \left(\frac{1}{3}\right)^{-4} \cdot \left(\frac{1}{3}\right)^8}{\left(\frac{1}{3}\right)^{-1} \cdot \left(\frac{1}{3}\right)^8}$$

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

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

$$\left(\frac{1}{8}\right)^5 \cdot \left(\frac{1}{8}\right)^{11} \cdot \left(\frac{1}{8}\right)^6$$

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

$$\frac{\left(\frac{3}{8}\right)^{-6} \cdot \left(\frac{3}{8}\right)^{-2} \cdot \left(\frac{3}{8}\right)^{-4}}{\left(\frac{3}{8}\right)^{10}}$$

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

$$\left(\frac{4}{5}\right)^{-2} \cdot \left(\frac{4}{5}\right)^{-1} \cdot \left(\frac{4}{5}\right)^{11}$$

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

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



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$$\frac{\left(\frac{2}{5}\right)^{-5} \cdot \left(\frac{2}{5}\right)^7 \cdot \left(\frac{2}{5}\right)^{10} \cdot \left(\frac{2}{5}\right)^{-10}}{\left(\frac{2}{5}\right)^{-9} \cdot \left(\frac{2}{5}\right)^{10}}$$

$\left(\frac{2}{5}\right)$

$$\frac{\left(\frac{4}{9}\right)^{-10} \cdot \left(\frac{4}{9}\right)^{-8} \cdot \left(\frac{4}{9}\right)^9}{\left(\frac{4}{9}\right)^{-9}}$$

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

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

$$\frac{\left(\frac{1}{3}\right)^{-10} \cdot \left(\frac{1}{3}\right)^8 \cdot \left(\frac{1}{3}\right)^{11}}{\left(\frac{1}{3}\right)^9}$$

$$\frac{\left(\frac{1}{2}\right)^2 \cdot \left(\frac{1}{2}\right)^7 \cdot \left(\frac{1}{2}\right)^{11}}{\left(\frac{1}{2}\right)}$$

$\left(\frac{1}{2}\right)^{19}$

$$\frac{\left(\frac{1}{3}\right)^4 \cdot \left(\frac{1}{3}\right)^{-7} \cdot \left(\frac{1}{3}\right)^{-4} \cdot \left(\frac{1}{3}\right)^8}{\left(\frac{1}{3}\right)^{-1} \cdot \left(\frac{1}{3}\right)^8}$$

$\left(\frac{1}{3}\right)^{-6}$

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

$\left(\frac{1}{7}\right)^{-11}$

$$\frac{\left(\frac{2}{5}\right)^7 \cdot \left(\frac{2}{5}\right)^{-3} \cdot \left(\frac{2}{5}\right)^{-10}}{\left(\frac{2}{5}\right)^{-6}}$$

$$\frac{\left(\frac{1}{8}\right)^5 \cdot \left(\frac{1}{8}\right)^{11} \cdot \left(\frac{1}{8}\right)^6}{\left(\frac{1}{8}\right)^{22}}$$

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

$\left(\frac{1}{3}\right)^{24}$

$$\frac{\left(\frac{3}{8}\right)^{-6} \cdot \left(\frac{3}{8}\right)^{-2} \cdot \left(\frac{3}{8}\right)^{-4}}{\left(\frac{3}{8}\right)^{10}}$$

$\left(\frac{3}{8}\right)^{-22}$

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

$$\frac{\left(\frac{4}{5}\right)^{-2} \cdot \left(\frac{4}{5}\right)^{-1} \cdot \left(\frac{4}{5}\right)^{11}}{\left(\frac{4}{5}\right)^8}$$

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

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

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

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