



Simplifying Fraction Exponent Expressions (Division)

Name: _____

Date: _____ Score: _____

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

$$\frac{\left(\frac{1}{3}\right)^7 \cdot \left(\frac{1}{3}\right)^{10} \cdot \left(\frac{1}{3}\right)}{\left(\frac{1}{3}\right)^{-6}}$$

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

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

$$\frac{\left(\frac{3}{5}\right)^{-8} \cdot \left(\frac{3}{5}\right)^{-2} \cdot \left(\frac{3}{5}\right)^{11}}{\left(\frac{3}{5}\right)^{-6}}$$

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

$$\frac{\left(\frac{1}{9}\right)^5 \cdot \left(\frac{1}{9}\right)^9 \cdot \left(\frac{1}{9}\right)^{-5} \cdot \left(\frac{1}{9}\right)^{11}}{\left(\frac{1}{9}\right)^{-9} \cdot \left(\frac{1}{9}\right)^5}$$

$$\left(\frac{1}{5}\right)^7 \cdot \left(\frac{1}{5}\right)^{11} \cdot \left(\frac{1}{5}\right)^{11}$$

$$\frac{\left(\frac{1}{3}\right)^4 \cdot \left(\frac{1}{3}\right)^7 \cdot \left(\frac{1}{3}\right)^{-2} \cdot \left(\frac{1}{3}\right)^{10}}{\left(\frac{1}{3}\right)^{11} \cdot \left(\frac{1}{3}\right)^{-7}}$$

$$\left(\frac{4}{5}\right)^{-6} \cdot \left(\frac{4}{5}\right)^{-10} \cdot \left(\frac{4}{5}\right)^{-9}$$

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

$$\left(\frac{1}{7}\right)^{-8} \cdot \left(\frac{1}{7}\right)^4 \cdot \left(\frac{1}{7}\right)^5$$

$$\frac{\left(\frac{3}{5}\right)^{10} \cdot \left(\frac{3}{5}\right)^{-3} \cdot \left(\frac{3}{5}\right)^8 \cdot \left(\frac{3}{5}\right)^{10}}{\left(\frac{3}{5}\right)^{-5} \cdot \left(\frac{3}{5}\right)^{11}}$$

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

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



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

$$\left(\frac{2}{3}\right)^5$$

$$\frac{\left(\frac{1}{3}\right)^7 \cdot \left(\frac{1}{3}\right)^{10} \cdot \left(\frac{1}{3}\right)}{\left(\frac{1}{3}\right)^{-6}}$$

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

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

$$\frac{\left(\frac{1}{9}\right)^{-8} \cdot \left(\frac{1}{9}\right)^{-5} \cdot \left(\frac{1}{9}\right)^{-7}}{\left(\frac{1}{9}\right)^{-20}}$$

$$\frac{\left(\frac{3}{5}\right)^{-8} \cdot \left(\frac{3}{5}\right)^{-2} \cdot \left(\frac{3}{5}\right)^{11}}{\left(\frac{3}{5}\right)^{-6}}$$

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

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

$$\left(\frac{1}{8}\right)^{-12}$$

$$\frac{\left(\frac{1}{9}\right)^5 \cdot \left(\frac{1}{9}\right)^9 \cdot \left(\frac{1}{9}\right)^{-5} \cdot \left(\frac{1}{9}\right)^{11}}{\left(\frac{1}{9}\right)^{-9} \cdot \left(\frac{1}{9}\right)^5}$$

$$\left(\frac{1}{9}\right)^{24}$$

$$\frac{\left(\frac{1}{5}\right)^7 \cdot \left(\frac{1}{5}\right)^{11} \cdot \left(\frac{1}{5}\right)^{11}}{\left(\frac{1}{5}\right)^{29}}$$

$$\frac{\left(\frac{1}{3}\right)^4 \cdot \left(\frac{1}{3}\right)^7 \cdot \left(\frac{1}{3}\right)^{-2} \cdot \left(\frac{1}{3}\right)^{10}}{\left(\frac{1}{3}\right)^{11} \cdot \left(\frac{1}{3}\right)^{-7}}$$

$$\left(\frac{1}{3}\right)^{15}$$

$$\frac{\left(\frac{4}{5}\right)^{-6} \cdot \left(\frac{4}{5}\right)^{-10} \cdot \left(\frac{4}{5}\right)^{-9}}{\left(\frac{4}{5}\right)^{-25}}$$

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

$$\left(\frac{2}{5}\right)^{-14}$$

$$\frac{\left(\frac{1}{7}\right)^{-8} \cdot \left(\frac{1}{7}\right)^4 \cdot \left(\frac{1}{7}\right)^5}{\left(\frac{1}{7}\right)}$$

$$\frac{\left(\frac{3}{5}\right)^{10} \cdot \left(\frac{3}{5}\right)^{-3} \cdot \left(\frac{3}{5}\right)^8 \cdot \left(\frac{3}{5}\right)^{10}}{\left(\frac{3}{5}\right)^{-5} \cdot \left(\frac{3}{5}\right)^{11}}$$

$$\left(\frac{3}{5}\right)^{19}$$

$$\frac{\left(\frac{1}{2}\right)^5 \cdot \left(\frac{1}{2}\right)^{11} \cdot \left(\frac{1}{2}\right)}{\left(\frac{1}{2}\right)^{17}}$$

$$\frac{\left(\frac{2}{7}\right)^7 \cdot \left(\frac{2}{7}\right)^{-5} \cdot \left(\frac{2}{7}\right)^4}{\left(\frac{2}{7}\right)^6}$$