



Simplifying Fraction Exponent Expressions
(Division)

Name: _____

Date: _____ Score: _____

$$\left(\frac{3}{7}\right)^{11} \cdot \left(\frac{3}{7}\right)^{11} \cdot \left(\frac{3}{7}\right)^{-6}$$

$$\frac{\left(\frac{1}{6}\right)^3 \cdot \left(\frac{1}{6}\right)^{-3} \cdot \left(\frac{1}{6}\right)^{10}}{\left(\frac{1}{6}\right)^{-8}}$$

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

$$\frac{\left(\frac{1}{8}\right)^8 \cdot \left(\frac{1}{8}\right)^{-10} \cdot \left(\frac{1}{8}\right)^{-3} \cdot \left(\frac{1}{8}\right)}{\left(\frac{1}{8}\right)^{-10} \cdot \left(\frac{1}{8}\right)^{-6}}$$

$$\frac{\left(\frac{2}{7}\right)^5 \cdot \left(\frac{2}{7}\right)^{-9} \cdot \left(\frac{2}{7}\right)^4}{\left(\frac{2}{7}\right)^{-7}}$$

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

$$\frac{\left(\frac{4}{9}\right)^7 \cdot \left(\frac{4}{9}\right)^{11} \cdot \left(\frac{4}{9}\right)^{-1}}{\left(\frac{4}{9}\right)^{-2}}$$

$$\frac{\left(\frac{1}{7}\right)^5 \cdot \left(\frac{1}{7}\right)^4 \cdot \left(\frac{1}{7}\right)^6}{\left(\frac{1}{7}\right)^{-10}}$$

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

$$\frac{\left(\frac{4}{9}\right)^4 \cdot \left(\frac{4}{9}\right)^{10} \cdot \left(\frac{4}{9}\right)^{-3} \cdot \left(\frac{4}{9}\right)^2}{\left(\frac{4}{9}\right)^{-9} \cdot \left(\frac{4}{9}\right)^4}$$

$$\frac{\left(\frac{1}{4}\right)^{-5} \cdot \left(\frac{1}{4}\right)^{-10} \cdot \left(\frac{1}{4}\right)^{-8}}{\left(\frac{1}{4}\right)^8}$$

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

$$\frac{\left(\frac{1}{7}\right)^{11} \cdot \left(\frac{1}{7}\right)^{-8} \cdot \left(\frac{1}{7}\right)^{11} \cdot \left(\frac{1}{7}\right)^{-5}}{\left(\frac{1}{7}\right)^4 \cdot \left(\frac{1}{7}\right)^{-3}}$$

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

$$\frac{\left(\frac{3}{7}\right)^{11} \cdot \left(\frac{3}{7}\right)^7 \cdot \left(\frac{3}{7}\right)^{-2}}{\left(\frac{3}{7}\right)^{-6}}$$



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$$\frac{\left(\frac{3}{7}\right)^{11} \cdot \left(\frac{3}{7}\right)^{11} \cdot \left(\frac{3}{7}\right)^{-6}}{\left(\frac{3}{7}\right)^{16}}$$

$$\frac{\left(\frac{1}{6}\right)^3 \cdot \left(\frac{1}{6}\right)^{-3} \cdot \left(\frac{1}{6}\right)^{10}}{\left(\frac{1}{6}\right)^{-8}} \left(\frac{1}{6}\right)^{18}$$

$$\frac{\left(\frac{4}{5}\right)^4 \cdot \left(\frac{4}{5}\right)^9 \cdot \left(\frac{4}{5}\right)^{-5}}{\left(\frac{4}{5}\right)^8}$$

$$\frac{\left(\frac{1}{8}\right)^8 \cdot \left(\frac{1}{8}\right)^{-10} \cdot \left(\frac{1}{8}\right)^{-3} \cdot \left(\frac{1}{8}\right)}{\left(\frac{1}{8}\right)^{-10} \cdot \left(\frac{1}{8}\right)^{-6}} \left(\frac{1}{8}\right)^{12}$$

$$\frac{\left(\frac{2}{7}\right)^5 \cdot \left(\frac{2}{7}\right)^{-9} \cdot \left(\frac{2}{7}\right)^4}{\left(\frac{2}{7}\right)^{-7}} \left(\frac{2}{7}\right)^7$$

$$\frac{\left(\frac{1}{8}\right)^{-8} \cdot \left(\frac{1}{8}\right)^4 \cdot \left(\frac{1}{8}\right)^{-6}}{\left(\frac{1}{8}\right)^4} \left(\frac{1}{8}\right)^{-14}$$

$$\frac{\left(\frac{4}{9}\right)^7 \cdot \left(\frac{4}{9}\right)^{11} \cdot \left(\frac{4}{9}\right)^{-1}}{\left(\frac{4}{9}\right)^{-2}} \left(\frac{4}{9}\right)^{19}$$

$$\frac{\left(\frac{1}{7}\right)^5 \cdot \left(\frac{1}{7}\right)^4 \cdot \left(\frac{1}{7}\right)^6}{\left(\frac{1}{7}\right)^{-10}} \left(\frac{1}{7}\right)^{25}$$

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

$$\frac{\left(\frac{4}{9}\right)^4 \cdot \left(\frac{4}{9}\right)^{10} \cdot \left(\frac{4}{9}\right)^{-3} \cdot \left(\frac{4}{9}\right)^2}{\left(\frac{4}{9}\right)^{-9} \cdot \left(\frac{4}{9}\right)^4} \left(\frac{4}{9}\right)^{18}$$

$$\frac{\left(\frac{1}{4}\right)^{-5} \cdot \left(\frac{1}{4}\right)^{-10} \cdot \left(\frac{1}{4}\right)^{-8}}{\left(\frac{1}{4}\right)^8} \left(\frac{1}{4}\right)^{-31}$$

$$\frac{\left(\frac{2}{3}\right)^{-2} \cdot \left(\frac{2}{3}\right)^5 \cdot \left(\frac{2}{3}\right)^2 \cdot \left(\frac{2}{3}\right)^6}{\left(\frac{2}{3}\right)^{-5} \cdot \left(\frac{2}{3}\right)^{-5}} \left(\frac{2}{3}\right)^{21}$$

$$\frac{\left(\frac{1}{7}\right)^{11} \cdot \left(\frac{1}{7}\right)^{-8} \cdot \left(\frac{1}{7}\right)^{11} \cdot \left(\frac{1}{7}\right)^{-5}}{\left(\frac{1}{7}\right)^4 \cdot \left(\frac{1}{7}\right)^{-3}} \left(\frac{1}{7}\right)^8$$

$$\frac{\left(\frac{2}{7}\right)^5 \cdot \left(\frac{2}{7}\right)^5 \cdot \left(\frac{2}{7}\right)^{10}}{\left(\frac{2}{7}\right)^{20}}$$

$$\frac{\left(\frac{3}{7}\right)^{11} \cdot \left(\frac{3}{7}\right)^7 \cdot \left(\frac{3}{7}\right)^{-2}}{\left(\frac{3}{7}\right)^{-6}} \left(\frac{3}{7}\right)^{22}$$