



# Simplifying Fraction Exponent Expressions (Division)

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Score: \_\_\_\_\_

$$\frac{\left(\frac{1}{9}\right)^2 \cdot \left(\frac{1}{9}\right)^8 \cdot \left(\frac{1}{9}\right)^7 \cdot \left(\frac{1}{9}\right)^7}{\left(\frac{1}{9}\right)^{-3} \cdot \left(\frac{1}{9}\right)^{-8}}$$

$$\frac{\left(\frac{2}{9}\right)^{-1} \cdot \left(\frac{2}{9}\right)^4 \cdot \left(\frac{2}{9}\right)^{-5}}{\left(\frac{2}{9}\right)^4}$$

$$\frac{\left(\frac{1}{7}\right)^2 \cdot \left(\frac{1}{7}\right)^{-9} \cdot \left(\frac{1}{7}\right)^{-4} \cdot \left(\frac{1}{7}\right)^{-10}}{\left(\frac{1}{7}\right)^8 \cdot \left(\frac{1}{7}\right)^{-4}}$$

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

$$\frac{\left(\frac{4}{7}\right)^7 \cdot \left(\frac{4}{7}\right)^{-6} \cdot \left(\frac{4}{7}\right)^{-4} \cdot \left(\frac{4}{7}\right)^2}{\left(\frac{4}{7}\right)^7 \cdot \left(\frac{4}{7}\right)^{-9}}$$

$$\frac{\left(\frac{1}{4}\right)^2 \cdot \left(\frac{1}{4}\right)^{-3} \cdot \left(\frac{1}{4}\right)^7 \cdot \left(\frac{1}{4}\right)^{-2}}{\left(\frac{1}{4}\right)^8 \cdot \left(\frac{1}{4}\right)^8}$$

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

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

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

$$\frac{\left(\frac{2}{7}\right)^{-5} \cdot \left(\frac{2}{7}\right)^{-8} \cdot \left(\frac{2}{7}\right)^9}{\left(\frac{2}{7}\right)^{-6}}$$

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

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

$$\frac{\left(\frac{1}{2}\right)^{-2} \cdot \left(\frac{1}{2}\right)^{-4} \cdot \left(\frac{1}{2}\right)^{-3} \cdot \left(\frac{1}{2}\right)^8}{\left(\frac{1}{2}\right)^3 \cdot \left(\frac{1}{2}\right)^{-7}}$$

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

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



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$$\frac{\left(\frac{1}{9}\right)^2 \cdot \left(\frac{1}{9}\right)^8 \cdot \left(\frac{1}{9}\right)^7 \cdot \left(\frac{1}{9}\right)^7}{\left(\frac{1}{9}\right)^{-3} \cdot \left(\frac{1}{9}\right)^{-8}}$$
$$\left(\frac{1}{9}\right)^{35}$$

$$\frac{\left(\frac{2}{9}\right)^{-1} \cdot \left(\frac{2}{9}\right)^4 \cdot \left(\frac{2}{9}\right)^{-5}}{\left(\frac{2}{9}\right)^4}$$
$$\left(\frac{2}{9}\right)^{-6}$$

$$\frac{\left(\frac{1}{7}\right)^2 \cdot \left(\frac{1}{7}\right)^{-9} \cdot \left(\frac{1}{7}\right)^{-4} \cdot \left(\frac{1}{7}\right)^{-10}}{\left(\frac{1}{7}\right)^8 \cdot \left(\frac{1}{7}\right)^{-4}}$$
$$\left(\frac{1}{7}\right)^{-25}$$

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

$$\frac{\left(\frac{4}{7}\right)^7 \cdot \left(\frac{4}{7}\right)^{-6} \cdot \left(\frac{4}{7}\right)^{-4} \cdot \left(\frac{4}{7}\right)^2}{\left(\frac{4}{7}\right)^7 \cdot \left(\frac{4}{7}\right)^{-9}}$$
$$\left(\frac{4}{7}\right)$$

$$\frac{\left(\frac{1}{4}\right)^2 \cdot \left(\frac{1}{4}\right)^{-3} \cdot \left(\frac{1}{4}\right)^7 \cdot \left(\frac{1}{4}\right)^{-2}}{\left(\frac{1}{4}\right)^8 \cdot \left(\frac{1}{4}\right)^8}$$
$$\left(\frac{1}{4}\right)^{-12}$$

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

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

$$\frac{\left(\frac{1}{7}\right)^{-5} \cdot \left(\frac{1}{7}\right)^9 \cdot \left(\frac{1}{7}\right)^{10}}{\left(\frac{1}{7}\right)^{-10}}$$
$$\left(\frac{1}{7}\right)^{24}$$

$$\frac{\left(\frac{2}{7}\right)^{-5} \cdot \left(\frac{2}{7}\right)^{-8} \cdot \left(\frac{2}{7}\right)^9}{\left(\frac{2}{7}\right)^{-6}}$$
$$\left(\frac{2}{7}\right)^2$$

$$\frac{\left(\frac{2}{7}\right)^4 \cdot \left(\frac{2}{7}\right)^6 \cdot \left(\frac{2}{7}\right)^4}{\left(\frac{2}{7}\right)^{14}}$$

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

$$\frac{\left(\frac{1}{2}\right)^{-2} \cdot \left(\frac{1}{2}\right)^{-4} \cdot \left(\frac{1}{2}\right)^{-3} \cdot \left(\frac{1}{2}\right)^8}{\left(\frac{1}{2}\right)^3 \cdot \left(\frac{1}{2}\right)^{-7}}$$
$$\left(\frac{1}{2}\right)^3$$

$$\frac{\left(\frac{3}{5}\right)^5 \cdot \left(\frac{3}{5}\right)^{-5} \cdot \left(\frac{3}{5}\right)^{-1} \cdot \left(\frac{3}{5}\right)^4}{\left(\frac{3}{5}\right)^{10} \cdot \left(\frac{3}{5}\right)}$$
$$\left(\frac{3}{5}\right)^{-8}$$

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