



Simplifier les exposants de fractions (Division)

Nom: _____

Date: _____ Note: _____

$$\frac{\left(\frac{3}{5}\right)^4 \cdot \left(\frac{3}{5}\right)^{-3} \cdot \left(\frac{3}{5}\right)^5 \cdot \left(\frac{3}{5}\right)^{-2}}{\left(\frac{3}{5}\right)^5 \cdot \left(\frac{3}{5}\right)^{-6}}$$

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

$$\frac{\left(\frac{2}{7}\right) \cdot \left(\frac{2}{7}\right)^{11} \cdot \left(\frac{2}{7}\right)^9 \cdot \left(\frac{2}{7}\right)^{-10}}{\left(\frac{2}{7}\right)^4 \cdot \left(\frac{2}{7}\right)^{-6}}$$

$$\frac{\left(\frac{4}{5}\right)^{-2} \cdot \left(\frac{4}{5}\right)^{11} \cdot \left(\frac{4}{5}\right)^{-9} \cdot \left(\frac{4}{5}\right)^6}{\left(\frac{4}{5}\right)^{-10} \cdot \left(\frac{4}{5}\right)^6}$$

$$\frac{\left(\frac{1}{6}\right)^4 \cdot \left(\frac{1}{6}\right)^{-8} \cdot \left(\frac{1}{6}\right)^5}{\left(\frac{1}{6}\right)}$$

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

$$\frac{\left(\frac{1}{3}\right)^{-10} \cdot \left(\frac{1}{3}\right)^{-7} \cdot \left(\frac{1}{3}\right)^{-6} \cdot \left(\frac{1}{3}\right)^7}{\left(\frac{1}{3}\right)^9 \cdot \left(\frac{1}{3}\right)^{-6}}$$

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

$$\frac{\left(\frac{2}{7}\right)^{-6} \cdot \left(\frac{2}{7}\right)^{-4} \cdot \left(\frac{2}{7}\right)^{-7} \cdot \left(\frac{2}{7}\right)^{11}}{\left(\frac{2}{7}\right)^{-10} \cdot \left(\frac{2}{7}\right)^{-6}}$$

$$\frac{\left(\frac{1}{6}\right)^{-9} \cdot \left(\frac{1}{6}\right)^{-5} \cdot \left(\frac{1}{6}\right)^{-5}}{\left(\frac{1}{6}\right)^{11}}$$

$$\frac{\left(\frac{2}{5}\right)^{-2} \cdot \left(\frac{2}{5}\right)^{-5} \cdot \left(\frac{2}{5}\right) \cdot \left(\frac{2}{5}\right)^4}{\left(\frac{2}{5}\right)^9 \cdot \left(\frac{2}{5}\right)^{10}}$$

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

$$\frac{\left(\frac{1}{5}\right)^2 \cdot \left(\frac{1}{5}\right)^{-5} \cdot \left(\frac{1}{5}\right)^{-4} \cdot \left(\frac{1}{5}\right)^6}{\left(\frac{1}{5}\right)^{10} \cdot \left(\frac{1}{5}\right)^{-6}}$$

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

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



Simplifier les exposants de fractions (Division)

Nom: _____

Date: _____ Note: _____

$$\frac{\left(\frac{3}{5}\right)^4 \cdot \left(\frac{3}{5}\right)^{-3} \cdot \left(\frac{3}{5}\right)^5 \cdot \left(\frac{3}{5}\right)^{-2}}{\left(\frac{3}{5}\right)^5 \cdot \left(\frac{3}{5}\right)^{-6}}$$

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

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

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

$$\frac{\left(\frac{2}{7}\right) \cdot \left(\frac{2}{7}\right)^{11} \cdot \left(\frac{2}{7}\right)^9 \cdot \left(\frac{2}{7}\right)^{-10}}{\left(\frac{2}{7}\right)^4 \cdot \left(\frac{2}{7}\right)^{-6}}$$

$\left(\frac{2}{7}\right)^{13}$

$$\frac{\left(\frac{4}{5}\right)^{-2} \cdot \left(\frac{4}{5}\right)^{11} \cdot \left(\frac{4}{5}\right)^{-9} \cdot \left(\frac{4}{5}\right)^6}{\left(\frac{4}{5}\right)^{-10} \cdot \left(\frac{4}{5}\right)^6}$$

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

$$\frac{\left(\frac{1}{6}\right)^4 \cdot \left(\frac{1}{6}\right)^{-8} \cdot \left(\frac{1}{6}\right)^5}{\left(\frac{1}{6}\right)}$$

$\left(\frac{1}{6}\right)^0$

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

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

$$\frac{\left(\frac{1}{3}\right)^{-10} \cdot \left(\frac{1}{3}\right)^{-7} \cdot \left(\frac{1}{3}\right)^{-6} \cdot \left(\frac{1}{3}\right)^7}{\left(\frac{1}{3}\right)^9 \cdot \left(\frac{1}{3}\right)^{-6}}$$

$\left(\frac{1}{3}\right)^{-19}$

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

$\left(\frac{1}{9}\right)^0$

$$\frac{\left(\frac{2}{7}\right)^{-6} \cdot \left(\frac{2}{7}\right)^{-4} \cdot \left(\frac{2}{7}\right)^{-7} \cdot \left(\frac{2}{7}\right)^{11}}{\left(\frac{2}{7}\right)^{-10} \cdot \left(\frac{2}{7}\right)^{-6}}$$

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

$$\frac{\left(\frac{1}{6}\right)^{-9} \cdot \left(\frac{1}{6}\right)^{-5} \cdot \left(\frac{1}{6}\right)^{-5}}{\left(\frac{1}{6}\right)^{11}}$$

$\left(\frac{1}{6}\right)^{-30}$

$$\frac{\left(\frac{2}{5}\right)^{-2} \cdot \left(\frac{2}{5}\right)^{-5} \cdot \left(\frac{2}{5}\right) \cdot \left(\frac{2}{5}\right)^4}{\left(\frac{2}{5}\right)^9 \cdot \left(\frac{2}{5}\right)^{10}}$$

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

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

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

$$\frac{\left(\frac{1}{5}\right)^2 \cdot \left(\frac{1}{5}\right)^{-5} \cdot \left(\frac{1}{5}\right)^{-4} \cdot \left(\frac{1}{5}\right)^6}{\left(\frac{1}{5}\right)^{10} \cdot \left(\frac{1}{5}\right)^{-6}}$$

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

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

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

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

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