



Simplificando os expoentes de fração (divisão)

Nome: _____

Encontro: Data: _____ Pontuação: _____

$$\frac{\left(\frac{3}{7}\right)^2 \cdot \left(\frac{3}{7}\right)^5 \cdot \left(\frac{3}{7}\right)^{-1}}{\left(\frac{3}{7}\right)^{-7}}$$

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

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

$$\frac{\left(\frac{2}{5}\right)^{-10} \cdot \left(\frac{2}{5}\right)^5 \cdot \left(\frac{2}{5}\right)^3}{\left(\frac{2}{5}\right)^{-1}}$$

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

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

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

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

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

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

$$\frac{\left(\frac{4}{7}\right)^4 \cdot \left(\frac{4}{7}\right)^9 \cdot \left(\frac{4}{7}\right)^7 \cdot \left(\frac{4}{7}\right)^3}{\left(\frac{4}{7}\right)^2 \cdot \left(\frac{4}{7}\right)^{10}}$$

$$\left(\frac{1}{5}\right)^2 \cdot \left(\frac{1}{5}\right)^{11} \cdot \left(\frac{1}{5}\right)^{-3}$$

$$\left(\frac{1}{5}\right)^2 \cdot \left(\frac{1}{5}\right)^{11} \cdot \left(\frac{1}{5}\right)^{-7}$$

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

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



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$$\frac{\left(\frac{3}{7}\right)^2 \cdot \left(\frac{3}{7}\right)^5 \cdot \left(\frac{3}{7}\right)^{-1}}{\left(\frac{3}{7}\right)^{-7}}$$
$$\left(\frac{3}{7}\right)^{13}$$

$$\frac{\left(\frac{1}{7}\right)^{-7} \cdot \left(\frac{1}{7}\right)^5 \cdot \left(\frac{1}{7}\right)^{10}}{\left(\frac{1}{7}\right)^{-4}}$$
$$\left(\frac{1}{7}\right)^{12}$$

$$\frac{\left(\frac{2}{7}\right)^4 \cdot \left(\frac{2}{7}\right)^2 \cdot \left(\frac{2}{7}\right) \cdot \left(\frac{2}{7}\right)^{-4}}{\left(\frac{2}{7}\right)^7 \cdot \left(\frac{2}{7}\right)^{11}}$$
$$\left(\frac{2}{7}\right)^{-15}$$

$$\frac{\left(\frac{2}{5}\right)^{-10} \cdot \left(\frac{2}{5}\right)^5 \cdot \left(\frac{2}{5}\right)^3}{\left(\frac{2}{5}\right)^{-1}}$$
$$\left(\frac{2}{5}\right)^{-1}$$

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

$$\frac{\left(\frac{1}{6}\right)^{-5} \cdot \left(\frac{1}{6}\right)^{11} \cdot \left(\frac{1}{6}\right)^{-8}}{\left(\frac{1}{6}\right)^{-2}}$$

$$\frac{\left(\frac{1}{2}\right)^8 \cdot \left(\frac{1}{2}\right)^7 \cdot \left(\frac{1}{2}\right)^3}{\left(\frac{1}{2}\right)^{18}}$$

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

$$\frac{\left(\frac{2}{5}\right)^6 \cdot \left(\frac{2}{5}\right)^4 \cdot \left(\frac{2}{5}\right)^{-5}}{\left(\frac{2}{5}\right)^{-9}}$$
$$\left(\frac{2}{5}\right)^{14}$$

$$\frac{\left(\frac{1}{5}\right)^{10} \cdot \left(\frac{1}{5}\right)^{-4} \cdot \left(\frac{1}{5}\right)^8}{\left(\frac{1}{5}\right)^{14}}$$

$$\frac{\left(\frac{4}{7}\right)^4 \cdot \left(\frac{4}{7}\right)^9 \cdot \left(\frac{4}{7}\right)^7 \cdot \left(\frac{4}{7}\right)^3}{\left(\frac{4}{7}\right)^2 \cdot \left(\frac{4}{7}\right)^{10}}$$
$$\left(\frac{4}{7}\right)^{11}$$

$$\frac{\left(\frac{1}{5}\right)^2 \cdot \left(\frac{1}{5}\right)^{11} \cdot \left(\frac{1}{5}\right)^{-3}}{\left(\frac{1}{5}\right)^{10}}$$

$$\frac{\left(\frac{1}{5}\right)^2 \cdot \left(\frac{1}{5}\right)^{11} \cdot \left(\frac{1}{5}\right)^{-7}}{\left(\frac{1}{5}\right)^6}$$

$$\frac{\left(\frac{2}{3}\right)^{-3} \cdot \left(\frac{2}{3}\right)^{-4} \cdot \left(\frac{2}{3}\right)^6}{\left(\frac{2}{3}\right)^{-1}}$$

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