



Simplificando os expoentes de fração (divisão)

Nome: _____

Encontro: Data: _____ Pontuação: _____

$$\left(\frac{4}{9}\right)^{10} \cdot \left(\frac{4}{9}\right)^{-6} \cdot \left(\frac{4}{9}\right)^{-8}$$

$$\frac{\left(\frac{2}{7}\right)^{-7} \cdot \left(\frac{2}{7}\right)^8 \cdot \left(\frac{2}{7}\right) \cdot \left(\frac{2}{7}\right)^4}{\left(\frac{2}{7}\right)^8 \cdot \left(\frac{2}{7}\right)^5}$$

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

$$\frac{\left(\frac{3}{5}\right)^{-7} \cdot \left(\frac{3}{5}\right)^8 \cdot \left(\frac{3}{5}\right)^5 \cdot \left(\frac{3}{5}\right)^3}{\left(\frac{3}{5}\right)^{-2} \cdot \left(\frac{3}{5}\right)^7}$$

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

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

$$\frac{\left(\frac{2}{9}\right)^{-8} \cdot \left(\frac{2}{9}\right)^5 \cdot \left(\frac{2}{9}\right)^3}{\left(\frac{2}{9}\right)^{-5}}$$

$$\frac{\left(\frac{1}{4}\right)^7 \cdot \left(\frac{1}{4}\right)^3 \cdot \left(\frac{1}{4}\right)^6 \cdot \left(\frac{1}{4}\right)^9}{\left(\frac{1}{4}\right)^{-6} \cdot \left(\frac{1}{4}\right)^4}$$

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

$$\left(\frac{2}{5}\right)^7 \cdot \left(\frac{2}{5}\right)^{11} \cdot \left(\frac{2}{5}\right)^{-4}$$

$$\left(\frac{2}{9}\right)^2 \cdot \left(\frac{2}{9}\right) \cdot \left(\frac{2}{9}\right)^9$$

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

$$\frac{\left(\frac{4}{9}\right)^3 \cdot \left(\frac{4}{9}\right)^{-4} \cdot \left(\frac{4}{9}\right)^{-6} \cdot \left(\frac{4}{9}\right)^8}{\left(\frac{4}{9}\right)^6 \cdot \left(\frac{4}{9}\right)^9}$$

$$\frac{\left(\frac{3}{5}\right)^{11} \cdot \left(\frac{3}{5}\right)^6 \cdot \left(\frac{3}{5}\right)^{-4} \cdot \left(\frac{3}{5}\right)^2}{\left(\frac{3}{5}\right)^6 \cdot \left(\frac{3}{5}\right)^{-9}}$$

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



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$$\frac{(\frac{4}{9})^{10} \cdot (\frac{4}{9})^{-6} \cdot (\frac{4}{9})^{-8}}{(\frac{4}{9})^{-4}}$$

$$\frac{(\frac{2}{7})^{-7} \cdot (\frac{2}{7})^8 \cdot (\frac{2}{7}) \cdot (\frac{2}{7})^4}{(\frac{2}{7})^8 \cdot (\frac{2}{7})^5}$$
$$(\frac{2}{7})^{-7}$$

$$\frac{(\frac{2}{3})^7 \cdot (\frac{2}{3})^7 \cdot (\frac{2}{3})^{-9}}{(\frac{2}{3})^7}$$
$$(\frac{2}{3})^{-2}$$

$$\frac{(\frac{3}{5})^{-7} \cdot (\frac{3}{5})^8 \cdot (\frac{3}{5})^5 \cdot (\frac{3}{5})^3}{(\frac{3}{5})^{-2} \cdot (\frac{3}{5})^7}$$
$$(\frac{3}{5})^4$$

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

$$(\frac{3}{8})^3 \cdot (\frac{3}{8})^5 \cdot (\frac{3}{8})^{-8}$$
$$(\frac{3}{8})^0$$

$$\frac{(\frac{2}{9})^{-8} \cdot (\frac{2}{9})^5 \cdot (\frac{2}{9})^3}{(\frac{2}{9})^{-5}}$$
$$(\frac{2}{9})^5$$

$$\frac{(\frac{1}{4})^7 \cdot (\frac{1}{4})^3 \cdot (\frac{1}{4})^6 \cdot (\frac{1}{4})^9}{(\frac{1}{4})^{-6} \cdot (\frac{1}{4})^4}$$
$$(\frac{1}{4})^{27}$$

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

$$(\frac{2}{5})^7 \cdot (\frac{2}{5})^{11} \cdot (\frac{2}{5})^{-4}$$
$$(\frac{2}{5})^{14}$$

$$(\frac{2}{9})^2 \cdot (\frac{2}{9}) \cdot (\frac{2}{9})^9$$
$$(\frac{2}{9})^{12}$$

$$\frac{(\frac{1}{6})^{-5} \cdot (\frac{1}{6})^{-6} \cdot (\frac{1}{6})^{-5}}{(\frac{1}{6})}$$
$$(\frac{1}{6})^{-17}$$

$$\frac{(\frac{4}{9})^3 \cdot (\frac{4}{9})^{-4} \cdot (\frac{4}{9})^{-6} \cdot (\frac{4}{9})^8}{(\frac{4}{9})^6 \cdot (\frac{4}{9})^9}$$
$$(\frac{4}{9})^{-14}$$

$$\frac{(\frac{3}{5})^{11} \cdot (\frac{3}{5})^6 \cdot (\frac{3}{5})^{-4} \cdot (\frac{3}{5})^2}{(\frac{3}{5})^6 \cdot (\frac{3}{5})^{-9}}$$
$$(\frac{3}{5})^{18}$$

$$(\frac{2}{9})^7 \cdot (\frac{2}{9})^9 \cdot (\frac{2}{9})^{10}$$
$$(\frac{2}{9})^{26}$$