



Vereinfachen von Bruchexponenten (Division)

Name: _____

Datum: _____ Ergebnis: _____

$$\frac{\left(\frac{3}{8}\right)^3 \cdot \left(\frac{3}{8}\right)^{-5} \cdot \left(\frac{3}{8}\right)^{11} \cdot \left(\frac{3}{8}\right)^{-9}}{\left(\frac{3}{8}\right)^5 \cdot \left(\frac{3}{8}\right)^7}$$

$$\frac{\left(\frac{3}{5}\right)^4 \cdot \left(\frac{3}{5}\right)^{10} \cdot \left(\frac{3}{5}\right)^9}{\left(\frac{3}{5}\right)^3}$$

$$\left(\frac{3}{7}\right)^{-8} \cdot \left(\frac{3}{7}\right)^2 \cdot \left(\frac{3}{7}\right)^{11}$$

$$\frac{\left(\frac{1}{4}\right)^{-8} \cdot \left(\frac{1}{4}\right)^{-4} \cdot \left(\frac{1}{4}\right)^2 \cdot \left(\frac{1}{4}\right)^{-3}}{\left(\frac{1}{4}\right)^{-6} \cdot \left(\frac{1}{4}\right)}$$

$$\left(\frac{3}{5}\right)^6 \cdot \left(\frac{3}{5}\right)^3 \cdot \left(\frac{3}{5}\right)^8$$

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

$$\frac{\left(\frac{3}{7}\right)^4 \cdot \left(\frac{3}{7}\right)^5 \cdot \left(\frac{3}{7}\right)^{-9} \cdot \left(\frac{3}{7}\right)^{11}}{\left(\frac{3}{7}\right)^8 \cdot \left(\frac{3}{7}\right)^{-9}}$$

$$\frac{\left(\frac{1}{9}\right)^{-3} \cdot \left(\frac{1}{9}\right)^8 \cdot \left(\frac{1}{9}\right)^4}{\left(\frac{1}{9}\right)^{11}}$$

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

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

$$\frac{\left(\frac{1}{5}\right)^2 \cdot \left(\frac{1}{5}\right)^{-8} \cdot \left(\frac{1}{5}\right)^7}{\left(\frac{1}{5}\right)^{-10}}$$

$$\left(\frac{3}{7}\right)^{-3} \cdot \left(\frac{3}{7}\right)^5 \cdot \left(\frac{3}{7}\right)^{10}$$

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

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

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



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$$\left(\frac{3}{8}\right)^{-12}$$

$$\frac{\left(\frac{3}{5}\right)^4 \cdot \left(\frac{3}{5}\right)^{10} \cdot \left(\frac{3}{5}\right)^9}{\left(\frac{3}{5}\right)^3}$$
$$\left(\frac{3}{5}\right)^{20}$$

$$\left(\frac{3}{7}\right)^{-8} \cdot \left(\frac{3}{7}\right)^2 \cdot \left(\frac{3}{7}\right)^{11}$$
$$\left(\frac{3}{7}\right)^5$$

$$\frac{\left(\frac{1}{4}\right)^{-8} \cdot \left(\frac{1}{4}\right)^{-4} \cdot \left(\frac{1}{4}\right)^2 \cdot \left(\frac{1}{4}\right)^{-3}}{\left(\frac{1}{4}\right)^{-6} \cdot \left(\frac{1}{4}\right)}$$
$$\left(\frac{1}{4}\right)^{-8}$$

$$\left(\frac{3}{5}\right)^6 \cdot \left(\frac{3}{5}\right)^3 \cdot \left(\frac{3}{5}\right)^8$$
$$\left(\frac{3}{5}\right)^{17}$$

$$\left(\frac{3}{7}\right)^{10} \cdot \left(\frac{3}{7}\right)^2 \cdot \left(\frac{3}{7}\right)^{11}$$
$$\left(\frac{3}{7}\right)^{23}$$

$$\frac{\left(\frac{3}{7}\right)^4 \cdot \left(\frac{3}{7}\right)^5 \cdot \left(\frac{3}{7}\right)^{-9} \cdot \left(\frac{3}{7}\right)^{11}}{\left(\frac{3}{7}\right)^8 \cdot \left(\frac{3}{7}\right)^{-9}}$$
$$\left(\frac{3}{7}\right)^{12}$$

$$\frac{\left(\frac{1}{9}\right)^{-3} \cdot \left(\frac{1}{9}\right)^8 \cdot \left(\frac{1}{9}\right)^4}{\left(\frac{1}{9}\right)^{11}}$$
$$\left(\frac{1}{9}\right)^{-2}$$

$$\left(\frac{1}{2}\right)^{-8} \cdot \left(\frac{1}{2}\right)^2 \cdot \left(\frac{1}{2}\right)^{-7}$$
$$\left(\frac{1}{2}\right)^{-13}$$

$$\left(\frac{1}{9}\right)^{-10} \cdot \left(\frac{1}{9}\right)^{-9} \cdot \left(\frac{1}{9}\right)^{-3}$$
$$\left(\frac{1}{9}\right)^{-22}$$

$$\frac{\left(\frac{1}{5}\right)^2 \cdot \left(\frac{1}{5}\right)^{-8} \cdot \left(\frac{1}{5}\right)^7}{\left(\frac{1}{5}\right)^{-10}}$$
$$\left(\frac{1}{5}\right)^{11}$$

$$\left(\frac{3}{7}\right)^{-3} \cdot \left(\frac{3}{7}\right)^5 \cdot \left(\frac{3}{7}\right)^{10}$$
$$\left(\frac{3}{7}\right)^{12}$$

$$\left(\frac{2}{9}\right) \cdot \left(\frac{2}{9}\right)^7 \cdot \left(\frac{2}{9}\right)^7$$
$$\left(\frac{2}{9}\right)^{15}$$

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

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