

Nombre:

Curso:

RECUERDA

$$\left(\frac{a}{b}\right)^n = \frac{a^n}{b^n}$$

Base positiva → positivo $\left(\frac{2}{5}\right)^2 = +\frac{2^2}{5^2} = +\frac{4}{25}$

Base negativa exponente impar → negativo $\left(-\frac{3}{2}\right)^3 = -\frac{3^3}{2^3} = -\frac{27}{8}$

Base negativa exponente par → positivo $\left(-\frac{3}{7}\right)^2 = +\frac{3^2}{7^2} = +\frac{9}{49}$

$$\left(\frac{a}{b}\right)^{-n} = \left(\frac{b}{a}\right)^n = \frac{b^n}{a^n}$$

Base positiva → positivo $\left(\frac{2}{5}\right)^{-2} = \left(\frac{5}{2}\right)^2 = +\frac{5^2}{2^2} = +\frac{25}{4}$

Base negativa exponente impar → negativo $\left(-\frac{3}{2}\right)^{-3} = \left(-\frac{2}{3}\right)^3 = -\frac{2^3}{3^3} = -\frac{8}{27}$

Base negativa exponente par → positivo $\left(-\frac{3}{7}\right)^{-2} = \left(-\frac{7}{3}\right)^2 = +\frac{7^2}{3^2} = +\frac{49}{9}$

$$\sqrt{\frac{a}{b}} = \frac{\sqrt{a}}{\sqrt{b}}$$

$$\sqrt{\frac{9}{25}} = +\frac{\sqrt{9}}{\sqrt{25}} = +\frac{3}{5}$$

$$-\sqrt{\frac{81}{16}} = -\frac{\sqrt{81}}{\sqrt{16}} = -\frac{9}{4}$$

1. Calcula las siguientes potencias de exponente positivo.

$$\left(\frac{3}{5}\right)^2 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}; \quad \left(-\frac{2}{5}\right)^4 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$\left(\frac{2}{6}\right)^3 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}; \quad \left(-\frac{1}{2}\right)^5 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$\left(\frac{1}{3}\right)^4 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}; \quad \left(-\frac{4}{3}\right)^3 = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

$$\left(\frac{4}{5}\right)^2 = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}; \quad \left(+\frac{1}{2}\right)^5 = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$\left(\frac{5}{4}\right)^2 = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}; \quad \left(-\frac{5}{7}\right)^3 = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$\left(\frac{2}{7}\right)^3 = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}; \quad \left(+\frac{10}{3}\right)^3 = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

2. Calcula las siguientes potencias de exponente negativo.

$$\left(\frac{3}{5}\right)^{-2} = \left(\underline{\hspace{1cm}}\right) = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$\left(-\frac{1}{5}\right)^{-3} = \left(\underline{\hspace{1cm}}\right) = \left(\underline{\hspace{1cm}}\right) = \underline{\hspace{1cm}}$$

$$\left(\frac{2}{3}\right)^{-5} = \left(\underline{\hspace{1cm}}\right) = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$\left(-\frac{1}{2}\right)^{-5} = \left(\underline{\hspace{1cm}}\right) = \left(\underline{\hspace{1cm}}\right) = \underline{\hspace{1cm}}$$

$$(-3)^{-4} = \left(\underline{\hspace{1cm}}\right) = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$\left(-\frac{4}{3}\right)^{-5} = \left(\underline{\hspace{1cm}}\right) = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

3. Calcula las siguientes raíces.

$$\sqrt{\frac{81}{4}} = \frac{\sqrt{\quad}}{\sqrt{\quad}} = \quad$$

$$-\sqrt{\frac{16}{25}} = \frac{\sqrt{\quad}}{\sqrt{\quad}} = \quad$$

$$\sqrt{\frac{49}{9}} = \frac{\sqrt{\quad}}{\sqrt{\quad}} = \quad$$

$$-\sqrt{\frac{100}{64}} = \frac{\sqrt{\quad}}{\sqrt{\quad}} = \quad$$