

Ejemplo

Ayudas

Operar y simplificar:

$$\left(\frac{2x}{x-3} \times \frac{2x}{x+3} \right) \div \frac{5x^3}{x^2-9}$$

Solución: Operando,

$$\begin{aligned} \frac{2x \cdot 2x}{(x-3)(x+3)} \div \frac{5x^3}{x^2-9} &= \frac{4x^2(x^2-9)}{(x-3)(x+3)5x^3} = \\ &= \frac{4x^2}{5x^3} = \frac{4}{5x} \end{aligned}$$

Producto:

$$\frac{p(x)}{q(x)} \times \frac{r(x)}{s(x)} = \frac{p(x) \cdot r(x)}{q(x) \cdot s(x)}$$

Cociente:

$$\frac{p(x)}{q(x)} \div \frac{r(x)}{s(x)} = \frac{p(x) \cdot s(x)}{q(x) \cdot r(x)}$$

Nº	Operar y simplificar:	Soluciones	Comprob.
1	$\frac{5}{x-1} \times \frac{2}{x+1}$		
2	$\frac{5}{x-1} \div \frac{2}{x+1}$		
3	$\left(\frac{2x}{x-3} \times \frac{2x}{x+3} \right) \div \frac{18x-6}{x^2-9}$		
4	$\frac{x+2}{x-3} \div \frac{x^2-4}{x^2-9}$		
5	$\left(\frac{a-b}{a+b} \right)^2$		
6	$\frac{1 + \frac{1}{x}}{1 - \frac{1}{x}}$		
7	$\left(\frac{3ab^2}{c^5d^7} \times \frac{c^2d^3}{a^3b} \right) \div \frac{abc}{d}$		
8	$\left(\frac{x+y}{x-y} + \frac{x-y}{x+y} \right) \div \frac{x^2+y^2}{x^2-y^2}$		