SIMPLIFICACIÓN DE FRACCIONES

Demuestra los siguientes resultados:

PREGUNTAS		RESPUESTAS
$\frac{a^2 - 16}{a + 4}$	=	$a - 4$
$\frac{25x^2 - 49y^2}{5x + 7y}$	=	$5x - 7y$
$\frac{4a^2 - 16x^2y^4}{2a + 4xy^2}$	=	$2a + 4xy^2$
$\frac{x^{2a} - y^{2b}}{x^a + y^b}$	=	$x^a - y^b$
$\frac{9 - 36x^4}{3 - 6x^2}$	=	$3 + 6x^2$
$\frac{16x^4 - 25y^4}{4x^2 - 5y^2}$	=	$4x^2 + 5y^2$
$\frac{(x + y)^2 - 100}{(x + y) - 10}$	=	$(x + y) + 10$

$$\frac{169 - (a - b)^2}{13 - (a - b)} = 13 + (a - b)$$

$$\frac{1 + x^3}{1 + x} = 1 - x + x^2$$

$$\frac{64x^3 + 27y^3}{4x + 3y} = 16x^2 - 12xy + 9y^2$$

Simplifica

$$\frac{x^2 + 2ax + a^2}{mx + ma} \qquad \frac{x^3 - 3x^2y + 3xy^2 - y^3}{x^2 - y^2} \qquad \frac{25\sqrt[3]{xy^2}}{125xy\sqrt{x}}$$

(Rta: $\frac{x+a}{m}$; $\frac{(x-y)^2}{x+y}$; $\frac{1}{5\sqrt[6]{x^7y^2}}$

Opera y simplifica

$$\left(\frac{1}{x^3} - \frac{1}{x^2} + \frac{1}{x}\right)\left(x^4 + x^3\right) \; ; \; \left(\frac{x-y}{x+y} + \frac{x+y}{x-y}\right)\left(\frac{x^2+y^2}{2xy} + 1\right)\frac{xy}{x^2+y^2} \; ; \; \left(x + \frac{x}{x-1}\right) : \left(x - \frac{x}{x-1}\right)$$

(Rta. x^3+1 ; $\frac{x+y}{x-y}$; $\frac{x}{x-2}$ *)*

Opera y simplifica

$$\frac{x}{x^2-2x} + \frac{x+2}{x^2-4} - \frac{x-2}{2x-4}; \qquad \frac{x+1}{x^2+2x+1} - \frac{x}{x^3} + \frac{2x^2-2}{x+1}$$

(Rta. $\frac{6-x}{2x-4}$; $\frac{2x^4-x^2-x-1}{x^3+x^2}$)