

Resuelve estas ecuaciones:

$$1) \frac{3-2x}{x} = 4$$

$$2) \frac{3-(x-1)(x-2)}{x} = 1-x$$

$$3) \frac{5-3(x+2)}{x} = \frac{3}{2}$$

$$4) \frac{x-1}{x+1} = 2$$

$$5) \frac{3-x}{x+2} - \frac{x-1}{x-2} = -2$$

$$1) \frac{3-2x}{x} = 4$$

$$3-2x = 4x$$

$$3 = 6x$$

$$x = \frac{3}{6}$$

$$x = \frac{1}{2}$$

$$2) \frac{3-(x-1)(x-2)}{x} = 1-x$$

$$3-(x-1)(x-2) = (1-x) \cdot x$$

$$3-(x^2-2x-x+2) = x-x^2$$

$$3-x^2+2x+x-2 = x-x^2$$

$$2x = -1$$

$$x = -\frac{1}{2}$$

$$3) \frac{5-3(x+2)}{x} = \frac{3}{2}$$

$$\frac{5-3x-6}{x} = \frac{3}{2}$$

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

$$-6x-2 = 3x$$

$$-2 = 9x$$

$$x = -\frac{2}{9}$$

$$4) \frac{x-1}{x+1} = 2$$

$$x-1 = 2(x+1)$$

$$x-1 = 2x+2$$

$$-3 = x$$

$$5) \frac{3-x}{x+2} - \frac{x-1}{x-2} = -2$$

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

$$(3-x)(x-2) - (x-1)(x+2) = -2(x+2)(x-2)$$

$$3x-6-x^2+2x - (x^2+2x-x-2) = -2(x^2-4)$$

$$3x-6-x^2+2x-x^2-2x+x+2 = -2x^2+8$$

$$4x = 12 \Rightarrow x = \frac{12}{4} \Rightarrow x = 3$$