

Ecuaciones primer grado (ampliación)

Ficha 1. Reglas avanzadas

1.1 * Aplica el procedimiento que se indique:

<ul style="list-style-type: none"> Multiplicar por "3" todos los términos: $x + \frac{1}{3} = 6 - 2x$ 	$\frac{-4x}{3} - 5 = 9 + 3x$
<ul style="list-style-type: none"> Cambiar signo de todos los términos (multiplicar por "-1"): $-2(x - 1) - 7 = -8 - 2x$ 	$-x - 3(2 - x) = -5 - 2x$
$-x = -5$	$-x = 5$
<ul style="list-style-type: none"> Intercambiar los miembros: $6 - 4 + 1 = x - 2x + 4x$ 	$-3 + 5 + 1 = 7x - x - 3x$
$-5 = -x$	$5 = -x$

Ficha 2. Ecuaciones de primer grado con "()"

2.1 * Resuelve:

$$5(x + 1) = 5$$

$$-5(x + 1) = 5$$

$$5(x - 1) = 5$$

$$-5(x - 1) = 5$$

$$5(-x + 1) = 5$$

$$-5(-x + 1) = 5$$

$$5(-x - 1) = 5$$

$$-5(-x - 1) = 5$$

2.2 * Resuelve:

$$5(x + 1) - 5 = 5$$

$$-5(x + 1) + 5 = 5$$

$$5(x - 1) - 5 = 5$$

$$-5(x - 1) + 5 = 5$$

$$5(-x + 1) - 5 = 5$$

$$-5(-x + 1) + 5 = 5$$

$$5(-x - 1) - 5 = 5$$

$$-5(-x - 1) + 5 = 5$$

2.3 ** Resuelve:

$$-(x + 1) - 5 = -5$$

$$-(x + 1) + 5 = 5$$

$$-(x - 1) - 5 = -5$$

$$-(x - 1) + 5 = 5$$

$$-(-x + 1) - 5 = -5$$

$$-(-x + 1) + 5 = 5$$

$$-(-x - 1) - 5 = -5$$

$$-(-x - 1) + 5 = 5$$

2.4 * Resuelve:**

$$-(x + 1) - 5 = -5 + 2x$$

$$-(x + 1) + 5 = 5 - 2x$$

$$-(x - 1) - 5 = -5 + 2x$$

$$-(x - 1) + 5 = 5 - 2x$$

$$-(-x + 1) - 5 = -5 + 2x$$

$$-(-x + 1) + 5 = 5 - 2x$$

$$-(-x - 1) - 5 = -5 + 2x$$

$$-(-x - 1) + 5 = 5 - 2x$$

2.5 * Resuelve:**

$-(x + 1) - 5 = -(-5 + 2x)$	$-(x + 1) + 5 = -(5 - 2x)$	$-(x - 1) - 5 = -2(-5 + 2x)$	$-(x - 1) + 5 = -2(5 - 2x)$
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$-(-x + 1) - 5 = -(-5 + 2x)$	$-(-x + 1) + 5 = -(5 - 2x)$	$-(-x - 1) - 5 = -2(-5 + 2x)$	$-(-x - 1) + 5 = -2(5 - 2x)$
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2.6 * Resuelve:**

$1 - (x + 1) - 5 = -(-5 + 2x)$	$1 + (x + 1) + 5 = -(5 - 2x)$	$1 - (x - 1) - 5 = -2(-5 + 2x)$	$1 + (x - 1) + 5 = -2(5 - 2x)$
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$1 - (-x + 1) - 5 = -(-5 + 2x)$	$1 + (-x + 1) + 5 = -(5 - 2x)$	$1 - (-x - 1) - 5 = -2(-5 + 2x)$	$1 + (-x - 1) + 5 = -2(5 - 2x)$
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2.7 * Resuelve:**

$6(x + 1) - 4x = 5x - 9$	$18x - 13 = 8 - 4(3x - 1)$	$3x + 5(2x - 1) = 8 - 3(4 - 5x)$
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2.8 * Resuelve:**

$5 - (4x + 6) = 2x + (7 - 4x)$	$11 - 5(3x + 2) + 7x = 1 - 9x$	$12x - 5(x + 2) = 4(2x - 1) + 7$
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Ficha 3. Ecuaciones primer grado con denominadores (por m.c.m.)

3.1 * Resuelve:

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

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

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

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

3.2 * Resuelve:

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

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

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

$$\frac{3x}{6} - 1 = \frac{-2}{6} + \frac{x}{6}$$

3.3 * Resuelve:

$$\frac{x+1}{3} = 5$$

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

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

$$\frac{2x-3}{3} = \frac{5x-2}{4}$$

3.4 ** Resuelve:

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

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

3.5 ** Resuelve:

$$\frac{x - 3}{3} + \frac{2x - 1}{6} = 4$$

$$\frac{x + 1}{6} - \frac{x + 3}{4} = -1$$

3.6 * Resuelve:**

$$\frac{x - 2}{4} - \frac{3x - 1}{8} = \frac{x}{2}$$

$$\frac{x - 2}{2} - \frac{8 - x}{6} = \frac{2x}{3}$$

3.7 * Resuelve:**

$$\frac{x - 1}{3} - \frac{5 - 2x}{6} = 4 - \frac{3x}{5}$$

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

Ficha 4. Ecuaciones primer grado con denominadores (en cruz)

4.1 * Resuelve:

$$\frac{x+1}{3} = 5$$

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

4.2 ** Resuelve:

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

$$\frac{2x-3}{3} = \frac{5x-2}{4}$$

4.3 ** Resuelve:

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

$$\frac{12-x}{x} = \frac{5}{7}$$

4.4 ** Resuelve:

$$\frac{x+5}{2} = \frac{2x+3}{3}$$

$$\frac{3x-5}{2x-7} = \frac{4}{3}$$