

## Ecuaciones de primer grado sencillas

|                |                  |                 |                  |
|----------------|------------------|-----------------|------------------|
| $x + 2 = 3$    | $x + 2 = - 3$    | $x - 2 = - 3$   | $x - 2 = 3$      |
| $x + 2 = 14$   | $x + 2 = - 14$   | $x - 2 = - 14$  | $x - 2 = 14$     |
| $x + 12 = 3$   | $x + 12 = - 3$   | $x - 12 = - 3$  | $x - 12 = 3$     |
| $x + 12 = 23$  | $x + 12 = - 23$  | $x - 12 = - 23$ | $x - 12 = 33$    |
| $2x = 6$       | $-2x = - 6$      | $- 2x = 6$      | $2x = - 6$       |
| $2x = 12$      | $- 2x = - 12$    | $- 2x = 12$     | $2x = - 12$      |
| $12x = 36$     | $-12x = - 36$    | $-12x = 36$     | $12x = - 36$     |
| $12x = 6$      | $-12x = - 6$     | $-12x = 6$      | $12x = - 6$      |
| $2x = 3$       | $-2x = - 3$      | $- 2x = 3$      | $2x = - 3$       |
| $2x = 7$       | $-2x = - 7$      | $- 2x = 7$      | $2x = - 7$       |
| $2x + 2 = 8$   | $2x + 2 = - 8$   | $2x - 2 = 8$    | $2x - 2 = - 8$   |
| $2x + 2 = 14$  | $2x + 2 = - 14$  | $2x - 2 = 14$   | $2x - 2 = - 14$  |
| $2x + 12 = 4$  | $2x + 12 = - 4$  | $2x - 12 = 4$   | $2x - 12 = - 4$  |
| $2x + 12 = 14$ | $2x + 12 = - 14$ | $2x - 12 = 14$  | $2x - 12 = - 14$ |

$$8x + 3 = 1 \quad (\text{sol. } x = \frac{-1}{4}) \quad x + 3 = -3 \quad (\text{sol. } x = -6) \quad -4x + 1 = 8 \quad (\text{sol. } x = \frac{-7}{4})$$

$$-3x - 4 = 4 \quad (\text{sol. } x = \frac{-8}{3}) \quad -2x - 6 = -3 \quad (\text{sol. } x = \frac{-3}{2}) \quad 3x - 2 = -8 \quad (\text{sol. } x = -2)$$

$$8x - 2 = 4 \quad (\text{sol. } x = \frac{3}{4}) \quad -5x + 3 = -4 \quad (\text{sol. } x = \frac{7}{5}) \quad 9x + 3 = -3 \quad (\text{sol. } x = \frac{-2}{3})$$

## Ecuaciones de primer grado sin paréntesis ni denominadores.

|                   |                     |                     |                   |
|-------------------|---------------------|---------------------|-------------------|
| $2x + 2 = 3 + x$  | $2x + 2 = - 3 - x$  | $x - 2 = - 3 + 2x$  | $x - 2 = 3 - 2x$  |
| $3x + 2 = 3 + 2x$ | $4x + 3 = - 3 - 2x$ | $4x - 5 = - 3 + 6x$ | $4x - 5 = 3 - 2x$ |

$$10x + 8 = -6 + 9x \quad (\text{sol. } x = -14) \quad -x - 4 = 10 + 3x \quad (\text{sol. } x = \frac{-7}{2})$$

$$-4x - 8 = 1 + 7x \quad (\text{sol. } x = \frac{-9}{11}) \quad -8x + 2 = -5 + 5x \quad (\text{sol. } x = \frac{7}{3})$$

$$3x + 4 = 3 + 5x \quad (\text{sol. } x = \frac{1}{2}) \quad -6x + 3 = 4 + 6x \quad (\text{sol. } x = \frac{-1}{12})$$

$$-6x - 5 = -7 + 9x \quad (\text{sol. } x = \frac{2}{15}) \quad -9x - 9 = 7 + 3x \quad (\text{sol. } x = \frac{-4}{3})$$

$$-2x - 3 = -2 + 8x \quad (\text{sol. } x = \frac{-1}{10}) \quad -x - 3 = 7 + 4x \quad (\text{sol. } x = -2)$$

## **Ecuaciones de primer grado para agrupar términos.**

$$2x + 5 - x = 5 - 2x + 6 \quad (\text{sol. } x=2)$$

$$-2 - x + 3 = -7x - 7 - 2x \quad (\text{sol. } x=-1)$$

$$7 - x + 9 = 3x - 2 - 9x \quad (\text{sol. } x=\frac{-18}{5})$$

$$5x + 7 + x = 5 + 2x + 5 \quad (\text{sol. } x=\frac{3}{4})$$

$$4x + 6 + x = 5 + 9x + 9 \quad (\text{sol. } x=-2)$$

$$4 + 6x + 3 = -4x - 7 + x \quad (\text{sol. } x=\frac{-14}{9})$$

$$8x + 5 + x = -7 + 3x + 1 \quad (\text{sol. } x=\frac{-11}{6})$$

$$9x + 5 - 5x = -8 - x + 8 \quad (\text{sol. } x=-1)$$

$$7 + 6x + 4 = -8x - 1 + x \quad (\text{sol. } x=\frac{-12}{13})$$

$$3x + 7 + x = 6 + 8x + 3 \quad (\text{sol. } x=\frac{-1}{2})$$

$$3x + 7 - 8x = 5 - x + 7 \quad (\text{sol. } x=\frac{-5}{4})$$

$$2 - x + 10 = 6x - 3 - 2x \quad (\text{sol. } x=3)$$

$$9x + 5 + x = -9 + 7x + 8 \quad (\text{sol. } x=-2)$$

$$-1 + 4x + 1 = -9x - 1 + x \quad (\text{sol. } x=\frac{-1}{12})$$

## **Ecuaciones de primer grado con paréntesis.**

$$2(x + 2) = 6 \quad (\text{sol. } x=1)$$

$$3(4 - x) = 6 \quad (\text{sol. } x=2)$$

$$2(x + 2) = x \quad (\text{sol. } x=-4)$$

$$2(x + 1) = 3x \quad (\text{sol. } x=2)$$

$$3(2 - x) = 2 + x \quad (\text{sol. } x=1)$$

$$2(3 - 2x) = -4 - 2x \quad (\text{sol. } x=5)$$

$$2(3 - x) = 5x - 8 \quad (\text{sol. } x=2)$$

$$5(3 - 2x) = 6 - 5x \quad (\text{sol. } x=\frac{9}{5})$$

$$-3(x - 2) = 6x - 3 + x \quad (\text{sol. } x=\frac{-9}{4})$$

$$1 + 2(x + 2) = -3(1 + x) \quad (\text{sol. } x=\frac{-8}{5})$$

$$2 + 3(1 - 2x) = 2(2 + 3x) - 3 \quad (\text{sol. } x=\frac{1}{3})$$

$$-3(-6x+5) = -3x+9 -2(8+x) \quad (\text{sol. } x=\frac{8}{23})$$

$$-3(-3x - 6) + 2(6 + x) = -2x + 6 \quad (\text{sol. } x=\frac{-24}{13})$$

$$-2(-8x-5) = 9x + 5 -2(9+x) \quad (\text{sol. } x=\frac{-23}{9})$$

$$4(-6x-7) = 4x + 10 - 2(1+x) \quad (\text{sol. } x=\frac{-18}{13})$$

$$5x - 3(1+x) = 2(-7x-1) - 7 \quad (\text{sol. } x=\frac{-3}{8})$$

$$2(-2x - 9) + 4(-1+x) = 8x + 5 \quad (\text{sol. } x=\frac{-27}{8})$$

$$-3(-8x-2)+2(3+x)=-3x+1 \quad (\text{sol. } x=\frac{-11}{29})$$