Equations

But → trouver la valeur de l'inconnue (qui est souvent "x")

Méthode de base →

- $x + 10 = 30$

$x + 10 - 10 = 30 - 10$

$\boxed{x = 20}$

- $x - 4 = 18$

$x - 4 + 4 = 18 + 4$

$\boxed{x = 22}$

- $2x = 20$

$2 \times x = 20$

$\frac{2 \times x}{2} = \frac{20}{2}$

$\boxed{x = 10}$

- $\frac{x}{4} = -8$

$\frac{x}{4} \times 4 = -8 \times 4$

$\boxed{x = -32}$

Applications à des calculs plus complexes

- $3x + 2 = 6$

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

$3x = 4$

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

$\boxed{x = \frac{4}{3}}$

- $10(x - 1) = -20$

$10x - 10 = -20$

$10x - 10 + 10 = -20 + 10$

$10x = -10$

$\frac{10x}{10} = \frac{-10}{10}$

$\boxed{x = -1}$

Si on a des "x" des deux côtés du "="

- $7x - 3 = 2x + 5$

$7x - 3 + 3 = 2x + 5 + 3$

$7x = 2x + 8$

$7x - 2x = 2x - 2x + 8$

$5x = 8$

$\frac{5x}{5} = \frac{8}{5}$

$\boxed{x = \frac{8}{5}}$

- $-2(x - 10) = -4(2x + 7)$

$-2x + 20 = -8x - 14$

$-2x + 20 - 20 = -8x - 14 - 20$

$-2x = -8x - 34$

$-2x + 8x = -8x + 8x - 34$

$6x = -34$

$\frac{6x}{6} = -\frac{34}{6}$

$\boxed{x = -\frac{34}{6} = -\frac{17}{3}}$