

# Equacions de primer grau senzilles

## Preguntes

**Exercici 1.** Resoleu les equacions:

a.  $8x + 1 = 3$

c.  $9x + 1 = 9$

b.  $9x + 7 = 12$

d.  $8x + 1 = 13$

**Exercici 2.** Resoleu les equacions següents:

a.  $9x + 3 = 2x + 18$

c.  $4x + 10 = -13x + 20$

b.  $-6x + 2 = 2x + 8$

d.  $1x + 6 = -14x + 13$

**Exercici 3.** Resoleu les equacions següents:

a.  $-3 + 3x = -3 + 7x - 13$

d.  $-4 + 7x = -5 + 12x - 16$

b.  $4 + 6x = -17 + 19x - 7$

e.  $-1 + 10x = 6 + 14x - 17$

c.  $-5 + 6x = -5 + 10x - 5$

f.  $-4 + 1x = -12 + 17x - 17$

## Solucions

1 (a.)  $x = \frac{1}{4}$  (b.)  $x = \frac{5}{9}$  (c.)  $x = \frac{8}{9}$  (d.)  $x = \frac{3}{2}$

2 (a.)  $x = \frac{15}{7}$  (b.)  $x = \frac{-3}{4}$  (c.)  $x = \frac{10}{17}$  (d.)  $x = \frac{7}{15}$

3 (a.)  $x = \frac{13}{4}$  (b.)  $x = \frac{28}{13}$  (c.)  $x = \frac{5}{4}$  (d.)  $x = \frac{17}{5}$  (e.)  $x = \frac{5}{2}$  (f.)  $x = \frac{25}{16}$

Les solucions d'aquests exercicis s'han calculat automàticament usant programari lliure: encara que totes les expressions són correctes, potser algunes es poden simplificar més.

## Resolució

- 1 (a.)  $8x + 1 = 3 \Rightarrow 8x = 3 - 1 \Rightarrow x = \frac{3-1}{8} \Rightarrow x = \frac{2}{8} \Rightarrow x = \frac{1}{4}$   
(b.)  $9x + 7 = 12 \Rightarrow 9x = 12 - 7 \Rightarrow x = \frac{12-7}{9} \Rightarrow x = \frac{5}{9} \Rightarrow x = \frac{5}{9}$   
(c.)  $9x + 1 = 9 \Rightarrow 9x = 9 - 1 \Rightarrow x = \frac{9-1}{9} \Rightarrow x = \frac{8}{9} \Rightarrow x = \frac{8}{9}$   
(d.)  $8x + 1 = 13 \Rightarrow 8x = 13 - 1 \Rightarrow x = \frac{13-1}{8} \Rightarrow x = \frac{12}{8} \Rightarrow x = \frac{3}{2}$
- 2 (a.)  $9x + 3 = 2x + 18 \Rightarrow 9x - 2x = 18 - 3 \Rightarrow 7x = 15 \Rightarrow x = \frac{15}{7} \Rightarrow x = \frac{15}{7}$   
(b.)  $-6x + 2 = 2x + 8 \Rightarrow -6x - 2x = 8 - 2 \Rightarrow -8x = 6 \Rightarrow x = \frac{6}{-8} \Rightarrow x = \frac{-3}{4}$   
(c.)  $4x + 10 = -13x + 20 \Rightarrow 4x + 13x = 20 - 10 \Rightarrow 17x = 10 \Rightarrow x = \frac{10}{17} \Rightarrow x = \frac{10}{17}$   
(d.)  $1x + 6 = -14x + 13 \Rightarrow 1x + 14x = 13 - 6 \Rightarrow 15x = 7 \Rightarrow x = \frac{7}{15} \Rightarrow x = \frac{7}{15}$
- 3 (a.)  $-3 + 3x = -3 + 7x - 13 \Rightarrow -4x = -13 \Rightarrow x = \frac{-13}{-4} = \frac{13}{4}$   
(b.)  $4 + 6x = -17 + 19x - 7 \Rightarrow -13x = -28 \Rightarrow x = \frac{-28}{-13} = \frac{28}{13}$   
(c.)  $-5 + 6x = -5 + 10x - 5 \Rightarrow -4x = -5 \Rightarrow x = \frac{-5}{-4} = \frac{5}{4}$   
(d.)  $-4 + 7x = -5 + 12x - 16 \Rightarrow -5x = -17 \Rightarrow x = \frac{-17}{-5} = \frac{17}{5}$   
(e.)  $-1 + 10x = 6 + 14x - 17 \Rightarrow -4x = -10 \Rightarrow x = \frac{-10}{-4} = \frac{5}{2}$   
(f.)  $-4 + 1x = -12 + 17x - 17 \Rightarrow -16x = -25 \Rightarrow x = \frac{-25}{-16} = \frac{25}{16}$

La resolució d'aquests exercicis s'ha calculat automàticament usant programari lliure: encara que totes les expressions són correctes, potser algunes es poden simplificar més.

