

Equacions de primer grau amb denominadors

Preguntes

Exercici 1. Resoleu les equacions:

a.

$$\frac{x}{3} + \frac{5x}{9} + 34 = 15x + \frac{15}{5}$$

b.

$$\frac{x}{7} + \frac{9x}{5} + 17 = -21x + \frac{11}{5}$$

Exercici 2. Resoleu les equacions següents:

a.

$$8x - 5 + \frac{2x}{7} = \frac{22x}{2} + \frac{22}{3}$$

b.

$$2x - 5 + \frac{2x}{6} = \frac{-1x}{2} + \frac{35}{3}$$

Solucions

1 (a.) $x = \frac{25}{3}$ (b.) $x = \frac{12}{7}$

2 (a.) $x = \frac{-15}{14}$ (b.) $x = \frac{7}{33}$

Resolució

1 (a.) $3x + 9 = 34 \Rightarrow 3x = 34 - 9 \Rightarrow x = \frac{34-9}{3} \Rightarrow x = \frac{25}{3} \Rightarrow x = \frac{25}{3}$
(b.) $7x + 5 = 17 \Rightarrow 7x = 17 - 5 \Rightarrow x = \frac{17-5}{7} \Rightarrow x = \frac{12}{7} \Rightarrow x = \frac{12}{7}$

2 (a.) $8x + 7 = 22x + 22 \Rightarrow 8x - 22x = 22 - 7 \Rightarrow -14x = 15 \Rightarrow x = \frac{15}{-14} \Rightarrow x = -\frac{15}{14}$
(b.) $2x + 6 = 35x + -1 \Rightarrow 2x - 35x = -1 - 6 \Rightarrow -33x = -7 \Rightarrow x = \frac{-7}{-33} \Rightarrow x = \frac{7}{33}$

