

### Exercicis de fraccions, potències i equacions

1.  $8 - \frac{1}{4} \cdot \frac{8}{14} + \frac{3}{7}$

2.  $\frac{9}{4} - \left(3 - \frac{5}{6}\right) \cdot 2$

3.  $\frac{4 - \frac{3}{2} \cdot \left(\frac{1}{4} - \frac{1}{2}\right)}{4 + \frac{3}{2}}$

4.  $\frac{\frac{3}{4} \cdot 10 - 2}{\left(1 - \frac{1}{6}\right) \cdot 2}$

5.  $\frac{\left(\frac{4}{9}\right)^{-3} \cdot \left(\frac{16}{3^2}\right)^4}{\frac{32}{3^5}}$

6.  $\frac{0.3^3 \cdot 1.3^4}{0.5^{-4}}$

7.  $\frac{(a^{-2}b^4)^{20} \left(\frac{b}{a^{-3}}\right)^{10}}{a^{-10} \left(\frac{1}{b}\right)^{-89}}$

8. Resoleu:

(a)  $3x - \frac{x}{3} = 3 - (x - 3)$

(b)  $\frac{x-2}{4} + \frac{3-x}{6} = 6 - \frac{4-x}{8}$

(c)  $\frac{x+3}{x} = \frac{x-2}{x+2}$

(d)  $\begin{cases} 3x + y = 5 \\ 2x - 4y = 1 \end{cases}$

(e)  $\begin{cases} \frac{x-3}{2} = y - \frac{1}{2} \\ x - \frac{4-x}{3} = \frac{y+15}{4} \end{cases}$

### Solucions

1.  $\frac{58}{7}$    2.  $-\frac{25}{12}$    3.  $\frac{35}{44}$    4.  $\frac{33}{10}$    5.  $2^5 \cdot 3^3$    6.  $\frac{2}{3 \cdot 5^3}$    7.  $b$

8a.  $x = \frac{18}{11}$    8b.  $x = -132$    8c.  $x = -\frac{6}{7}$    8d.  $x = \frac{3}{2}, y = \frac{1}{2}$    8e.  $x = 4, y = 1$