Material de repaso – Ecuaciones

Resuelve las siguientes ecuaciones:

a) $x - \frac{13x}{12} = \frac{5x}{18} + \frac{13}{12}$ sol: $x = -3$

b) $3x - 4 = 5 + 3\left(\frac{x}{5} - 1\right)$ sol: $x = \frac{5}{2}$

c) $2 - 4\left(\frac{2x}{7} + \frac{1}{7}\right) = \frac{3}{2} - x$ sol: $x = -\frac{1}{2}$

d) $5x - 3\left(3 - \frac{x}{4}\right) = \frac{7x}{2} - 3$ sol: $x = \frac{8}{3}$

e) $5\left(\frac{2x}{3} - \frac{3x}{5}\right) + 1 = 2x - 2(x - 1)$ sol: $x = 3$

f) $\frac{2x}{3} - 4\left(\frac{x}{5} - \frac{1}{6}\right) = \frac{1}{15}$ sol: $x = \frac{9}{2}$

g) $1 - \frac{2}{3}(x - 3) = 2 - \frac{1}{4}(3x - 4)$ sol: $x = 0$

h) $\frac{1}{2}\left(\frac{x}{3} - \frac{x}{2}\right) + \frac{1}{9} = \frac{1}{2}\left(\frac{1}{2} - \frac{x}{3}\right)$ sol: $x = \frac{5}{3}$

i) $\frac{2x}{3} - 5\left(\frac{x}{12} + \frac{1}{4}\right) = 3 - 2\left(1 - \frac{x}{6}\right)$ sol: $x = -27$

j) $3\left(\frac{11x}{6} - x\right) - 4 = 2x - 3\left(1 - \frac{x}{6}\right)$ sol: x = incompatible

k) $\frac{1-3x}{4} = 2x - 3\left(x - \frac{1}{2}\right)$ sol: x = 5

l) $2x - \frac{x+1}{8} = 3 - \frac{3x-1}{4}$ sol: $x = \frac{9}{7}$

m) $3x - \frac{x-2}{2} = 2\left(2 + \frac{x}{4}\right)$ sol: $x = \frac{3}{2}$

n) $\frac{3x}{4} - 1 = x - \frac{1-5x}{2}$ sol: $x = -\frac{2}{11}$

ñ) $\frac{1-9x}{3} - 2 = \frac{x}{3} - \frac{11x-1}{2}$ sol: x = 1

o) $1 - \frac{2x-2}{15} = \frac{x}{3} + \frac{x-1}{5}$ sol: x = 2

p) $x - \frac{3-x}{3} = \frac{3x}{2} - \frac{8-3x}{4}$ sol: $x = \frac{12}{11}$

q) $x - \frac{x+1}{5} = \frac{x+3}{2} - 2$ sol: x = – 1