

Resuelve las siguientes ecuaciones :

a) $\frac{3x}{4} - \frac{7(x-2)}{6} = -1$

$$\frac{3x}{4} - \frac{7x-14}{6} = -1$$

$$\frac{9x}{12} - \frac{14x-28}{12} = -\frac{12}{12}$$

$$9x - 14x + 28 = -12$$
$$-5x = -12 - 28$$

$$-5x = -40$$

$$x = \frac{-40}{-5} \rightarrow x = 8$$

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

$$3x - \frac{6}{3} + 1 = \frac{4x}{2} - 4$$

$$3x - 2 + 1 = 2x - 4$$

$$3x - 2x = -4 - 1 + 2$$

$$x = -3$$

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

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

$$\frac{x}{2} - \frac{4x}{2} + \frac{4}{2} = \frac{3x}{2} + \frac{12}{2}$$

$$x - 4x + 4 = 3x + 12$$

$$x - 4x - 3x = 12 - 4$$

$$-6x = 8$$

$$x = \frac{8}{-6} = -\frac{4}{3}$$

d) $\frac{1}{2}(2x-3) - x = \frac{x}{3} - \frac{1}{2}$

$$x - \frac{3}{2} - x = \frac{x}{3} - \frac{1}{2}$$

$$\frac{6x}{6} - \frac{9}{6} - \frac{6x}{6} - \frac{2x}{6} = \frac{3}{6}$$

$$6x - 9 - 6x = 2x - 3$$

$$6x - 6x - 2x = -3 + 9$$

$$-2x = 6$$

$$x = \frac{6}{-2} = -3$$