

SOLUCIONES

Ejerc. 18 de Marzo 2020

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

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

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

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

$$2x = -8$$

$$x = -\frac{8}{2}$$

$$x = -4$$

$$\frac{2x}{5} - \frac{x}{2} = \frac{x}{5}$$

$$\frac{4x}{10} - \frac{5x}{10} = \frac{2x}{10}$$

$$4x - 5x = 2x$$

$$4x - 5x - 2x = 0$$

$$-3x = 0$$

$$x = \frac{0}{-3}$$

$$x = 0$$

$$\frac{x}{2} + \frac{x-1}{4} = \frac{x}{3} \quad \text{mcm}(2, 4, 3) = 12$$

$$\frac{6x}{12} + \frac{3 \cdot (x-1)}{12} = \frac{4x}{12}$$

$$6x + 3 \cdot (x-1) = 4x$$

$$6x + 3x - 3 = 4x$$

$$9x - 3 = 4$$

$$9x - 4x = 3$$

$$5x = 3$$

$$x = \frac{3}{5}$$

$$x + \frac{x+2}{6} = \frac{4x}{3} \quad \text{mcm}(6, 3) = 6$$

$$\frac{6x}{6} + \frac{x+2}{6} = \frac{8x}{6}$$

$$6x + x + 2 = 8x$$

$$7x + 2 = 8x$$

$$2 = 8x - 7x$$

$$2 = x$$

$$x = 2$$

$$x + \frac{x+2}{6} = \frac{4x}{3} \quad \text{mcm}(6, 3) = 6$$

$$\frac{6x}{6} + \frac{x+2}{6} = \frac{8x}{6}$$

$$6x + x + 2 = 8x$$

$$7x + 2 = 8x$$

$$2 = 8x - 7x$$

$$2 = x$$

$$x = 2$$

$$\frac{x-1}{4} = \frac{x}{6} - 2 \quad \text{mcm}(4, 6) = 12$$

$$\frac{3 \cdot (x-1)}{12} = \frac{2x}{12} - \frac{24}{12}$$

$$3x - 3 = 2x - 24$$

$$3x - 2x = -24 + 3$$

$$x = -21$$

$$\frac{x}{2} + \frac{x-1}{4} = \frac{x}{3} \quad \text{mcm}(2, 4, 3) = 12$$

$$\frac{6x}{12} + \frac{3 \cdot (x-1)}{12} = \frac{4x}{12}$$

$$6x + 3 \cdot (x-1) = 4x$$

$$6x + 3x - 3 = 4x$$

$$9x - 3 = 4$$

$$9x - 4x = 3$$

$$5x = 3$$

$$x = \frac{3}{5}$$