

82. Halla la solución de las ecuaciones.

a) $\frac{2x}{3} = 4$ c) $\frac{4x}{3} + 2 = 6$

b) $\frac{6x}{7} - 2 = 4$ d) $\frac{-8x}{3} = 16$

a) $2x = 4 \cdot 3 \rightarrow 2x = 12 \rightarrow x = 6$

b) $\frac{6x}{7} = 4 + 2 \rightarrow 6x = 6 \cdot 7 \rightarrow 6x = 42 \rightarrow x = 7$

c) $\frac{4x}{3} = 6 - 2 \rightarrow 4x = 4 \cdot 3 \rightarrow 4x = 12 \rightarrow x = 3$

d) $-8x = 16 \cdot 3 \rightarrow -8x = 48 \rightarrow x = -6$

83. Resuelve.

a) $\frac{6x+4}{7} = 4$ c) $\frac{16-x}{7} = 1$

b) $\frac{3x-5}{2} = 2$ d) $\frac{4+x}{3} = 5$

a) $6x + 4 = 4 \cdot 7 \rightarrow 6x = 28 - 4 \rightarrow 6x = 24 \rightarrow x = 4$

b) $3x - 5 = 2 \cdot 2 \rightarrow 3x = 4 + 5 \rightarrow 3x = 9 \rightarrow x = 3$

c) $16 - x = 1 \cdot 7 \rightarrow -x = 7 - 16 \rightarrow -x = -9 \rightarrow x = 9$

d) $4 + x = 5 \cdot 3 \rightarrow x = 15 - 4 \rightarrow x = 11$

84. Calcula la solución de las ecuaciones.

a) $10 + \frac{2x}{7} = 8 + 4$ c) $4x - 38 = \frac{3x + 2}{5}$

b) $\frac{x}{3} + 2x = 1 + 2x$ d) $\frac{2x}{3} = 24$

a) $\frac{2x}{7} = -10 + 8 + 4 \rightarrow \frac{2x}{7} = 2 \rightarrow 2x = 2 \cdot 7 \rightarrow 2x = 14 \rightarrow x = 7$

b) $\frac{x}{3} = -2x + 1 + 2x \rightarrow \frac{x}{3} = 1 \rightarrow x = 3$

c) $(4x - 38) \cdot 5 = 3x + 2 \rightarrow 20x - 190 = 3x + 2 \rightarrow 20x - 3x = 190 + 2 \rightarrow 17x = 192 \rightarrow x = \frac{192}{17}$

d) $2x = 24 \cdot 3 \rightarrow 2x = 72 \rightarrow x = 36$

89. Resuelve estas ecuaciones.

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

g) $6 - 2(x - 1) = \frac{4}{5}$

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

h) $2x - 5(x + 3) = \frac{4}{7}$

a) $2 \cdot 3 \cdot (x - 2) = 3 \rightarrow 6x - 12 = 3 \rightarrow 6x = 12 + 3 \rightarrow 6x = 15 \rightarrow x = 5/2$

b) $3 \cdot 2 \cdot (1 - x) = -2 \rightarrow 6 - 6x = -2 \rightarrow -6x = -6 - 2 \rightarrow -6x = -8 \rightarrow x = 4/3$

c) $3 \cdot [4(1 - 2x) - 3x] = 5 \rightarrow 12(1 - 2x) - 9x = 5 \rightarrow 12 - 24x - 9x = 5 \rightarrow -24x - 9x = -12 + 5 \rightarrow x = 7/33$

d) $10 - 4x + 2 + 3x = 2/5 \rightarrow 5 \cdot (10 - 4x + 2 + 3x) = 2 \rightarrow 5 \cdot (12 - x) = 2 \rightarrow 60 - 5x = 2 \rightarrow -5x = -60 + 2 \rightarrow x = 58/5$