

$$b) -12x^2 + 4x = 0 \Rightarrow -4x(3x-1) = 0 \Rightarrow \begin{cases} -4x = 0 \Rightarrow x = 0 \\ 3x-1 = 0 \Rightarrow x = \frac{1}{3} \end{cases}$$

$$c) 18x^2 - 50 = 0 \Rightarrow$$

$$18x^2 = 50 \Rightarrow x^2 = \frac{50}{18} \Rightarrow x^2 = \frac{2 \cdot 25}{2 \cdot 9} = \frac{25}{9} \Rightarrow$$

$$x = \pm \sqrt{\frac{25}{9}} \Rightarrow x = \pm \frac{5}{3}$$

6)

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

$$\frac{3x^2}{12} - \frac{6(x^2-2)}{12} = \frac{4(x+1)}{12} - \frac{6x}{12}$$

$$3x^2 - 6x^2 + 12 = 4x + 4 - 6x$$

$$3x^2 - 6x^2 + 12 - 4x - 4 + 6x = 0$$

$$-3x^2 + 2x + 8 = 0$$

$$x = \frac{-2 \pm \sqrt{4 + 96}}{-6} = \frac{-2 \pm 10}{-6} \begin{cases} \rightarrow \frac{-12}{-6} = 2 \\ \rightarrow \frac{-8}{-6} = -\frac{4}{3} \end{cases}$$

$$x = 2; x = -\frac{4}{3}$$

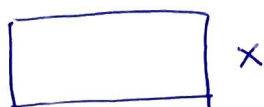
7)

a) 15 workers $\begin{cases} \rightarrow x \text{ workers } 5 \text{ cfs} \\ \rightarrow 15-x \text{ workers } 10 \text{ cfs} \end{cases}$ $1 \text{ cfs} = 140 \text{ cfs}$

$$5x + 10(15-x) = 140 \Rightarrow 5x + 150 - 10x = 140 \Rightarrow$$

$$-5x = -10 \Rightarrow x = 2$$

b)



$$A = b \cdot h$$

$$\text{Ancho} \rightarrow x \quad \text{Largo} = \frac{2x}{3} + 10$$

$$P = 60 \text{ cm}$$

$$A = x \left(\frac{2x}{3} + 10 \right)$$