

$$1- 14x + 16 - 3(5 + 4x) = -11$$

$$a) 14x + 16 - 15 - 12x = -11$$

$$14x - 12x = -11 - 16 + 15$$

$$2x = -12 \Rightarrow x = \frac{-12}{2}$$

$$\Rightarrow \boxed{x = -6}$$

$$b) \frac{x-1}{4} - \frac{x-5}{36} = \frac{x+5}{9}$$

$$\frac{9x-9}{36} - \frac{x-5}{36} = \frac{4x+20}{36}$$

$$9x - 9 - x + 5 = 4x + 20$$

$$9x - x - 4x = 20 + 9 - 5$$

$$4x = 24$$

$$x = \frac{24}{4} \Rightarrow \boxed{x = 6}$$

$$c) 3 + 2(x-1) = 4x - 5$$

$$3 + 2x - 2 = 4x - 5$$

$$2x - 4x = -5 - 3 + 2$$

$$-2x = -6$$

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

$$2- b) \begin{cases} 5(x+2) = y \\ 2x + y = 3 \end{cases} \Rightarrow$$

$$\Rightarrow \begin{cases} 5x + 10 = y \\ 2x + y = 3 \end{cases} \Rightarrow \text{substitución}$$

$$2x + (5x + 10) = 3 \Rightarrow$$

$$2x + 5x = 3 - 10$$

$$7x = -7 \Rightarrow \boxed{x = -1}; 5(-1) + 10 = y$$

$$-5 + 10 = y$$

$$\boxed{5 = y}$$

$$2- \begin{cases} 3x - y = -5 \\ 2x + y = 0 \end{cases} \rightarrow \text{Reducción: } \begin{cases} 3x - y = -5 \\ 2x + y = 0 \end{cases}$$

$$5x = -5 \Rightarrow x = \frac{-5}{5} \Rightarrow \boxed{x = -1}$$

$$3 \cdot (-1) = y = -5 \Rightarrow$$

$$\Rightarrow -3 - y = -5 \Rightarrow -y = -5 + 3$$

$$-y = -2 \Rightarrow$$

$$\Rightarrow \boxed{y = 2}$$