

p193:10

$$a) \begin{cases} 2y = x + 8 \\ y = 2x + 10 \end{cases} \rightarrow \begin{cases} 2(2x + 10) = x + 8 \\ 4x + 20 = x + 8 \\ 4x - x = 8 - 20 \\ 3x = -12 \end{cases}$$

SUSTITUCIÓN

$$\boxed{x = \frac{-12}{3} = -4} \rightarrow y = 2 \cdot (-4) + 10$$

$$y = -8 + 10$$

$$\boxed{y = 2}$$

$$b) \begin{cases} x + 2y = -5 \\ x - 3y = 5 \end{cases} \xrightarrow{\cdot(-1)} \begin{cases} x + 2y = -5 \\ -x + 3y = -5 \end{cases}$$

REDUCCIÓN

$$5y = -10$$

$$\boxed{y = \frac{-10}{5} = -2} \xrightarrow{(II)} x - 3 \cdot (-2) = 5$$

$$x + 6 = 5$$

$$x = 5 - 6$$

$$\boxed{x = -1}$$

$$c) \begin{cases} x = 2y + 3 \\ x = 3y - 1 \end{cases} \rightarrow \begin{cases} 2y + 3 = 3y - 1 \\ 2y - 3y = -1 - 3 \end{cases}$$

IGUALACIÓN

$$-y = -4$$

$$\boxed{y = 4} \xrightarrow{(I)} x = 2 \cdot 4 + 3$$

$$\boxed{x = 8 + 3 = 11}$$

$$d) \begin{cases} 5x - y = 11 \\ 3x + y = 13 \end{cases} \text{ REDUCCIÓN}$$

$$8x = 24$$

$$\boxed{x = \frac{24}{8} = 3} \xrightarrow{(II)} 3 \cdot 3 + y = 13$$

$$\boxed{y = 13 - 9 = 4}$$

$$e) \begin{cases} 3x + 2y = 8 \\ x - y = 1 \end{cases} \xrightarrow{\cdot 2} \begin{cases} 3x + 2y = 8 \\ 2x - 2y = 2 \end{cases}$$

REDUCCIÓN

$$\begin{array}{r} 5x = 10 \\ \boxed{x = \frac{10}{5} = 2} \end{array}$$

↓ (II)

$$2 - y = 1$$

$$2 - 1 = y$$

$$\boxed{y = 1}$$

$$f) \begin{cases} 7x + 4y = 10 \\ y = 3 - 2x \end{cases} \xrightarrow{\uparrow} \begin{aligned} 7x + 4(3 - 2x) &= 10 \\ 7x + 12 - 8x &= 10 \end{aligned}$$

SUSTITUCIÓN

$$7x - 8x = 10 - 12$$

$$-x = -2$$

$$\boxed{x = 2}$$

↓

$$y = 3 - 2 \cdot 2 = 3 - 4$$

$$\boxed{y = -1}$$