

$$d. \begin{cases} 4x + 3y = 26 \\ 7x + 8y = 40 \end{cases}$$

Reducción

$$\left. \begin{array}{l} -7E_1 : -28x - 21y = -182 \\ 4E_2 : 28x + 32y = 160 \end{array} \right\}$$

$$\text{Sumamos} \quad 11y = -22$$

$$y = \frac{-22}{11}$$

$$y = -2$$

Sustituyendo en la 1ª ecuación:

$$4x + 3y = 26$$

$$4x + 3 \cdot (-2) = 26$$

$$4x - 6 = 26$$

$$4x = 26 + 6$$

$$4x = 32$$

$$x = \frac{32}{4} = 8$$

$$x = 8, y = -2$$

$$d. \begin{cases} \frac{x}{2} + \frac{y}{3} = 5 \\ y + 3x = 24 \end{cases} \rightarrow \frac{3x}{6} + \frac{2y}{6} = \frac{30}{6}$$

$$\left. \begin{array}{l} 3x + 2y = 30 \\ 3x + y = 24 \end{array} \right\} \text{Sustitución}$$

$$x = \frac{30 - 2y}{3}$$

$$3 \cdot \frac{30 - 2y}{3} + y = 24$$

$$\frac{30 - 2 \cdot 6}{3} =$$

$$\frac{30 - 12}{3} = \frac{18}{3} = 6$$

$$\frac{90 - 6y}{3} + y = 24$$

$$\frac{90 - 6y}{3} + \frac{3y}{3} = \frac{72}{3}$$

$$-6y + 3y = 72 - 90$$

$$-3y = -18$$

$$y = \frac{-18}{-3} = 6$$

↘

The screenshot shows a web browser window with the following elements:

- Address bar: `edubook.vicensvivesdigital.com/web/index.html#/ap?l=598&t=125530&a=125534&q=311823`
- Page title: **5 Sistemas de ecuaciones**
- Navigation menu: Documentos, Actividades, Enlaces, Multimedia
- Table of contents: 1, 2, 3, 4, 5, R, A, C, E, I
- Activity questions:
 - a. $\begin{cases} x + 2y = 18 \\ y - x = -9 \end{cases} \Rightarrow x = \square \quad y = \square$
 - b. $\begin{cases} \frac{x}{2} + y = 2 \\ x - y = 10 \end{cases} \Rightarrow x = \square \quad y = \square$
 - c. $\begin{cases} 7x - 8y = 19 \\ 2x + 3y = 16 \end{cases} \Rightarrow x = \square \quad y = \square$
 - d. $\begin{cases} \frac{x}{2} + \frac{y}{3} = 5 \\ y + 3x = 24 \end{cases} \Rightarrow x = \square \quad y = \square$
- Buttons: Resolver, Comprobar, Ver resultados
- Taskbar: Windows logo, Internet Explorer, Google Chrome, Firefox, and system clock (9:46, 25/01/2016)

$$a. \begin{cases} x + 2y = 18 \\ y - x = -9 \end{cases}$$

$$\begin{cases} x + 2y = 18 \\ -x + y = -9 \end{cases}$$

$$+3y = +9$$

$$y = \frac{+9}{+3} = +3$$

$$x + 2 \cdot 3 = 18$$

$$x + 6 = 18$$

$$x = 18 - 6$$

$$x = 12$$

$$x = 12$$

$$y = 3$$

$$b. \begin{cases} \frac{x}{2} + y = 2 \\ x - y = 10 \end{cases}$$

$$\begin{cases} x + 2y = 4 \\ x - y = 10 \end{cases}$$

$$\frac{x}{2} + \frac{y}{1} = \frac{2}{1}$$

$$\frac{x + 2y}{2} = \frac{4}{2}$$

$$\begin{array}{r} \cancel{x + 2y = 4} \\ \cancel{-x + y = -10} \\ \hline 3y = -6 \end{array}$$

$$3y = -6$$

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

$$\begin{array}{l} y = -2 \\ x = 8 \end{array}$$

$$x + 7 \cdot (-2) = 4$$

$$x - 4 = 4$$

$$x = 4 + 4$$

$$x = 8$$