

Departamento de Matemáticas 1º Bachillerato



7 - Sistemas de ecuaciones

1. p019e01 - Resuelve los sistemas:

(a)
$$\begin{cases} 3x - 2y = 1\\ x + 6y = 7 \end{cases}$$

Sol: $\{x:1, y:1\}$

(b)
$$\begin{cases} 6x - 2y = 14\\ 3x - y = 7 \end{cases}$$

Sol: $\{x: \frac{y}{3} + \frac{7}{3}\}$

(c)
$$\begin{cases} 6x - 2y = 9\\ 3x - y = 10 \end{cases}$$

Sol: []

(d)
$$\begin{cases} 4x + 7y = -3 \\ 7x + 4y = 36 \end{cases}$$

Sol: $\{x:8, y:-5\}$

(e)
$$\begin{cases} 4x + 16 = 5y \\ 5y - 19 = 3x \end{cases}$$

Sol: $\{x:3, y: \frac{28}{5}\}$

(f)
$$\begin{cases} x - 5 = y + 2 \\ 1 + 3x + 2y = x - 4 \end{cases}$$

Sol: $\left\{ x : \frac{9}{4}, \quad y : -\frac{19}{4} \right\}$

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

Sol: []

(h)
$$\begin{cases} x + 3y = 6 \\ 6y - 5 = 7 - 2x \end{cases}$$

Sol: $\{x: -3y+6\}$

(i)
$$\begin{cases} x - y = 8 \\ x + y = 24 \end{cases}$$

Sol: $\{x:16, y:8\}$

$$(j) \quad \begin{cases} x + 2y = 11 \\ 2x - y = 2 \end{cases}$$

Sol: $\{x:3, y:4\}$

$$(k) \quad \begin{cases} 3x - 4y = -9\\ 2x + y = 5 \end{cases}$$

Sol: $\{x:1, y:3\}$

(1)
$$\begin{cases} 10(x-2) + y = 1\\ x + 3(x-y) = 5 \end{cases}$$

Sol: $\{x:2, y:1\}$

(m)
$$\begin{cases} \frac{x-y}{2} + \frac{x-y}{3} = 5\\ \frac{x+7}{4} + y = 3 \end{cases}$$

Sol: $\left\{x: \frac{29}{5}, y: -\frac{1}{5}\right\}$

(n)
$$\begin{cases} \frac{3(y+2x+2)}{4} = \frac{4x+y-1}{3} \\ \frac{1}{3}(x+y) - \frac{1}{6}(x-y) = \frac{y-1}{6} \end{cases}$$

Sol: $\{x: 39, y: -20\}$

(ñ)
$$\begin{cases} x - 2(x+y) = 3y - 2\\ \frac{x}{3} + \frac{y}{2} = 3 \end{cases}$$

Sol: $\{x:12, y:-2\}$

(o)
$$\begin{cases} \frac{3-2y}{4} - \frac{1}{4} = \frac{1-2x}{6} \\ \frac{25}{8} - 1 = \frac{x+3}{2} - \frac{3(1+y)}{8} \end{cases}$$

Sol: $\{x:5, y:4\}$

(p)
$$\begin{cases} \frac{4y-5x}{6} + \frac{3x-2y}{2} = 1 - \frac{2}{9}(x+y) \\ \frac{4y+x-8}{8} - x = \frac{2(y-2x)}{3} \end{cases}$$

Sol: $\left\{x: \frac{4}{7}, y: -\frac{31}{7}\right\}$