

SISTEMAS DE ECUACIONES LINEALES para hacer matricialmente

Clasificar y resolver:

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

SCD (3,-1)

2)
$$\begin{cases} 2x + 3y = 1 \\ 5x + 7y = 3 \end{cases}$$

SCD (2,-1)

3)
$$\begin{cases} 2x + 4y = 10 \\ 3x + 6y = 15 \end{cases}$$

SCI (5-2α,α)

4)
$$\begin{cases} 4x - 2y = 5 \\ -6x + 3y = 1 \end{cases}$$

SI

5)
$$\begin{cases} 2x + 3y = 3 \\ x - 2y = 5 \\ 8x + 3y = 7 \end{cases}$$

SI

6)
$$\begin{cases} x + 2y - 3z = -1 \\ 3x - y + 2z = 7 \\ 5x + 3y - 4z = 2 \end{cases}$$

S.I.

7)
$$\begin{cases} 2x + y - 2z = 10 \\ 3x + 2y + 2z = 1 \\ 5x + 4y + 3z = 4 \end{cases}$$

SCD (759/7,-230,-81/7)

8)
$$\begin{cases} x + 2y - 3z = 6 \\ 2x - y + 4z = 2 \\ 4x + 3y - 2z = 14 \end{cases}$$

SCI (4-α,1+2α,α)

9)
$$\begin{cases} 2x + 3y - 2z = 5 \\ x - 2y + 3z = 2 \\ 4x - y + 4z = 1 \end{cases}$$

SI

10)
$$\begin{cases} x + 2y + 3z = 3 \\ 2x + 3y + 8z = 4 \\ 3x + 2y + 17z = 1 \end{cases}$$

SCI (-1-7α, 2+2α,α)

11)
$$\begin{cases} x + 2y - z = 0 \\ x - y + z = 1 \\ x + 5y - 3z = -1 \end{cases}$$

SCI (2-α/3,-1+2α/3,α)

12)
$$\begin{cases} 2x + 3y - 2z = 5 \\ x - 2y + 3z = 2 \\ 4x - y + 4z = 1 \end{cases}$$

SI

13)
$$\begin{cases} 2x - 3y + 4z = 3 \\ -x + 2y - 3z = -2 \\ 4x - 3y - z = 0 \end{cases}$$

SCD (1,1,1)

14)
$$\begin{cases} x + 3y - 2z = 0 \\ 2x - 3y + z = 0 \\ 3x - 2y + 2z = 0 \end{cases}$$

SCD (0,0,0)

15)
$$\begin{cases} x + 3y - 2z = 0 \\ x - 8y + 8z = 0 \\ 3x - 2y + 4z = 0 \end{cases}$$

SCI (-8α/11,10/11α,α)

16)
$$\begin{cases} x - 3y + 4z - 2t = 5 \\ 2y + 5z + t = 2 \\ 5x - 3y - z = 16 \end{cases}$$

SCI (333+385α/102,-3-71α/102,21+4α/51,α)

17)
$$\begin{cases} x + 5y + 4z - 13t = 3 \\ 3x - y + 2z + 5t = 2 \\ 2x + 2y + 3z - 4t = 1 \end{cases}$$

SI

18)
$$\begin{cases} x + 2y - z + 3t = 3 \\ 2x + 4y + 4z + 3t = 9 \\ 3x + 6y - z + 8t = 10 \end{cases}$$

SCI (7-5β-4α/2,α,1+β/2,β)

19)
$$\begin{cases} x + 2y - 3z + 2t = 2 \\ 2x + 5y - 8z + 6t = 5 \\ 3x + 4y - 5z + 2t = 4 \end{cases}$$

SCI (-α+2β,1+2α-2β,α,β)

20)
$$\begin{cases} x - 2y + 2z = 0 \\ 2x + y - 2z = 0 \\ 3x + 4y - 6z = 0 \\ 3x - 11y + 12z = 0 \end{cases}$$

SCI (2/5α,6/5α,α)

21)
$$\begin{cases} x + 2y + 2z = 2 \\ 3x - 2y - z = 5 \\ 2x - 5y + 3z = -4 \\ x + 4y + 6z = 0 \end{cases}$$

SCD (2,1,-1)

22)
$$\begin{cases} x + 2y - 2z = 10 \\ 4x - y + z = 4 \\ -2x + y + z = -2 \\ -x - 3y = -11 \end{cases}$$

SCD (5,3,-1)

23)
$$\begin{cases} 2x + 4y + 5z = 1 \\ x + 3y + 3z = -1 \\ 4x + 5y + 4z = 2 \\ 3x + 3y + 2z = 2 \\ 2x + 5y - z = -7 \end{cases}$$

SCD (2,-2,1)

24)
$$\begin{cases} 2x - y + z - 2t = -5 \\ 2x + 2y - 3z + t = -1 \\ -x + y - z = -1 \\ 4x - 3y + 2z - 3t = -8 \end{cases}$$

SCD (0,1,2,3)

25)
$$\begin{cases} x + y + z + t = 1 \\ x - y + z + t = 1 \\ x + y - z + t = 1 \\ x + y + z - t = 1 \end{cases}$$

SCD (1,0,0,0)

26)
$$\begin{cases} x + y + z + t = 0 \\ x + 2y + 2z = 0 \\ 3x - 2y - z = 5 \\ 2x - 5y + 3z = 4 \end{cases}$$

SCD (72/55,-23/55,-13/55,-36/55)

27)
$$\begin{cases} x + y - z - 2t + 3u = 0 \\ -x + 2y + 2z + 3t - 2u = 0 \\ 2x - y - z + t + u = 0 \\ 2x + 2y - 2z - t - 2u = 0 \end{cases}$$

SCI (-40/9α,7/9α,-6α,8/3α,α)

28)
$$\begin{cases} 3x + 4y + 2z - t = 5 \\ 2x - 5y + 4z + 5t = -2 \\ 7x - 6y + 10z + 9t = 1 \\ 4x - 13y + 7t = -12 \end{cases}$$

SCI (0,23-14α/15,α,17-26α/15)

29)
$$\begin{cases} x + y + z + t = 0 \\ x - y - z + t = 0 \\ -x - y + z + t = 0 \\ x - 3y + 5z + 9t = 0 \end{cases}$$

SCI (-α,α,-α,α)

30)
$$\begin{cases} x + 2y - 3z + 2t = 0 \\ -2x + y + z + t = 0 \\ x + z + t = 0 \\ 2x + y + 2z + 2t = 0 \end{cases}$$

SCD (0,0,0,0)