

1. Resuelve el sistema:

1.
$$\begin{cases} 2x + y = 4 \\ x + y = 3 \end{cases}$$

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

9.
$$\begin{cases} 2x + 3y = 7 \\ 3x - 2y = 4 \end{cases}$$

13.
$$\begin{cases} 3(x+y) = 2y+1 \\ 2(x-y)-1 = 5 \end{cases}$$

17.
$$\begin{cases} 2(x+y) = 2-y \\ 3(x+2y) = 2 \end{cases}$$

21.
$$\begin{cases} 3x+2(y-2)-1 = 2x-4 \\ 3(x-1)-y+3 = 2(x-y) \end{cases}$$

25.
$$\begin{cases} 2(x-1)-2(y-1) = 1-y \\ 2(x+1)-2(y+1) = 1-x \end{cases}$$

29.
$$\begin{cases} 2(x-y+1)+y = 2(y+1)-1 \\ 3(x-y+2)-y = 2(3-y)-4 \end{cases}$$

2.
$$\begin{cases} 2x + y = 1 \\ x + y = 0 \end{cases}$$

6.
$$\begin{cases} 2x - y = 2 \\ 3x - 2y = 2 \end{cases}$$

10.
$$\begin{cases} 2x + 3y = 1 \\ 3x + 2y = 4 \end{cases}$$

14.
$$\begin{cases} 3(x+y) = 1+y \\ 5(x-y) = 9-y \end{cases}$$

18.
$$\begin{cases} 2(x+y) = 2+y \\ 4(x+y) = 7-2x \end{cases}$$

22.
$$\begin{cases} x+y-2(x-1) = 1+2y \\ x+2(y+1) = 3-2x \end{cases}$$

26.
$$\begin{cases} 3(x-1)-2(y-1) = 3-y \\ 2(x+1)-3(y+1) = 1-2y \end{cases}$$

30.
$$\begin{cases} 2(x-y)-2(y-5) = 3-y \\ 2(x+y)-3(x-2) = 2(1-2x) \end{cases}$$

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

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

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

15.
$$\begin{cases} 2(x-y) = y+1 \\ 3x = 2(y+2) \end{cases}$$

19.
$$\begin{cases} 2(x+y) = 3-2x \\ 3(x+1) = 5-y \end{cases}$$

23.
$$\begin{cases} 1-y-2(x+1) = 3y-2 \\ 1-x-2(y+1) = 2x-y \end{cases}$$

27.
$$\begin{cases} 3(x+1)-2(y-1) = 4-5y \\ 2(x-1)-2(y+1) = y-1 \end{cases}$$

31.
$$\begin{cases} 2(x-y-1)-2(y-1) = 1-(x+y) \\ 2(x-2y)-2(y-1) = y+1 \end{cases}$$

4.
$$\begin{cases} 2x + 5y = 1 \\ x + y = 0 \end{cases}$$

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

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

16.
$$\begin{cases} 2(x+2) = y+3 \\ 3(3x+y) = 1-3y \end{cases}$$

20.
$$\begin{cases} 2(x+y) = 1-y \\ 9(2x+3y) = 7-3y \end{cases}$$

24.
$$\begin{cases} 1-2y-2(2x-1) = x+2 \\ x-2-2(y-1) = 2x-y \end{cases}$$

28.
$$\begin{cases} 3(x-1)+2(y+1) = y-5 \\ 2(x+1)-2(y-1) = 3-6y \end{cases}$$

32.
$$\begin{cases} 2(x+y)+3(y+1) = y+4 \\ 5(x+y)-3(x-1) = 5-x \end{cases}$$

2. Resuelve el sistema:

1.
$$\begin{cases} x + 2y = 1 \\ \frac{x}{3} + \frac{y}{2} = \frac{1}{6} \end{cases}$$

2.
$$\begin{cases} 2x + y = 2 \\ \frac{x}{2} + \frac{y}{6} = \frac{2}{3} \end{cases}$$

3.
$$\begin{cases} x + 2y = 3 \\ \frac{x}{2} - \frac{y}{3} = \frac{5}{6} \end{cases}$$

4.
$$\begin{cases} \frac{x}{2} + y = \frac{1}{6} \\ 2x + 3y = \frac{1}{6} \end{cases}$$

5.
$$\begin{cases} \frac{x}{2} - \frac{y}{4} = 1 \\ \frac{x}{3} - \frac{y}{2} = 0 \end{cases}$$

6.
$$\begin{cases} \frac{x}{3} + \frac{y}{2} = -\frac{1}{6} \\ \frac{x}{2} + y = 0 \end{cases}$$

7.
$$\begin{cases} \frac{1}{3}x + \frac{1}{2}y = \frac{1}{3} \\ \frac{1}{3}x - \frac{1}{4}y = \frac{1}{12} \end{cases}$$

8.
$$\begin{cases} \frac{1}{3}x - \frac{1}{2}y = \frac{1}{6} \\ \frac{3}{4}x - \frac{3}{2}y = \frac{1}{8} \end{cases}$$

9.
$$\begin{cases} \frac{x}{6} - \frac{y-6}{3} = 3 \\ x - \frac{y+4}{2} = 1 \end{cases}$$

10.
$$\begin{cases} \frac{x}{2} - \frac{y-4}{4} = 2 \\ x - \frac{2-y}{4} = 0 \end{cases}$$

11.
$$\begin{cases} \frac{x}{2} + \frac{y+2}{3} = \frac{3}{4} \\ \frac{x-1}{4} - \frac{y}{2} = \frac{1}{8} \end{cases}$$

12.
$$\begin{cases} \frac{x}{2} + \frac{y+1}{3} = \frac{1}{3} \\ \frac{x+1}{2} + \frac{y}{4} = \frac{7}{12} \end{cases}$$

13.
$$\begin{cases} \frac{x}{2} - \frac{4x+3y}{12} = 1 \\ x - \frac{2x+y}{4} = 2 \end{cases}$$

14.
$$\begin{cases} \frac{x}{2} - \frac{3x-2y}{12} = 1 \\ \frac{2x}{3} - \frac{3x-y}{9} = 1 \end{cases}$$

15.
$$\begin{cases} \frac{3x}{2} - \frac{2y+3x}{3} = \frac{1}{6} \\ \frac{x+2y}{2} - \frac{5y}{4} = \frac{3}{8} \end{cases}$$

3. Resuelve el sistema:

1.
$$\begin{cases} 2x+y-z = 1 \\ x-2y+2z = 3 \\ 3x-2y+z = 2 \end{cases}$$

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

3.
$$\begin{cases} x+y+z = 2 \\ 2x-2y-z = 2 \\ 3x+5y+2z = 2 \end{cases}$$

4.
$$\begin{cases} x-y-z = 0 \\ x+2y-5z = 2 \\ 3x-2y-4z = 1 \end{cases}$$

5.
$$\begin{cases} 6x-6y+8z = 3 \\ 3x-6y+6z = 1 \\ 12x-12y+12z = 5 \end{cases}$$

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

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

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

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

10.
$$\begin{cases} 2(x+y) = 1-z \\ 2(x-z) = 2+y \\ y+z = 1-4x \end{cases}$$

11.
$$\begin{cases} \frac{x}{3} + \frac{3y+z}{6} = -1 \\ \frac{x}{2} + \frac{y+2z}{4} = -1 \\ \frac{x}{3} - \frac{y-z}{6} = -1 \end{cases}$$

12.
$$\begin{cases} \frac{x}{4} - \frac{y}{8} - \frac{z}{2} = 1 \\ \frac{x}{3} - \frac{y+z}{2} = \frac{8}{3} \\ \frac{x-y}{6} - \frac{z}{3} = 1 \end{cases}$$

13.
$$\begin{cases} \frac{x+y+7}{3} - \frac{z}{2} = 0 \\ \frac{x-z}{4} + \frac{y}{8} + 1 = 0 \\ \frac{z}{2} - \frac{2x+y}{6} - \frac{5}{3} = 0 \end{cases}$$

14.
$$\begin{cases} \frac{y+6}{2} - \frac{x-z}{3} = 1 \\ \frac{y+6}{3} - \frac{x-z}{6} = 1 \\ \frac{x-2y-5}{3} - \frac{z}{2} = 1 \end{cases}$$

15.
$$\begin{cases} \frac{x+3y}{6} - \frac{z+1}{3} = y \\ 2+z + \frac{x-4z}{4} = y \\ \frac{x-5}{5} - \frac{z-y}{2} = y \end{cases}$$

4. Resuelve el sistema:

1. $\begin{cases} x-2y = 1 \\ x^2+4y = 1 \end{cases}$

2. $\begin{cases} 3x+y = 1 \\ x^2-y = 3 \end{cases}$

3. $\begin{cases} 2x-y = 1 \\ 3x-y^2 = 2 \end{cases}$

4. $\begin{cases} 2x+3y = 1 \\ x^2+2y = 2 \end{cases}$

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

6. $\begin{cases} x-y = 3 \\ x^2+y^2 = 5 \end{cases}$

7. $\begin{cases} x-y = 1 \\ x^2-2y^2 = 2 \end{cases}$

8. $\begin{cases} 2x-y = 2 \\ 2x^2-y^2 = 2 \end{cases}$

9. $\begin{cases} 2x-3y = 0 \\ x^2-2y^2 = 1 \end{cases}$

10. $\begin{cases} x-2y = 1 \\ 2x^2-y^2 = 1 \end{cases}$

11. $\begin{cases} x^2-y = 3 \\ x^2+y^2 = 5 \end{cases}$

12. $\begin{cases} 3x-y^2 = 2 \\ 3x^2-2y^2 = 4 \end{cases}$

13. $\begin{cases} x^2-y = 6 \\ 2x^2+y^2 = 27 \end{cases}$

14. $\begin{cases} 2x+y^2 = 2 \\ 4x^2+6y^2 = 7 \end{cases}$

15. $\begin{cases} 2x^2+y = 3 \\ 16(x^2-1)+y^2 = 1 \end{cases}$

16. $\begin{cases} xy-x+y = 4 \\ xy-y = 2 \end{cases}$

17. $\begin{cases} xy-x+2y = 3 \\ xy+x+3 = 0 \end{cases}$

18. $\begin{cases} xy+2x+y = 0 \\ x-xy = 2 \end{cases}$

19. $\begin{cases} xy+x-y = 1 \\ 2xy-x-y = 0 \end{cases}$

20. $\begin{cases} xy-x+y = 1 \\ 2xy+2x-y = 1 \end{cases}$

5. Resuelve el sistema:

1. $\begin{cases} xy-2y = 1 \\ xy+x+y^2 = 1 \end{cases}$

2. $\begin{cases} x^2+y^2-2x = 1 \\ x^2+y^2+2y = 3 \end{cases}$

3. $\begin{cases} x^2+y^2-x-y = 2 \\ x^2+y^2-2x+y = 2 \end{cases}$

4. $\begin{cases} x^2+y^2+2x = 1 \\ x^2-y^2+2y = 1 \end{cases}$

5. $\begin{cases} x^2+y^2-2xy = 4 \\ x^2-y^2-xy = 5 \end{cases}$

6. $\begin{cases} \frac{1}{x} + \frac{1}{y} = \frac{3}{2} \\ \frac{2}{x} - \frac{2}{y} = 1 \end{cases}$

7. $\begin{cases} \frac{1}{x} + \frac{4}{y} + 1 = 0 \\ \frac{1}{x} + y + 1 = 0 \end{cases}$

8. $\begin{cases} \frac{1}{x} - \frac{1}{y} = 1 \\ \frac{1}{3x} + \frac{1}{2y} = 2 \end{cases}$

9. $\begin{cases} \frac{2}{x} - \frac{1}{y} = 1 \\ \frac{3}{2x} - \frac{2}{3y} = 1 \end{cases}$

10. $\begin{cases} \frac{1}{x} + y = 1 \\ 3x - \frac{1}{y} = 4 \end{cases}$

11. $\begin{cases} y - \frac{2}{x} = 1 \\ x - \frac{2}{y} = 1 \end{cases}$

12. $\begin{cases} \frac{1}{x} - \frac{1}{y} = 3 \\ x + y^2 - xy = 1 \end{cases}$

13. $\begin{cases} x - y = 1 \\ \sqrt{x+2} - y = 1 \end{cases}$

14. $\begin{cases} x + y = 2 \\ x + \sqrt{y-1} = 1 \end{cases}$

15. $\begin{cases} 2x + 3y = 1 \\ \sqrt{x+2} + y = 1 \end{cases}$

16. $\begin{cases} x+y = 2 \\ \sqrt{x+3} - \sqrt{y} = 1 \end{cases}$

17. $\begin{cases} x - y = 1 \\ \sqrt{x+1} - \sqrt{y-1} = 1 \end{cases}$

18. $\begin{cases} 3x+y-1 = 0 \\ \sqrt{2x-1} - \sqrt{2-y} + 1 = 0 \end{cases}$

19. $\begin{cases} \sqrt{2x-1} + \sqrt{y+2} = 2 \\ 2\sqrt{2x-1} + y = 1 \end{cases}$

20. $\begin{cases} \sqrt{x-1} + \sqrt{y} = 2 \\ \frac{1}{\sqrt{x-1}} + \frac{1}{\sqrt{y}} = 2 \end{cases}$

— Soluciones —

- 1.1. (1,2) 1.2. (1,-1) 1.3. $\left(\frac{1}{2}, \frac{-1}{2}\right)$ 1.4. $\left(\frac{-1}{3}, \frac{1}{3}\right)$ 1.5. (1,1) 1.6. (2,2) 1.7. $\left(\frac{2}{3}, \frac{-1}{3}\right)$ 1.8. $\left(\frac{3}{2}, \frac{-1}{2}\right)$ 1.9. (2,1) 1.10. (2,-1) 1.11. $\left(\frac{2}{3}, \frac{-1}{3}\right)$ 1.12. $\left(\frac{3}{2}, \frac{1}{2}\right)$ 1.13. (1,-2) 1.14. (1,-1) 1.15. (2,1) 1.16. $\left(\frac{1}{3}, \frac{-1}{3}\right)$ 1.17. $\left(2, \frac{-2}{3}\right)$ 1.18. $\left(\frac{1}{2}, \frac{1}{1}\right)$ 1.19. $\left(\frac{1}{2}, \frac{1}{2}\right)$ 1.20. $\left(\frac{3}{2}, \frac{-2}{3}\right)$ 1.21. (-1,1) 1.22. (-1,2) 1.23. $\left(\frac{-1}{2}, \frac{1}{2}\right)$ 1.24. $\left(\frac{1}{3}, \frac{-1}{3}\right)$ 1.25. (1,1) 1.26. (2,2) 1.27. $\left(\frac{-2}{3}, \frac{1}{3}\right)$ 1.28. $\left(\frac{-3}{2}, \frac{1}{2}\right)$ 1.29. (-2,-1) 1.30. (-2,1) 1.31. $\left(\frac{2}{3}, \frac{1}{3}\right)$ 1.32. $\left(\frac{3}{2}, \frac{-1}{2}\right)$ 2.1. (-1,1) 2.2. (2,-2) 2.3. $\left(\frac{2}{2}, \frac{1}{2}\right)$ 2.4. $\left(\frac{-2}{3}, \frac{1}{2}\right)$ 2.5. (3,2) 2.6. (-2,1) 2.7. $\left(\frac{1}{2}, \frac{1}{3}\right)$ 2.8. $\left(\frac{3}{2}, \frac{-1}{3}\right)$ 2.9. (2,-2) 2.10. (1,-2) 2.11. $\left(\frac{1}{2}, \frac{-1}{2}\right)$ 2.12. $\left(\frac{2}{3}, \frac{-1}{1}\right)$ 2.13. (3,-2) 2.14. (2,3) 2.15. $\left(\frac{1}{2}, \frac{1}{2}\right)$ 3.1. (1,2,3) 3.2. (1,1,1) 3.3. (1,-1,2) 3.4. (3,2,1) 3.5. $\left(\frac{1}{2}, \frac{1}{3}, \frac{1}{4}\right)$ 3.6. (1,1,-2) 3.7. (2,1,-1) 3.8. $\left(1, \frac{1}{2}, \frac{1}{1}\right)$ 3.9. $\left(\frac{1}{3}, \frac{1}{2}, \frac{-1}{3}\right)$ 3.10. $\left(\frac{1}{3}, \frac{2}{3}, \frac{-1}{1}\right)$ 3.11. (-4,0,2) 3.12. (2,-4,0) 3.13. (0,-4,2) 3.14. (2,0,-4) 3.15. (0,2,-4) 4.1. (1,0), (-3,-2) 4.2. (1,-2), (-4,13) 4.3. (1,1), $\left(\frac{3}{4}, \frac{1}{2}\right)$ 4.4. (2,-1), $\left(\frac{-2}{3}, \frac{7}{9}\right)$ 4.5. (-1,4), $\left(\frac{-1}{3}, \frac{5}{9}\right)$ 4.6. (2,-1), (1,-2) 4.7. (2,1) 4.8. (1,0), (3,4) 4.9. (3,2), (-3,-2) 4.10. (-1,-1), $\left(\frac{5}{7}, \frac{-1}{7}\right)$ 4.11. (1,-2), (-1,-2), (2,1), (-2,1) 4.12. (2,2); (2,-2) 4.13. (1,-5), (-1,-5), (3,3), (-3,3) 4.14. $\left(\frac{1}{2}, \frac{1}{1}\right)$ $\left(\frac{1}{2}, \frac{-1}{1}\right)$ 4.15. (1,1), (-1,1) 4.16. (2,2), $\left(-3, \frac{-1}{2}\right)$ 4.17. (-1,2), (-3,0) 4.18. (1,-1), $\left(\frac{-2}{3}, 4\right)$ 4.19. (1,1), $\left(\frac{1}{3}, \frac{-1}{1}\right)$ 4.20. (-1,-1), $\left(\frac{1}{2}, 1\right)$ 5.1. (1,-1) 5.2. (0,1), (2,-1) 5.3. (2,1), $\left(\frac{-4}{5}, \frac{-2}{5}\right)$ 5.4. (0,1), (-2,-1) 5.5. (3,1), (-3,-1) 5.6. (1,2) 5.7. (1,-2), $\left(\frac{-1}{3}, 2\right)$ 5.8. $\left(\frac{1}{3}, \frac{1}{2}\right)$ 5.9. $\left(\frac{1}{2}, \frac{1}{3}\right)$ 5.10. $\left(2, \frac{1}{2}\right)$, $\left(\frac{2}{3}, \frac{-1}{2}\right)$ 5.11. (-1,-1), (2,2) 5.12. $\left(\frac{1}{4}, 1\right)$ 5.13. (2,1) 5.14. (0,2), (1,1) 5.15. (2,-1) 5.16. (1,1) 5.17. (3,2) 5.18. (1,-2), (5,-14) 5.19. (1,-1) 5.20. (2,1)