

COLECCIÓN DE ECUACIONES 4

1. $x - 15 = 3(2x - 1) - (x - 4)$ $x = -4$
2. $\frac{x+4}{5} - \frac{x+3}{4} = 1 - \frac{x+1}{2}$ $x = 1$
3. $\frac{1-2x}{9} = 1 - \frac{x+4}{6}$ $x = -4$
4. $\frac{1}{2}[1 - (x+2)^2] = -x - \frac{x^2-1}{2}$ $x = -2$
5. $(3x+2)^2 + 3(1-3x)x = 2(x-11)$ $x = -2$
6. $(2x-3)^2 + (x-2)^2 = 3(x+1) + 5x(x-1)$ $x = 5/7$
7. $(x+1)^2 - 3x = 3$ $x = -1$ $x = 2$
8. $\frac{x-1}{x} + x = 1$ $x = -1$ $x = 1$
9. $\frac{(x+1)(x-3)}{2} + x = \frac{x}{4}$ $x = -3/2$ $x = 2$
10. $\frac{x-3}{x} + \frac{x+3}{x^2} = \frac{2}{3}$ $x = -3$ $x = 3$
11. $\frac{1}{x} + \frac{1}{x^2} = \frac{3}{4}$ $x = -3/2$ $x = 2$
12. $(x+1)^2 - (x-2)^2 = (x+3)^2 + x^2 - 20$ $x = -2$ $x = 2$
13. $7x^2 + 5 = 705$ $x = 10, x = -10$
14. $5x^2 - 45 = 0$ $x = 3$ $x = -3$
15. $5x^2 + 20x = 0$ $x = 0, x = -4$
16. $3x^2 - 21x = 0$ $x = 0, x = 7$
17. $2x^2 - x - 1 = 0$ $x = 1, x = -1/2$
18. $\left(\frac{2x}{3} + \frac{3}{2}\right)^2 - \frac{9}{4} = 0$ $x = -9/2$ $x = 0$
19. $x^2 - x - 6 = 0$ $x = 3, x = -2$
20. $(x-1)(x+3) = 0$ $x = -3, x = 1$

$$21. (x-2)(x+4)(2x-5)=0 \quad x=2, x=-4, x=5/2$$

$$22. x(x+1)(x-2)\left(x-\frac{1}{2}\right)=0 \quad x=0, x=-1, x=2, x=1/2$$

$$23. x^4 - 3x^2 - 4 = 0 \quad x=-2, x=-i, x=i, x=2$$

$$24. x^4 - 5x^2 + 6 = 0 \quad x=-\sqrt{2}, x=\sqrt{2}, x=-\sqrt{3}, x=\sqrt{3}$$

$$25. x^4 - 9x^2 = 0 \quad x=-3, x=0, x=0, x=3$$

$$26. 9x^4 - 10x^2 + 1 = 0 \quad x=-1, x=-1/3, x=1/3, x=1$$

$$27. (x+5)^2 = 1 \quad x=-6, x=-4$$

$$28. (2x-1)^2 = 4 \quad x=-1/2, x=3/2$$

$$29. (3x-2)^4 = 0 \quad x=2/3, x=2/3, x=2/3, x=2/3$$

$$30. x - \sqrt{x} = 2 \quad x=4$$

$$31. x - \sqrt{25-x^2} = 1 \quad x=4$$

$$32. \sqrt{x^2+3} - \sqrt{3-x} = 0 \quad x=-1, x=0$$

$$33. \sqrt{x} + \sqrt{3x-2} = 2 \quad x=1$$

$$34. \sqrt{x^2+7} + 2 = 2x \quad x=3$$

$$35. x^3 - 27 = 0 \quad x=3$$

$$36. \left. \begin{array}{l} 3x-5y=1 \\ x+2y=15 \end{array} \right\} \quad x=7, y=4$$

$$37. \left. \begin{array}{l} 2x-y=4 \\ 4x+3y=-7 \end{array} \right\} \quad x=1/2, y=-3$$

$$38. \left. \begin{array}{l} \frac{x+1}{3} + y = 1 \\ \frac{x-3}{4} + 2y = 1 \end{array} \right\} \quad x=-1, y=1$$