

ECUACIONES IRRACIONALES

Resolver las siguientes ecuaciones, considere hacer cambio de variable en algunos ejercicios y comprobar el resultado:

1. $\sqrt[3]{x+5} = 3$
2. $\sqrt[4]{x-3} = 2$
3. $\sqrt{5n+9} = n-1$
4. $m-13 = \sqrt{m+7}$
5. $\sqrt{x+5} + 7 = 0$
6. $3 + \sqrt{2x-1} = 0$
7. $\sqrt{3x+4} = 2 + \sqrt{x}$
8. $\sqrt{3w-2} - \sqrt{w} = 2$
9. $y^4 - 2y^2 - 8 = 0$
10. $x^4 - 7x^2 - 18 = 0$
11. $x^{10} + 3x^5 - 10 = 0$
12. $x^{10} - 7x^5 - 8 = 0$
13. $2x^{2/3} + 3x^{1/3} - 2 = 0$
14. $x^{2/3} - 3x^{1/3} - 10 = 0$
15. $(m^2 - m)^2 - 4(m^2 - m) = 12$
16. $(x^2 + 2x)^2 - (x^2 + 2x) = 6$
17. $\sqrt{u-2} = 2 + \sqrt{2u+3}$
18. $\sqrt{3t+4} + \sqrt{t} = -3$
19. $\sqrt{3y-2} = 3 - \sqrt{3y+1}$
20. $\sqrt{2x-1} - \sqrt{x-4} = 2$
21. $\sqrt{7x-2} - \sqrt{x+1} = \sqrt{3}$
22. $\sqrt{3x+6} - \sqrt{x+4} = \sqrt{2}$
23. $3n^2 - 11n - 20 = 0$
24. $6x^{-2} - 5x^{-1} - 6 = 0$
25. $9y^{-4} - 10y^{-2} + 1 = 0$
26. $4x^{-4} - 17x^{-2} + 4 = 0$
27. $y^{1/2} - 3y^{1/4} + 2 = 0$
28. $4x^{-1} - 9x^{-1/2} + 2 = 0$
29. $(m-5)^4 + 36 = 13(m-5)^2$
30. $(x-3)^4 + 3(x-3)^2 = 4$
31. $\sqrt{5-2x} - \sqrt{x+6} = \sqrt{x+3}$
32. $\sqrt{2x+3} - \sqrt{x-2} = \sqrt{x+1}$
33. $m - 7\sqrt{m} + 12 = 0$
34. $y - 6 + \sqrt{y} = 0$
35. $t - 11\sqrt{t} + 18 = 0$
36. $x = 15 - 2\sqrt{x}$
37. $x + \sqrt{4x+1} = 5$
38. $2x - \sqrt{x-1} = 3x - 7$
39. $\sqrt{5x-1} + \sqrt{x+3} = 4$
40. $2\sqrt{x} - \sqrt{x+5} = 1$
41. $\sqrt{2x-1} + \sqrt{x+3} = 3$
42. $\sqrt{x-3} + \sqrt{2x+1} - 2\sqrt{x} = 0$
43. $\sqrt{5x-1} - 3\sqrt{3-x} = \sqrt{2x}$
44. $\sqrt{3x+1} + \sqrt{5x} = \sqrt{16x+1}$
45. $\sqrt{2x} + \sqrt{4x-3} = 3$
46. $\sqrt{x+3} + \frac{6}{\sqrt{x+3}} = 5$
47. $\sqrt{x} + \frac{4}{\sqrt{x}} = 5$
48. $2\sqrt{x} = \sqrt{x+7} + \frac{8}{\sqrt{x+7}}$
49. $\sqrt{x} + \sqrt{x+8} = 2\sqrt{x}$
50. $\sqrt{6-x} + \sqrt{x+7} - \sqrt{12x+1} = 0$
51. $\sqrt{\frac{x+1}{2}} = 9-x$
52. $\sqrt{x-\frac{3}{2}} = 2x-4$
53. $\sqrt{2x+1} = \frac{2}{3}$
54. $\sqrt{\frac{2}{x}} = 3$
55. $\sqrt{x^2+4} = 3$
56. $\sqrt{x+1} = x-1$