

Equations Involving Radicals

1. $\sqrt{x} = 6$
2. $\sqrt{x} - 1 = 0$
3. $\sqrt{2x} = 8$
4. $3\sqrt{x} = 12$
5. $-2\sqrt{x} + 14 = 0$
6. $4\sqrt{x} = -1$
7. $\sqrt{3x} + 6 = 0$
8. $64 - 4\sqrt{x} = 0$
9. $\sqrt{-3x} = 3$
10. $\sqrt{3x+1} = 4$
11. $\sqrt{3-2x} = 2$
12. $\sqrt{x^2-2} = x+4$
13. $\sqrt{x+3} = \sqrt{2x-1}$
14. $\sqrt{3x+1} = \sqrt{x+15}$
15. $\sqrt{3x-5} - 3\sqrt{x} = 0$
16. $2\sqrt{x} - \sqrt{2x+10} = 0$
17. $\sqrt{2x} = x - 4$
18. $x + 2 = \sqrt{8x+1}$
19. $\sqrt{x} + 2 = x$
20. $3 = x - 2\sqrt{x}$
21. $\sqrt{3x+7} - 3 = x$
22. $\sqrt{4-12x} - 6 = 2x$
23. $x = \sqrt{3-x} + 1$
24. $\sqrt{x+7} - 5 = x$
25. $x = \sqrt{x+44} - 2$

Answers:

1. 36
2. 1
3. 32
4. 16
5. 49
6. No solution.
7. No solution.
8. 256
9. -3
10. 5
11. $-\frac{1}{2}$
12. $-\frac{9}{4}$
13. 4
14. 7
15. No solution.
16. 5
17. 8
18. 1, 3
19. 4
20. 9
21. -1, -2
22. -1
23. 2
24. -3
25. 5