

Other Equations

Equations with Radicals, Quadratic In Form

Solve for x

1. $x - \sqrt{2x + 3} = 0$

2. $x - \sqrt{3x + 18} = 0$

3. $\sqrt{3x + 7} = 3x + 5$

4. $\sqrt{4x + 13} = 2x - 1$

5. $\sqrt{4x + 5} - 2 = 2x - 7$

6. $\sqrt{6x + 7} - 1 = x + 1$

7. $\sqrt{x} - \sqrt{x - 5} = 1$

8. $\sqrt{x} - \sqrt{x - 12} = 2$

9. $\sqrt[3]{4x + 3} = \sqrt[3]{2x - 1}$

10. $\sqrt[3]{2x} = \sqrt[3]{5x + 2}$

11. $\sqrt[3]{5x^2 - 6x + 2} - \sqrt[3]{x} = 0$

12. $\sqrt[3]{3x^2 - 9x + 8} = \sqrt[3]{x}$

13. $\sqrt[4]{2x - 3} = 4$

14. $\sqrt[4]{4x + 5} = 2$

15. $\sqrt[4]{x^2 + 2x} = \sqrt[4]{3}$

16. $\sqrt[4]{x^2 + 5x} = \sqrt[4]{6}$

17. $x^{\frac{3}{2}} = 8$

18. $x^{\frac{3}{2}} = 27$

19. $x^{\frac{3}{2}} = -27$

20. $x^{\frac{3}{2}} = -8$

21. $x^{\frac{2}{3}} = 25$

22. $x^{\frac{2}{3}} = 49$

23. $x^{\frac{3}{4}} = 64$

24. $x^{\frac{3}{4}} = 125$

25. $x^{\frac{4}{3}} = 16$

26. $x^{\frac{4}{3}} = 625$

27. $(x + 5)^{\frac{2}{3}} = 16$

28. $(x - 7)^{\frac{2}{3}} = 36$

29. $(x - 8)^{\frac{3}{2}} = -64$

30. $(x + 8)^{\frac{3}{2}} = -125$

31. $(x + 3)^{\frac{3}{4}} - 7 = 118$

32. $(x + 3)^{\frac{3}{4}} - 7 = -34$

33. $(x - 4)^{\frac{2}{5}} + 8 = 57$

34. $(x + 6)^{\frac{2}{5}} + 7 = 107$

35. $2x^4 - 7x^2 + 5 = 0$

36. $4x^4 - 8x^2 + 3 = 0$

37. $x^4 + 2x^2 - 15 = 0$

38. $3x^4 + 10x^2 - 25 = 0$

39. $(2x - 1)^{\frac{2}{3}} = x^{\frac{1}{3}}$

40. $(x - 3)^{\frac{2}{5}} = (4x)^{\frac{1}{5}}$

41. $x^{\frac{2}{3}} = 2x^{\frac{1}{3}}$

42. $3x^{\frac{3}{4}} = x^{\frac{1}{2}}$

43. $(x - 1)^{\frac{2}{3}} + (x - 1)^{\frac{1}{3}} - 12 = 0$

44. $(2x - 1)^{\frac{2}{3}} + 2(2x - 1)^{\frac{1}{3}} - 3 = 0$

45. $6(x + 2)^4 - 11(x + 2)^2 = -4$

46. $8(x - 4)^4 - 10(x - 4)^2 = -3$

47. $10x^{-2} + 33x^{-1} - 7 = 0$

48. $7x^{-2} - 10x^{-1} - 8 = 0$

49. $x^{-\frac{2}{3}} + x^{-\frac{1}{3}} - 6 = 0$

50. $2x^{-\frac{4}{3}} - x^{-\frac{2}{3}} - 1 = 0$

51. $x - \sqrt{x} - 12 = 0$

52. $x - 2\sqrt{x} - 15 = 0$