

Solving Power and Radical Equations - Homework

Solve each equation. Show all work.

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

2. $\sqrt{x+2} = 3$

3. $x^{\frac{1}{2}} - 3 = 5$

4. $3\sqrt{2-x} = 9$

5. $2(x-1)^{1/2} = 5$

Solve each equation. Check your solution. Not all answers will work.

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

7. $\sqrt[3]{x} - 2 = 1$

8. $\sqrt[3]{x-5} = 4$

9. $(x+4)^{1/3} + 7 = 4$

10. $4\sqrt[3]{x-6} = 6$

11. $(5x+1)^{1/3} + 2 = 7$

Solve each equation. Check your solution. Not all answers will work.

12. $\sqrt[3]{x-3} = \frac{1}{2}$

13. $x^{2/3} = 16$

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

15. $x^{3/4} - 9 = 18$

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

17. $\sqrt[4]{3x-5} = \sqrt[4]{5x-8}$