

Key
No home

Solve each equation and check your solutions.

1. $\sqrt{x+6} = 3$

$x = 3$

2. $\sqrt{3x-5} = 7$

$x = 18$

3. $2\sqrt{x+5} = 6$

$x = 4$

4. $\sqrt[3]{y-7} = 4$

$y = 71$

5. $\sqrt{x-9} + 6 = 3$

No
Solution

6. $\sqrt[4]{3x} - 2 = 0$

$x = \frac{16}{3}$

7. $\sqrt{x+3} - 6 = 3$

$x = 78$

8. $16 = 8 + \sqrt{x}$

$x = 64$

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

$$x = 4$$

$$10. \sqrt{2x-7} = \sqrt{x+2}$$

$$x = 9$$

$$11. \sqrt[3]{5x-3} + 8 = 6$$

$$x = -1$$

$$12. \sqrt{x^2 - 6x + 9} - 5 = 2$$

$$x = 10 \quad x = -4$$

$$13. 2 = \sqrt{x^2 - 3x - 18} - 4$$

$$x = 9$$

$$x = -6$$

$$14. \sqrt{x^2 - 2x + 1} - 2 = 3$$

$$x = 6 \quad x = -4$$

$$15. \sqrt{x^2 + 4x - 8} + 3 = 5$$

$$x = -6 \quad x = 2$$

$$16. \sqrt{x+5} - \sqrt{x} = 1$$

$$x = 4$$

$$17. \sqrt{x-13} + \sqrt{x+2} = 3$$

No
Solution

$$18. \sqrt{x+10} + \sqrt{x-6} = 8$$

$$x = 15$$

$$19. \sqrt{x+95} - \sqrt{x-1} = 6$$

$$x = 26$$

$$20. \sqrt{x-6} - \sqrt{x} = 3$$

No
Solution

