

For the following functions state the transformations, graph the function and list the domain and range.

1. $f(x) = \sqrt{x-5} + 6$

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

3. $y = -4\sqrt{x+3}$

4. $y = \sqrt[3]{\frac{x+2}{3}} - 4$

5. $y = \frac{1}{2}\sqrt{-x} - 4$

Solve for x

6. $\sqrt{x+7} - 15 = 5$

7. $-6 = -\sqrt{2x}$

8. $\sqrt[3]{x} + 27 = 30$

9. $x = \sqrt{8x+20}$

10. $x+6 = \sqrt{x+6}$

11. $(x^2 - 2x - 10)^{\frac{3}{2}} - 126 = -1$

12. $0.8(x^2 + 2x + 110)^{\frac{2}{3}} = 20$

13**. $\sqrt{x+7} - \sqrt{8x} = -1$

14. $\sqrt{3x+1} + \sqrt{5-x} = 4$

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