Assignment: Solving Square Root Equations

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_

**Graph and solve. Show Work!**

![[image]]()1. $2\sqrt{x+1}=2$ Solve: $2\sqrt{x+1}=2$

![[image]]()2. $-\sqrt{x-1}=-2$ Solve: $-\sqrt{x-1}=-2$

![[image]]()3. $\sqrt{x+3}=-1$ Solve: $\sqrt{x+3}=-1$

![[image]]()4. $\sqrt{x+2}=2$ Solve: $\sqrt{x+2}=2$

**Solve each of the following equations. Show Work!**

5. $\sqrt{2x-3}=1$ 6. $\sqrt{x+3}=6$ 7. $\sqrt{x+1}-5=8$

8. $\sqrt{x-2}-7=-4$ 9. $\sqrt{3x+1}=9$ 10. $\sqrt{2x+1}=13$

11. $\sqrt{x+3}-20=0$ 12. $\sqrt{x+4}-11=0$ 13. $\sqrt{x-3}=-2$

14. $\sqrt{x+2}=-4$ 15. $5\sqrt{x-1}=\sqrt{x+1}$ 16. $4\sqrt{x+1}=3\sqrt{x+2}$

17. $\sqrt{4x-1}=\sqrt{3x+1}$ 18. $\sqrt{3x+1}=\sqrt{2x+6}$ 19. $\sqrt{5x-3}=\sqrt{2x+3}$