

Name Key Class _____ Date _____

Solving: HW: Lesson 6

Solving Square Root and Other Radical Equations

Solve. Check for extraneous solutions.

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

$x = 127$

2. $3x^{\frac{4}{3}} + 5 = 53$

$x = 8$

3. $4x^{\frac{3}{2}} - 5 = 103$

$x = 9$

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

$x = 3$

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



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

$x = 9$

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

$x = 27$

14. $\sqrt{4x+2} = \sqrt{3x+4}$

$x = 2$

15. $(7x-3)^{\frac{1}{2}} = 5$

$x = 4$

21. $5\sqrt{x} + 2 = 12$

$x = 4$

28. $(2x+1)^{\frac{1}{3}} = 1$

$x = 0$

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

$x = -2$