

Name: _____ Hour: _____ Date: _____

NOTES: Section 6.6 – Solve Radical Equations

Goals: #1 - I can solve radical equations and check for extraneous solutions.

#2 - I can solve an equation with two radicals.

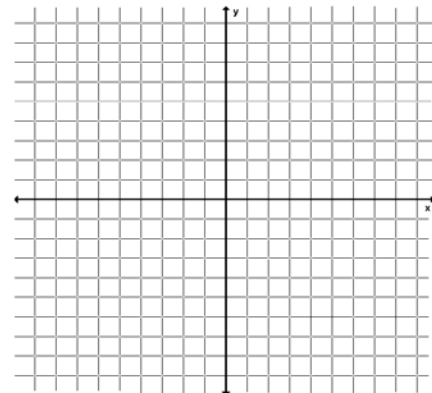
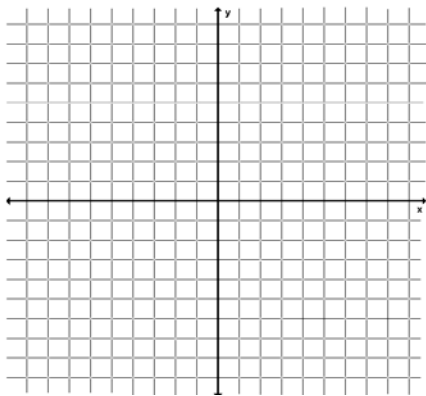


Homework: Lesson 6.6 Worksheet

Warm Up: Graph the function. Then state the domain and range. Lastly, compare the function with its parent function.

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

2.) $y = 2(x+3)^{1/2} + 2$



domain: _____

domain: _____

range: _____

range: _____

comparison: _____

comparison: _____

Notes:

To solve a radical equation:

1. _____ the _____ on one side of the equation.
2. _____ each side of the equation to the same _____ to eliminate radical.
3. _____ the polynomial equation using _____ we've learned.
4. _____ your solution!

Name: _____ Hour: _____ Date: _____

Example #1: Solve the equation. Check your solution.

1. $\sqrt[3]{x-5} - 1 = -1$

2. $(3x + 4)^{2/3} = 16$

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

4. $\sqrt{x + 6} + 2 = \sqrt{10 - 3x}$

Name: _____ Hour: _____ Date: _____

You practice: Solve the equation. Check your solution.

1. $-2x^{4/3} - 21 = -53$

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

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