

Section 10.6—Solving Radical Equations

Review

$(\sqrt{a})^2$

$(3\sqrt{x})^2$

$(\sqrt{x+1})^2$

What is a RADICAL EQUATION?

$\sqrt{3y-2} = 5$

Check your solution!

$\sqrt[3]{k+2} = 4$

How do I SOLVE a RADICAL EQUATION?

1. _____ the radical.
2. Apply the Power Rule:
3. Solve the resulting _____.
4. _____ check your _____ !!

Example

$x = 5$

Apply the Power Rule

Check your solutions!

Why should I ALWAYS check my solutions?

Example

$$\sqrt{r-5} + 6 = 10$$

$$\sqrt{c+3} + 7 = 1$$

$$\sqrt{3x-4} = \sqrt{5x+2}$$

$$3 + x = \sqrt{7 + 3x}$$

$$\sqrt{4y+1} + 5 = y$$

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

Summary: