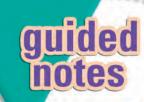
NAME

Solving Radical Equations Module 18

Solving One-Step Radical Equations Lesson 1



Lesson Objectives

- Solve one-step radical equations.
- Determine whether a solution is extraneous by checking.

$$(\sqrt{x})^2 = \frac{x}{}$$

$$\sqrt{\chi^2} = |\mathbf{X}|$$

$$(\sqrt[3]{x})^3 = x$$

A radical equation is an equation that has a variable radicand.

To solve a radical equation, first rewrite the equation without

___. Then, solve the resulting equation.

By squaring both sides of an equation, **extraneous** _ solutions may be generated.

An extraneous solution is a solution that does not satisfy the

original _ equation. Therefore, an extraneous solution is not ____ a solution of the equation.

Solve and check: $\sqrt{x} = 12$. x = 144

Solve and check: $\sqrt{x} = 7$. x = 49

The radical sign indicates the nonnegative square root.

Solve and check: $\sqrt{x} = -6$. no solution

Solve and check: $-\sqrt{x} = -11$. x = 121

Solve and check: $\sqrt[4]{x} = 5$. x = 625