

# 5 8 Radical Equations And Inequalities Answers

## 5.4 Solving Radical Equations and Inequalities

5 8 Radical Equations And  
5.8 Solving Radical Equations and  
Inequalities Algebra 2 5 - 13 Example  
6: The time  $t$  in seconds that it takes a  
car to travel a quarter mile when  
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estimated by using the formula  $t = 5.8253$   
 $\sqrt{\frac{w}{P}}$ , where  $w$  is the weight of the car  
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## 5.8 SOLVING RADICAL EQUATIONS AND

## INEQUALITIES

Solve 5-8. Study Guide and Intervention (continued) Radical Equations and Inequalities NAME \_\_\_\_\_

DATE \_\_\_\_\_ PERIOD \_\_\_\_\_

5-8 Example Since the radicand of a square root must be greater than or equal to zero, first solve  $20x - 4 \geq 0$ .  $20x - 4 \geq 0$   
 $20x - 4 + 4 \geq 0 + 4$  Now solve  $20x \geq 4$   
 $20x - 20 \geq 4 - 20$  Original inequality

5-8 Study Guide and Intervention - teacherwee

Solving Radical Equations and Inequalities Solve radical equations by raising both sides of the equation to the power of the index of the radical. For example, the index of  $\sqrt[n]{a}$  is  $n$ .

Therefore,  $(\sqrt[n]{a})^n = a^n$  Solve:  $3\sqrt{21x - 8}$   
Step 1 Isolate the radical. Divide both

sides of the equation by 3 and simplify.  
3218 33 x x 26

## LESSON Reteach 5-8 Solving Radical Equations and Inequalities

This 5-8 Skills Practice: Radical Equations and Inequalities Worksheet is suitable for 10th - 12th Grade. In this radical equations worksheet, students solve radical equations. They simplify equations containing radicals.

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Algebra 2 5 8 Radical Equations And  
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2x 16; x 8 5 19 3 5 2 25 2 5 4 3 2 8 11  
12 16 5 4 10 4 3 36 12 9 Name Date  
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Remember:  $n^a = n^a$ . Always check for  
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## LESSON Reteach Solving Radical Equations and Inequalities

### § 3-5 RADICAL EQUATIONS

#### Procedure Solving Radical Equations

1. Isolate the radical (or one of the radicals). 2. Exponentiate to eliminate the isolated radical. 3. Repeat steps 1 and 2 if there are still radicals. 4. Solve the resulting equation. 5. Check your answers using the original equation.

### § 3-5 RADICAL EQUATIONS

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## Algebra 2 Section 5 8 Radical Equations and Inequalities

### Unit 2 Polynomial and Radical

### Equations and Inequalities 219 5-1 6-6

7-4 227 326 369 Lesson Page (Millions)  
... • Lessons 5-5 through 5-8 Simplify and solve equations involving roots, radicals, and rational exponents. • Lesson 5-9 Perform operations with complex numbers.

## Polynomial and Radical Equations and Inequalities

A Radical Equation is an equation with a square root or cube root, etc. Solving Radical Equations. We can get rid of a square root by squaring. (Or cube roots by cubing, etc) But Warning: this can sometimes create "solutions" which don't actually work when we put them into the original equation. So we need to Check!

## Solving Radical Equations -

mathsisfun.com

Radical equations may have one or more radical terms and are solved by eliminating each radical, one at a time. We have to be careful when solving radical equations as it is not unusual to find extraneous solutions, roots that are not, in fact, solutions to the equation. These solutions are not due to a mistake in the solving method, but result from the process of raising both sides of an ...

Equations With Radicals and Rational Exponents | College ...

Similarly, radical equations can be solved by raising both sides to a power. For a square root, the index of the radical is 2. Remember! Solve each equation. Example 1A: Solving

Equations Containing One Radical.  
Subtract 5. Simplify. Square both sides.  
Solve for x. Simplify.

Slide 1

We're asked to solve the equation, 3 plus the principal square root of 5x plus 6 is equal to 12. And so the general strategy to solve this type of equation is to isolate the radical sign on one side of the equation and then you can square it to essentially get the radical sign to go away.

Solving square-root equations: one solution (video) | Khan ...

Radical equations When you want to solve an equation with containing a radical expression you have to isolate the radical on one side from all other

terms and then square both sides of the equation. Example

Radical equations (Algebra 1, Radical expressions ...

Solving Simple Radical Equations.

Concepts Simple Eqns Harder Eqns

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Purplemath. We'll start with a couple simple exercises. As we go, remember that we must square the two sides of an equation, rather than the individual terms in those two sides.

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Section 5.4 Solving Radical Equations and Inequalities 263 Solving a Real-

Life Problem In a hurricane, the mean sustained wind velocity  $v$  (in meters per

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Solve 5  $20x^4 - 3$ . Study Guide and Intervention (continued) Radical Equations and Inequalities NAME \_\_\_\_\_

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 $20x^4 \geq 3$   $x^4 \geq \frac{3}{20}$  Now solve  $5 \sqrt{20} \sqrt[4]{x^3} - 5$   
 $20x^4 - 3$  Original inequality

5-8 Study Guide and Intervention - teacherwee

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Therefore,  $x^3 - 2x^2 + 3x - 9 = 0$  Solve:  $3 - 21x + 8$   
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## Algebra 2 Section 5 8 Radical Equations and Inequalities

Unit 2 Polynomial and Radical Equations and Inequalities 219 5-1 6-6 7-4 227 326 369 Lesson Page (Millions) ... • Lessons 5-5 through 5-8 Simplify and solve equations involving roots, radicals, and rational exponents. • Lesson 5-9 Perform operations with complex numbers.

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## **Solving Simple Radical Equations | Purplemath**

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### Slide 1

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