

## Topic 6 | Lesson 6-1 | Rational Exponents and Properties of Exponents

Pacing: 2 Days / Block: 1 Day

LESSON OBJECTIVE(S)	ESSENTIAL UNDERSTANDING
<p>Students will be able to:</p> <p>Extend the properties of integer exponents to rational exponents to rewrite radical expressions using rational exponents.</p> <p>Solve equations with rational exponents using the properties of exponents.</p>	<p>Radicals can be rewritten using rational exponents. The properties of exponents can be used to solve equations with rational exponents.</p>
NEW VOCABULARY	
<ul style="list-style-type: none"> <li>Rational exponent</li> </ul>	
STUDENT EDITION	STUDENT COMPANION
Pages 217-223 or at SavvasRealize.com	Pages 115-118 or at SavvasRealize.com

### Teaching the Lesson

STEP 1: EXPLORE	
<b>Critique &amp; Explain</b>	Student Edition & Student Companion SavvasRealize.com
STEP 2: UNDERSTAND & APPLY	
<b>Example 1:</b> Write Radicals Using Rational Exponents	Student Edition & Student Companion SavvasRealize.com
<b>Example 2:</b> Use the Product of Powers Property to Solve Equations With Rational Exponents	Student Edition & Student Companion SavvasRealize.com
<b>Example 3:</b> Use the Power of Power Property to Solve Equations With Rational Exponents  Support for Struggling Students and English Language Learners	Student Edition & Student Companion SavvasRealize.com

<b>Example 4:</b> Use the Power of a Product Property to Solve Equations With Rational Exponents	Student Edition & Student Companion SavvasRealize.com
<b>Example 5:</b> Use the Quotient of Powers Property to Solve Equations With Rational Exponents  Support for Advanced Students	Student Edition & Student Companion SavvasRealize.com
<b>Concept Summary</b>  Do You UNDERSTAND? and Do You KNOW HOW?	Student Edition & Student Companion SavvasRealize.com
<b>STEP 3: PRACTICE AND PROBLEM SOLVING</b>	
<b>Practice and Problem Solving</b>	Student Edition SavvasRealize.com
<b>STEP 4: ASSESS &amp; DIFFERENTIATE</b>	
<b>Lesson Quiz</b>	Teacher Resource Download Center SavvasRealize.com
<b>Differentiated Resources Library</b> <ul style="list-style-type: none"> <li>• Reteach to Build Understanding</li> <li>• Mathematical Literacy and Vocabulary</li> <li>• Additional Practice</li> <li>• Enrichment</li> <li>• Video Tutorials</li> </ul>	Teacher Resource Download Center SavvasRealize.com