

Unit 9 Radical Expressions

Content Area: **Math**
Course(s): **CP Algebra 1, Accelerated Algebra I, Accelerated Algebra I**
Time Period: **Marking Period 4**
Length: **2**
Status: **Published**

Unit Overview

This unit allows students to master rules of radicals and understanding perfect square values. Students will also see how these relate to equations involving radicals.

Enduring Understandings

- Operations can be performed with radical expressions and radical expressions can be simplified using the multiplication and division properties of square roots.
- Square root functions can be graphed by plotting points or using translations of the parent square root function.
- Some radical equations can be solved by squaring both sides and testing the solutions.

Essential Questions

How are radical expressions represented?

What are the characteristics of square root functions?

How can you solve a radical equation?

New Jersey Student Learning Standards (No CCS)

MA.F-IF.C.7b	Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.
MA.A-CED.A.2	Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.
MA.A-REI.A.2	Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise.

Interdisciplinary Connections

LA.W.9-10.6	Use technology, including the Internet, to produce, share, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.
SCI.HS-ETS1-2	Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.
TECH.8.1.12.C.CS4	Contribute to project teams to produce original works or solve problems.

Technology Standards

TECH.8.1.12.C.CS4	Contribute to project teams to produce original works or solve problems.
TECH.8.1.12.D.CS3	Exhibit leadership for digital citizenship.
TECH.8.1.12.F.CS4	Use multiple processes and diverse perspectives to explore alternative solutions.

21st Century Themes/Careers

CAEP.9.2.12.C.3	Identify transferable career skills and design alternate career plans.
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Instructional Strategies & Learning Activities

- Use graphing calculator to explore tables.
- Spend time with modeling problems.
- Use problems and activities from book involving modeling problems.
- ~~Provide access to online book~~
- Provide access to book pages and problems through Canvas
- Provide access to review keys
- Use ~~Pearson~~ Quizzes to review and reinforce.
- ~~Provide access to Pearson Review.~~
- ~~Examview~~ Quizzes to assess HW.
- Desmos
- Delta Math

Formative Assessments

- Daily homework checks
- Quiz
- ~~Exam View~~ HW Checks
- Warm-ups
- Desmos

- Delta Math

Summative Assessment

- Unit Quiz

Benchmark Assessments

Final Exam