

UNIT 10 - LESSON PLANS

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| Class Algebra 1 | Topic Operations with Radical Expressions | Lesson 3 | Of 6 |
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Objective

Students will:

- Work with radicals and integer exponents.
- Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational
- Rewrite expressions involving radicals and rational exponents using the properties of exponents.

"I Can" Statement

I can work with radicals and integer exponents.

I know rewrite expressions involving radicals and rational exponents using the properties of exponents.

Common Core Standards

CCSS.MATH.CONTENT.8.EE.A.2

Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.

CCSS.MATH.CONTENT.HSN.RN.A.1

Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. For example, we define $5^{1/3}$ to be the cube root of 5 because we want $(5^{1/3})^3 = 5^{(1/3)3}$ to hold, so $(5^{1/3})^3$ must equal 5.

CCSS.MATH.CONTENT.HSN.RN.A.2

Rewrite expressions involving radicals and rational exponents using the properties of exponents.

Bell Work

See Bell Work 10-3

Procedures

1. Start and lead student discussion related to the bell work.
2. Distribute the Guided Notes
3. Present lesson or play a video lesson.
4. Use an Online Activity if time permitted.
5. Distribute Lesson Assignment.

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| Assessment | Bell Work 10-3 Assignment 10-3 Exit Quiz 10-3 |
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| Additional Resources | See Online Activities |
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