05 Topic: Fractional Equations

Content Area: Mathematics
Course(s): Algebra 2
Time Period: Semester 1
Length: 2-3 weeks
Status: Published

Standards

MA.K-12.2	Reason abstractly and quantitatively.
MA.K-12.3	Construct viable arguments and critique the reasoning of others.
MA.K-12.4	Model with mathematics.
MA.K-12.5	Use appropriate tools strategically.
MA.A-REI.A.2	Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise.

Enduring Understandings

- 1. Mathematics is a language consisting of symbols and rules.
- 2. The same mathematical ideas can be represented concretely or symbolically.
- 3. There can be different strategies to solve a problem, but some are more effective and efficient than others.

Essential Questions

What methods will students use to solve Fractional Equations?

How do students solve work and distance word problems?

How will students be able to identify, solve, and use literal equations?

Knowledge and Skills

simplify complex rational expressions

solve fractional equations

solve literal equations

Transfer Goals

Using mathematical reasoning and strategic thinking can allow for practical solutions of many problems.

Often unique vocabulary and implementation methods are needed to solve problems.

Resources

- 1. McDougal/Littell Algebra & Trigonometry Structure & Method Book 2
- 2. Aufmann/Barker/Lockwood Intermediate Algebra with Applications Sixth Edition
- 3. Houghton/Mifflin/Harcourt On Core Mathematics Algebra 2
- 4. Holt Algebra 2 with Trigonometry
- 5. Larson/Boswell Big Ideas Math: Algebra 2 Texas Edition
- 6. Khan Academy
- 7. PurpleMath
- 8. KutaSoftware
- 9. CK-12
- 10. Quizlet
- 11. Albert I/O
- 12. Desmos
- 13. Problem Attic