

Algebra 1 - Unit 1 - Math - Reasoning with Equation

Content Area: **Mathematics**
Course(s): **Math 6, Generic Course**
Time Period: **Generic Time Period**
Length: **30 days**
Status: **Published**

Established Goals/Standards

Please choose the appropriate Goals/Standards from the Standards tab above.

MA.A-SSE.A.1	Interpret expressions that represent a quantity in terms of its context.
MA.A-SSE.A.1a	Interpret parts of an expression, such as terms, factors, and coefficients.
MA.A-SSE.A.1b	Interpret complicated expressions by viewing one or more of their parts as a single entity.
MA.A-CED	Creating Equations
MA.A-CED.A	Create equations that describe numbers or relationships
MA.A-CED.A.1	Create equations and inequalities in one variable and use them to solve problems.
MA.A-CED.A.4	Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.
MA.A-REI	Reasoning with Equations and Inequalities
MA.A-REI.A	Understand solving equations as a process of reasoning and explain the reasoning
MA.A-REI.A.1	Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method.
MA.A-REI.B.3	Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.

Essential Questions

Please add your Essential Questions by clicking on the Lists tab above.

- How can the value on an unknown variable be found?
- How do we represent unknown quantities?

Enduring Understanding

Please add your Enduring Understandings by clicking on the Lists tab above.

- Students can find an unknown variable by following the rules for solving equations or evaluation expressions.
- Variables can be used to represent numbers in expressions and equations.

Content

Students will be able to:

- Identify the parts of an expression
- Translate words into an expression and vice versa
- Evaluate an expression for given values
- Apply the distributive property
- Identify and combine like terms
- Solve equations
- Transform equations

Vocabulary:

- Coefficient
- Constant
- Expression
- Equation
- Distributive property
- Evaluate exponent
- Terms
- Simplify
- Solve

Assessments

Resources

- Pearson textbook and online resources
- Teacher made flip-charts
- Web-based activities (mathplayground.com) (coolmath.com)
- Teacher made worksheets/assessments
- NJCTL.org (PMI math)
- Pizzazz series of worksheets