

Algebra 1 – Unit 1: Equations and Inequalities in a Single Variable

Expectations, Essential Questions, Enduring Understandings, Indicators and Vocabulary

Expectation

1.2 model and interpret real-world situations using the language of mathematics and appropriate technology.

Essential Questions

Why are equations and inequalities useful?

Why are functions and relations represented in multiple ways?

Enduring Understanding

Functions and their representations are used to model real-world relationships.

Indicators

- 1.2.1 determine the equation for a line, solve linear equations, and /or describe the solutions using numbers, symbols, and/or graphs.
- 1.2.1.a solve an equation for a specified variable.
- 1.2.2 solve linear inequalities and describe the solutions using numbers, symbols, and/or graphs
- 1.2.2.a graph an inequality, write and/or solve an inequality, or interpret an inequality in the context of a problem.
- 1.2.2.1 interpret and solve absolute value equations and inequalities.
- 1.2.4.a describe how the graphical model of a non-linear function represents a given problem and estimate the solution.

Vocabulary

- boundary
- compound inequality
- equivalent equation
- identity
- literal equation/formula