

Algebra 1B Unit 02: Inequalities

Content Area: **Math**
Course(s): **Algebra I B**
Time Period: **Semester 1**
Length: **5 cycles**
Status: **Published**

Unit Introduction

Standards

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| MA.A-CED.A.1 | Create equations and inequalities in one variable and use them to solve problems. |
| MA.A-REI.B.3 | Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. |
| MA.A-SSE.A.1b | Interpret complicated expressions by viewing one or more of their parts as a single entity. |

Essential Questions

- Can inequalities that appear to be different be equivalent?
- How can you solve inequalities?
- How do you represent relationships between quantities that are not equal?

Content

- Absolute Value Equations & Inequalities
- Compound Inequalities
- Inequalities & Their Graphs
- Solving Inequalities Using Addition or Subtraction
- Solving Inequalities Using Multiplication and Division
- Solving Multi-Step Inequalities

Skills

- Dividing by a Negative Number
- Dividing by a Positive Number
- Graphing an Inequality
- Identifying Solutions by Evaluating
- Inequalities with Special Solutions
- Multiplying by a Negative Number

- Multiplying by a Positive Number
- Solve an Absolute Value Equation with No Solution
- Solving a Compound Inequality Involving "And"
- Solving a Compound Inequality Involving "Or"
- Solving an Absolute Value Equation
- Solving an Absolute Value Inequality Involving Greater Than or Equal To
- Solving An Absolute Value Inequality Involving Less Than or Equal To
- Solving an Inequality and Checking Solutions
- Solving an Inequality with Variables on Both Sides
- Use graphing calculators and technology where appropriate
- Use relevant vocabulary, notations, and symbols when appropriate
- Using Interval Notation
- Using More than One Step
- Using the Addition Property of Inequality
- Using the Distributive Property
- Using the Subtraction Property of Inequality
- Writing a Compound Inequality
- Writing an Inequality from a Graph
- Writing and Solving a Compound Inequality
- Writing and Solving a Compound Inequality
- Writing and Solving an Inequality
- Writing and Solving a Multi-Step Inequality
- Writing Inequalities
- Writing Real-World Inequalities