

MP2a-Linear Inequalities

Content Area: **Math**
Course(s): **Math 8 Algebra 1 Honors**
Time Period: **Marking Period 2**
Length: **MP2**
Status: **Published**

Essential Questions

- How are symbols used in mathematics?

Big Ideas

- Create equations that describe numbers or relationships.
- Solve equations and inequalities in one variable.
- Represent and solve equations and inequalities graphically.

Enduring Understandings

Creating Equations

A.CED.1 Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions.

A.CED.3 Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.

Reasoning with Equations & Inequalities

A.REI.3 Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.

A.REI.12 Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.

Mathematical Practices Focus

1. Make sense of problems and persevere in solving them. Lessons 0-1, 1-8, 2-4, 3-4, 4-5, 5-4, 6-4, 7-5, 8-8, 9-3, 10-5, 11-1, 12-4

2. Reason abstractly and quantitatively. Lessons 1-3, 2-1, 3-3, 4-1, 5-1, 6-5, 7-2, 8-5, 9-1, 10-3, 11-8, 12-2
3. Construct viable arguments and critique the reasoning of others. Lessons 1-3, 2-5, 3-5, 4-2, 5-5, 6-1, 7-4, 8-1, 9-2, 10-4, 11-2, 12-1
4. Model with mathematics. Lessons 1-1, 2-9, 3-2, 4-5, 5-1, 6-5, 7-6, 8-7, 9-7, 10-4, 11-7, 12-5
5. Use appropriate tools strategically. Lessons 1-7, 2-4, 3-2, 4-4, 5-6, 6-1, 7-5, 8-2, 9-6, 10-6, 11-8, 12-3
6. Attend to precision. Lessons 1-3, 2-8, 3-4, 4-2, 5-2, 6-6, 7-4, 8-9, 9-5, 10-1, 11-6, 12-2
7. Look for and make use of structure. Lessons 1-2, 2-5, 3-6, 4-1, 5-5, 6-3, 7-7, 8-6, 9-6, 10-2, 11-2, 12-8
8. Look for and express regularity in repeated reasoning. Lessons 1-4, 2-7, 3-1, 4-1, 5-4, 6-1, 7-1, 8-4, 9-3, 10-2, 11-5, 12-6