

Algebra I



Unit 4: Systems of Equations and Inequalities

Algebra I Curriculum

Power Objective

P.O. #4: Solve systems of linear equations and inequalities. ([P.O.# 4 Proficiency Rubric](#))

Academic Vocabulary

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| <ul style="list-style-type: none"><input type="checkbox"/> consistent<input type="checkbox"/> dependent<input type="checkbox"/> elimination method<input type="checkbox"/> inconsistent<input type="checkbox"/> independent<input type="checkbox"/> linear inequality<input type="checkbox"/> solutions of an inequality | <ul style="list-style-type: none"><input type="checkbox"/> solutions of a system of linear equations<input type="checkbox"/> solutions of a system of linear inequalities<input type="checkbox"/> substitution method<input type="checkbox"/> system of linear equations<input type="checkbox"/> systems of linear inequalities<input type="checkbox"/> constraints |
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Enduring Understandings

Students understand that...

- Solve an equation is the process of rewriting the equation to make what it says about its variable(s) as simple as possible. Properties of numbers and equality can be used to transform an equation (or inequality) into equivalent, simpler equations (or inequalities) in order to finish solutions. Useful information about equations and inequalities (including solutions) can be found by analyzing graphs or tables. The number and types of solutions vary predictable, based on the type of equation.
- Many real-world mathematical problems can be represented algebraically. These representations can lead to algebraic solutions. A function that models a real-world situation can then be used to make estimates or predictions about future occurrences

Essential Questions

- How can you solve a system of equations or inequalities?
- How can systems of equations model real-world situations?