

Mathematics
Algebra 1: Part 2
Unit 2: Systems of Equations and Inequalities

Essential Understandings	<ul style="list-style-type: none"> ▪ Solving systems of equations and inequalities is a very important Algebraic skill.
Essential Questions	<ul style="list-style-type: none"> ▪ How do you solve systems by graphing? ▪ How do you solve systems by substitution? ▪ How do you solve systems by linear combinations? ▪ How do you solve special types of linear systems?
Essential Knowledge	<ul style="list-style-type: none"> ▪ Systems will be solved by graphing. ▪ Systems will be solved using substitution. ▪ Systems will be solved by linear combinations. ▪ Special types of linear systems will be solved.
Vocabulary	<ul style="list-style-type: none"> ▪ <u>Terms:</u> <ul style="list-style-type: none"> ○ systems of linear equations, solution of a linear system, point of intersection, graph-and-check method, substitution method, linear combination method, no solution systems, identity (infinitely many) solutions
Essential Skills	<ul style="list-style-type: none"> ▪ Solve systems by graphing. ▪ Solve systems by substitution. ▪ Solve systems by linear combinations. ▪ Solve special types of linear systems.
Related Maine Learning Results	<p><u>Mathematics</u> D. Algebra Symbols and Expressions D1.Students understand and use polynomials and expressions with rational exponents.</p> <ol style="list-style-type: none"> a. Simplify expressions including those with rational numbers. b. Add, subtract, and multiply polynomials. c. Factor the common term out of polynomial expressions. d. Divide polynomials by $(ax+b)$. <p>Equations and Inequalities D2.Students solve families of equations and inequalities.</p> <ol style="list-style-type: none"> a. Solve systems of linear equations and inequalities in two unknowns and interpret their graphs. f. Explain why the coordinates of the point of intersection of the lines represented by a system of equations is its solution and apply this understanding to solving problems.
Sample Lessons And Activities	<ul style="list-style-type: none"> ▪ Students will orally respond to questions. ▪ Students will utilize worksheets and their notes to demonstrate individual understanding of the concepts.

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Sample Classroom Assessment Methods	<ul style="list-style-type: none">▪ Quizzes▪ Take-home worksheets▪ Tests
Sample Resources	<ul style="list-style-type: none">▪ <u>Publications:</u><ul style="list-style-type: none">○ <u>Algebra 1 Concepts and Skills</u> - McDougal - Littell