

Mathematics
Algebra 1: CP
Unit 7: 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? ▪ How do you solve systems of inequalities?
Essential Knowledge	<ul style="list-style-type: none"> ▪ Systems can be solved by graphing. ▪ Systems can be solved using substitution. ▪ Systems can be solved by linear combinations. ▪ Special types of linear systems can be solved. ▪ Systems of inequalities can 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. ▪ Solve systems of inequalities.
Related Maine Learning Results	<p><u>Mathematics</u> D. Algebra Functions and Relations D4.Students understand and interpret the characteristics of functions using graphs, tables, and algebraic techniques.</p> <ol style="list-style-type: none"> a. Recognize the graphs and sketch graphs of the basic functions. b. Apply functions from these families to problem situations. c. Use concepts such as domain, range, zeros, intercepts, and maximum and minimum values. d. Use the concepts of average rate of change (table of values) and increasing and decreasing over intervals, and use these characteristics to compare functions. <p>D5.Students express relationships recursively and use iterative methods to solve problems.</p> <ol style="list-style-type: none"> a. Express the (n+1)st term in terms of the nth term and describe relationships in terms of starting point and rule followed to transform one terms to the next. b. Use technology to perform repeated calculations to develop solutions to real life problems involving linear, exponential,

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	and other patterns of change.
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Sample Lessons And Activities	<ul style="list-style-type: none">▪ Students will orally respond to questions.▪ Students will utilize worksheets and in their notes to demonstrate individual understanding of the concepts.
Sample Classroom Assessment Methods	<ul style="list-style-type: none">▪ Evaluate homework.▪ Quizzes.▪ Chapter test.
Sample Resources	<ul style="list-style-type: none">▪ <u>Publications:</u><ul style="list-style-type: none">○ <u>Algebra 1</u> -McDougall Littell