

Mathematics
Topics in Algebra and Geometry
Unit 3: Solving Linear Functions

Essential Understandings	Solving linear functions is one of the major skills necessary to be successful in Algebra 1.
Essential Questions	- What is a solution off an equation? - How do you solve algebraic equations? - How do you solve and use formulas? - How do you use ratios and rates to solve real life problems? - How do you solve percentage problems?
Essential Knowledge	- An equation has a solution. - A ratio is a comparison of two numbers. - Percentage means part of 100. - Percentage problems can be solved using a proportion.
Vocabulary	<u>Terms:</u> - equation, linear equations, formulas, ratios, rates, percent, percent equations
Essential Skills	- Identify solutions of equations. - Solve algebraic equations. - Solve and use formulas. - Use ratios and rates to solve real life problems. - Solve percentage problems.
Related Maine Learning Results	<u>Mathematics</u> D. Algebra Symbols and Expressions D1.Students understand and use polynomials and expressions with rational exponents. 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 $(ax+b)$.
Sample Lessons And Activities	Students will work in pairs on worksheets that require ratios and proportions to solve word problems.
Sample Classroom Assessment Methods	Students will present their solutions to check for understanding and accuracy.
Sample Resources	<u>Publications:</u> <u>Algebra 1 Textbook</u> (McDougall Littell)