Mathematics **Brunswick School Department**

Algebra 1: Academic
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 of an equation? ▪ How do you solve complex 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? ▪ How do you solve absolute-value equations?
Essential Knowledge	▪ Solutions of equations are what make equations true. ▪ Ratios can be written in three different ways. ▪ Ratios and rates can be used to solve real life problems. ▪ The definition of percentage is parts per hundred. ▪ Absolute value equations can be solved.
Vocabulary	▪ Terms: o equation, linear equations, formulas, ratios, rates, percent, percent equations, absolute value 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. ▪ Solve absolute-value equations.
Related Maine Learning Results	Mathematics B. Data Measurement and Approximation B1. Students understand the relationship between precision and accuracy. a. Express answers to a reasonable degree of precision in the context of a given problem. D. Algebra Symbols and Expressions D1. Students understand and use polynomials and expressions with rational exponents. a. Simplify expressions including those with rational numbers. Equations and Inequalities D2. Students solve families of equations and inequalities. d. Solve absolute value equations and inequalities and interpret the results.
Sample Lessons And Activities	▪ Students will orally respond to questions. ▪ Students will utilize worksheets and in their notes to demonstrate individual understanding of the concepts.

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Sample Classroom Assessment Methods	▪ Quizzes ▪ Take-home worksheets ▪ Tests
Sample Resources	▪ Publications: o Algebra -Foerster