

Mathematics
Algebra 1: Part 2
Unit 1: Solving and Graphing Linear Inequalities

Essential Understandings	<ul style="list-style-type: none"> ▪ Solving and graphing linear inequalities is a very important Algebraic skill.
Essential Questions	<ul style="list-style-type: none"> ▪ How do you solve inequalities using addition and subtraction? ▪ How do you solve inequalities using multiplication and division? ▪ How do you solve multi-step inequalities? ▪ How do you solve inequalities with “and” or “or.”? ▪ How do you solve absolute-value equations?
Essential Knowledge	<ul style="list-style-type: none"> ▪ Inequalities can be solved by addition and subtraction. ▪ Inequalities can be solved by multiplying and dividing. ▪ Multi-step equalities will be solved. ▪ Inequalities involving “and” and “or” will be solved. ▪ Absolute value equations will be solved.
Vocabulary	<ul style="list-style-type: none"> ▪ <u>Terms:</u> <ul style="list-style-type: none"> ○ single step inequalities, multi-step inequalities, multiplication and division property of inequalities, graph of inequalities, compound inequalities, “AND” inequalities, “OR” inequalities
Essential Skills	<ul style="list-style-type: none"> ▪ Solve inequalities using addition and subtraction. ▪ Solve inequalities using multiplication and division. ▪ Solve multi-step inequalities. ▪ Solve inequalities with “and” or “or.” ▪ Solve absolute-value equations.
Related Maine Learning Results	<p><u>Mathematics</u></p> <p>D. Algebra</p> <p>Symbols and Expressions</p> <p>D1.Students understand and use polynomials and expressions with rational exponents.</p> <p>a. Simplify expressions including those with rational numbers.</p> <p>Equations and Inequalities</p> <p>D2.Students solve families of equations and inequalities.</p> <p>d. Solve absolute value equations and inequalities and interpret the results.</p>
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.
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

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