

**Louisiana State Core Curriculum
Algebra Standards 2005**

Content standards	Boardworks High School Algebra presentations
Number and Number Relations: Benchmarks 9-12	
N-1-H Demonstrating an understanding of the real number system; (1, 2, 4)	Classifying numbers
N-2-H Demonstrating that a number can be expressed in many forms, and selecting an appropriate form for a given situation (e.g., fractions, decimals, percents, and scientific notation); (1, 4)	Fractions, decimals and percentages Scientific notations Calculations involving scientific notation Exponent laws Radicals
N-3-H Using number sense to estimate and determine if solutions are reasonable; (2, 4)	–
N-4-H Determining whether an exact or approximate answer is necessary; (2, 3, 4)	–
N-5-H Selecting and using appropriate computational methods and tools for given situations (e.g., estimation, or exact computation using mental arithmetic, calculator, symbolic manipulator, or paper and pencil); (3)	Using graphs to solve equations Solving equations by trial and error
N-6-H Applying ratios and proportional thinking in a variety of situations (e.g., finding a missing term of a proportion); (2, 4)	Ratio Dividing in a given ratio Direct proportion Inverse proportion
N-7-H Justifying reasonableness of solutions and verifying results. (1, 2, 4)	–
Algebra: Benchmarks 9-12	
A-1-H Demonstrating the ability to translate real-world situations (e.g., distance versus time relationships, population growth, growth functions for diseases, growth of time relationships, population growth, growth functions for diseases, growth of minimum wage, auto insurance tables) into algebraic expressions, equations, and inequalities and vice versa; (1, 2, 4)	Exponents Zero, negative and fractional exponents The laws of logarithms Solving equations involving logarithms Exponentials and logarithms Exponential growth and decay Compound percentages

<p>A-2-H Recognizing the relationship between operations involving real numbers and operations involving algebraic equations; (2, 4)</p>	<p>Equations, formulas and identities Solving linear equations Equations with parentheses and fractions Using equations to solve problems</p>
<p>A-3-H Using tables and graphs as tools to interpret algebraic expressions, equations, and inequalities; (1, 3)</p>	<p>Inequalities Solving linear inequalities Inequalities and regions Inequalities in two variables Quadratic inequalities Systems of equations and graphs Systems of linear and quadratic equations Using graphs to solve equations Linear graphs Slopes and intercepts Parallel and perpendicular lines Real life graphs Graphs of important non-linear functions</p>

A-4-H Solving algebraic equations and inequalities using a variety of techniques with the appropriate tools (e.g., hand-held manipulatives, graphing calculator, symbolic manipulator, or pencil and paper). (2, 3)

Inequalities
Solving linear inequalities
Inequalities and regions
Inequalities in two variables
Quadratic inequalities
Systems of equations and graphs
Systems of linear and quadratic equations
Using graphs to solve equations
The elimination method for systems of equations
The substitution method for systems of equations
Solving linear equations
Equations with parentheses and fractions
Using equations to solve problems
Multiplying parentheses
The distributive property
Factoring
Factoring quadratic expressions
Algebraic fractions