

**Content Standards for California Public Schools
correlated to
Merit Software Math Programs**

All students will attain California's mathematics academic content standards, and many will be inspired to achieve far beyond the minimum standards. These content standards establish what every student in California can and needs to learn in mathematics. These standards were revised November, 2001.

Merit's Math programs address the following California math standards:

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Grade 3

Subhead	Standard	Benchmark	Merit Software
Number Sense	1.0 Students understand the place value of whole numbers:	1.1 Count, read, and write whole numbers to 10,000.	Word Problem Shape-Up Set 1, 2, 3
Number Sense	2.0 Students calculate and solve problems involving addition, subtraction, multiplication, and division:	2.1 Find the sum or difference of two whole numbers between 0 and 10,000.	Word Problem Shape-Up Set 1, 2, 3
Number Sense	3.0 Students understand the relationship between whole numbers, simple fractions, and decimals:	3.1 Compare fractions represented by drawings or concrete materials to show equivalency and to add and subtract simple fractions in context (e.g., 1/2 of a pizza is the same amount as 2/4 of another pizza that is the same size; show that 3/8 is larger than 1/4).	Word Problem Shape-Up Set 1, 2, 3; Fraction Shape-Up
Measurement	1.0 Students choose and use appropriate units and measurement tools to quantify the properties of objects:	1.1 Choose the appropriate tools and units (metric and U.S.) and estimate and measure the length, liquid volume, and weight/mass of given objects.	Word Problem Shape-Up Set 1, 2, 3

Mathematical Reasoning	1.0 Students make decisions about how to approach problems:	1.1 Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, sequencing and prioritizing information, and observing patterns.	Word Problem Shape-Up Set 1, 2, 3
Mathematical Reasoning	2.0 Students use strategies, skills, and concepts in finding solutions:	2.1 Use estimation to verify the reasonableness of calculated results.	Word Problem Shape-Up Set 1, 2, 3
Mathematical Reasoning	3.0 Students move beyond a particular problem by generalizing to other situations:	3.1 Evaluate the reasonableness of the solution in the context of the original situation.	Word Problem Shape-Up Set 1, 2, 3

Grade 4

Subhead	Standard	Benchmark	Merit Software
Number Sense	1.0 Students understand the place value of whole numbers and decimals to two decimal places and how whole numbers and decimals relate to simple fractions. Students use the concepts of negative numbers:	1.4 Decide when a rounded solution is called for and explain why such a solution may be appropriate.	Word Problem Shape-Up Set 1, 2, 3
Number Sense	1.0 Students understand the place value of whole numbers and decimals to two decimal places and how whole numbers and decimals relate to simple fractions. Students use the concepts of negative numbers:	1.5 Explain different interpretations of fractions, for example, parts of a whole, parts of a set, and division of whole numbers by whole numbers; explain equivalents of fractions (see Standard 4.0).	Word Problem Shape-Up Set 1, 2, 3; Fraction Shape-Up
Number Sense	1.0 Students understand the place value of whole numbers and decimals to two decimal places and how whole numbers and decimals relate to simple fractions. Students use the concepts of negative numbers:	1.7 Write the fraction represented by a drawing of parts of a figure; represent a given fraction by using drawings; and relate a fraction to a simple decimal on a number line.	Word Problem Shape-Up Set 1, 2, 3; Fraction Shape-Up

Measurement and Geometry	1.0 Students understand perimeter and area:	1.4 Understand and use formulas to solve problems involving perimeters and areas of rectangles and squares. Use those formulas to find the areas of more complex figures by dividing the figures into basic shapes.	Word Problem Shape-Up Set 1, 2, 3
Mathematical Reasoning	1.0 Students make decisions about how to approach problems:	1.1 Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, sequencing and prioritizing information, and observing patterns.	Word Problem Shape-Up Set 1, 2, 3
Mathematical Reasoning	2.0 Students use strategies, skills, and concepts in finding solutions:	2.3 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning.	Word Problem Shape-Up Set 1, 2, 3
Mathematical Reasoning	2.0 Students use strategies, skills, and concepts in finding solutions:	2.4 Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work.	Word Problem Shape-Up Set 1, 2, 3

Grade 5

Subhead	Standard	Benchmark	Merit Software
Number Sense	1.0 Students compute with very large and very small numbers, positive integers, decimals, and fractions and understand the relationship between decimals, fractions, and percents. They understand the relative magnitudes of numbers:	1.1 Estimate, round, and manipulate very large (e.g., millions) and very small (e.g., thousandths) numbers; 1.2 Interpret percents as a part of a hundred; find decimal and percent equivalents for common fractions and explain why they represent the same value; compute a given percent of a whole number; 1.3 Understand and compute positive integer powers of nonnegative integers; compute examples as repeated multiplication; 1.5 Identify and represent on a number line decimals, fractions, mixed numbers, and positive and negative integers.	Word Problem Shape-Up Set 1, 2, 3; Fraction Shape-Up

Number Sense	2.0 Students perform calculations and solve problems involving addition, subtraction, and simple multiplication and division of fractions and decimals:	2.3 Solve simple problems, including ones arising in concrete situations, involving the addition and subtraction of fractions and mixed numbers (like and unlike denominators of 20 or less), and express answers in the simplest form. 2.5 Compute and perform simple multiplication and division of fractions and apply these procedures to solving problems.	Word Problem Shape-Up Set 1, 2, 3; Fraction Shape-Up
Measurement and Geometry	1.0 Students understand and compute the volumes and areas of simple objects:	1.1 Derive and use the formula for the area of a triangle and of a parallelogram by comparing it with the formula for the area of a rectangle	Word Problem Shape-Up Set 1, 2, 3
Statistics, Data Analysis, and Probability	1.0 Students display, analyze, compare, and interpret different data sets, including data sets of different sizes:	1.1 Know the concepts of mean, median, and mode; compute and compare simple examples to show that they may differ.	Word Problem Shape-Up Set 1
Statistics, Data Analysis, and Probability	1.0 Students display, analyze, compare, and interpret different data sets, including data sets of different sizes:	1.2 Organize and display single-variable data in appropriate graphs and representations (e.g., histogram, circle graphs) and explain which types of graphs are appropriate for various data sets.	Word Problem Shape-Up Set 1
Statistics, Data Analysis, and Probability	1.0 Students display, analyze, compare, and interpret different data sets, including data sets of different sizes:	1.3 Use fractions and percentages to compare data sets of different sizes.	Word Problem Shape-Up Set 1; Fraction Shape-Up
Statistics, Data Analysis, and Probability	1.0 Students display, analyze, compare, and interpret different data sets, including data sets of different sizes:	1.4 Identify ordered pairs of data from a graph and interpret the meaning of the data in terms of the situation depicted by the graph.	Word Problem Shape-Up Set 1
Statistics, Data Analysis, and Probability	1.0 Students display, analyze, compare, and interpret different data sets, including data sets of different sizes:	1.5 Know how to write ordered pairs correctly; for example, (x, y) .	Word Problem Shape-Up Set 1

Mathematical Reasoning	1.0 Students make decisions about how to approach problems:	1.1 Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, sequencing and prioritizing information, and observing patterns.	Word Problem Shape-Up Set 1
Mathematical Reasoning	2.0 Students use strategies, skills, and concepts in finding solutions:	2.5 Indicate the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy.	Word Problem Shape-Up Set 1
Mathematical Reasoning	3.0 Students move beyond a particular problem by generalizing to other situations:	3.1 Evaluate the reasonableness of the solution in the context of the original situation.	Word Problem Shape-Up Set 1, 2, 3

Grade 6

Subhead	Standard	Benchmark	Merit Software
Number Sense	1.0 Students compare and order positive and negative fractions, decimals, and mixed numbers. Students solve problems involving fractions, ratios, proportions, and percentages:	1.1 Compare and order positive and negative fractions, decimals, and mixed numbers and place them on a number line; 1.4 Calculate given percentages of quantities and solve problems involving discounts at sales, interest earned, and tips.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Number Sense	2.0 Students calculate and solve problems involving addition, subtraction, multiplication, and division:	2.1 Solve problems involving addition, subtraction, multiplication, and division of positive fractions and explain why a particular operation was used for a given situation. 2.2 Explain the meaning of multiplication and division of positive fractions and perform the calculations (e.g., $5/8 \div 15/16 = 5/8 \times 16/15 = 2/3$).	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2

Algebra and Functions	1.0 Students write verbal expressions and sentences as algebraic expressions and equations; they evaluate algebraic expressions, solve simple linear equations, and graph and interpret their results:	1.1 Write and solve one-step linear equations in one variable. 1.3 Apply algebraic order of operations and the commutative, associative, and distributive properties to evaluate expressions; and justify each step in the process. 1.4 Solve problems manually by using the correct order of operations or by using a scientific calculator.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Algebra and Functions	2.0 Students analyze and use tables, graphs, and rules to solve problems involving rates and proportions:	2.1 Convert one unit of measurement to another (e.g., from feet to miles, from centimeters to inches); 2.2 Demonstrate an understanding that rate is a measure of one quantity per unit value of another quantity; 2.3 Solve problems involving rates, average speed, distance, and time.	Basic Algebra Shape-Up Set 1 & 2
Statistics, Data Analysis, and Probability	1.0 Students compute and analyze statistical measurements for data sets:	1.1 Compute the range, mean, median, and mode of data sets; 1.4 Know why a specific measure of central tendency (mean, median, mode) provides the most useful information in a given context.	Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Statistics, Data Analysis, and Probability	2.0 Students use data samples of a population and describe the characteristics and limitations of the samples:	3.1 Evaluate the reasonableness of the solution in the context of the original situation.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Mathematical Reasoning	2.0 Students use strategies, skills, and concepts in finding solutions:	2.4 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1
Mathematical Reasoning	2.0 Students use strategies, skills, and concepts in finding solutions:	2.6 Indicate the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1

Grade 7

Subhead	Standard	Benchmark	Merit Software
Number Sense	1.0 Students know the properties of, and compute with, rational numbers expressed in a variety of forms:	1.2 Add, subtract, multiply, and divide rational numbers (integers, fractions and terminating decimals) and take positive rational numbers to whole-number powers.	Word Problem Shape-Up Set 1, 2, 3; Basic Algebra Shape-Up Set 1 & 2
Number Sense	1.0 Students know the properties of, and compute with, rational numbers expressed in a variety of forms:	1.3 Convert fractions to decimals and percents and use these representations in estimations, computations, and applications	Word Problem Shape-Up Set 1, 2, 3; Basic Algebra Shape-Up Set 1 & 2
Number Sense	1.0 Students know the properties of, and compute with, rational numbers expressed in a variety of forms:	1.7 Solve problems that involve discounts, markups, commissions, and profit and compute simple and compound interest.	Word Problem Shape-Up Set 1, 2, 3; Basic Algebra Shape-Up Set 1 & 2
Number Sense	2.0 Students use exponents, powers, and roots and use exponents in working with fractions:	2.1 Understand negative whole-number exponents. Multiply and divide expressions involving exponents with a common base 2.3 Add and subtract fractions by using factoring to find common denominators.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Number Sense	2.0 Students use exponents, powers, and roots and use exponents in working with fractions:	2.2 Add and subtract fractions by using factoring to find common denominators.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Algebra and Functions	1.0 Students express quantitative relationships by using algebraic terminology, expressions, equations, inequalities, and graphs:	1.1 Use variables and appropriate operations to write an expression, an equation, an inequality, or a system of equations or inequalities that represents a verbal description (e.g., three less than a number, half as large as area A).	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Algebra and Functions	1.0 Students express quantitative relationships by using algebraic terminology, expressions, equations, inequalities, and graphs:	1.2 Use the correct order of operations to evaluate algebraic expressions such as $3(2x+5)^2$.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Algebra and Functions	1.0 Students express quantitative relationships by using algebraic terminology, expressions, equations, inequalities, and graphs:	1.3 Simplify numerical expressions by applying properties of rational numbers (e.g., identify, inverse, distributive, associative, commutative) and justify the process used.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2

Algebra and Functions	1.0 Students express quantitative relationships by using algebraic terminology, expressions, equations, inequalities, and graphs:	1.4 Use algebraic terminology (e.g., variable, equation, term, coefficient, inequality, expression constant) correctly;	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Algebra and Functions	1.0 Students express quantitative relationships by using algebraic terminology, expressions, equations, inequalities, and graphs:	1.5 Represent quantitative relationships graphically and interpret the meaning of a specific part of a graph in the situation represented by the graph.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Algebra and Functions	2.0 Students interpret and evaluate expressions involving integer powers and simple roots:	2.1 Interpret positive whole-number powers as repeated multiplication and negative whole-number powers as repeated division or multiplication by the multiplicative inverse. Simplify and evaluate expressions that include exponents.	Basic Algebra Shape-Up Set 1
Algebra and Functions	2.0 Students interpret and evaluate expressions involving integer powers and simple roots:	2.2 Multiply and divide monomials; extend the process of taking powers and extracting roots to monomials when the latter results in a monomial with an integer exponent.	Basic Algebra Shape-Up Set 1
Algebra and Functions	3.0 Students graph and interpret linear and some nonlinear functions:	3.1 Graph functions of the form $y=nx^2$ and $y=nx^3$ and use in solving problems	Pre-Algebra Shape-Up; Basic Algebra Shape-Up
Algebra and Functions	3.0 Students graph and interpret linear and some nonlinear functions:	3.2 Plot the values from the volumes of three-dimensional shapes for various values of the edge lengths (e.g., cubes with varying edge lengths or a triangle prism with a fixed height and an equilateral triangle base of varying lengths).	Pre-Algebra Shape-Up; Basic Algebra Shape-Up
Algebra and Functions	3.0 Students graph and interpret linear and some nonlinear functions:	3.3 Graph linear functions, noting that the vertical change (change in y-value) per unit of horizontal change (change in x-value) is always the same and know that the ratio ("rise over run") is called the slope of a graph.	Pre-Algebra Shape-Up; Basic Algebra Shape-Up
Algebra and Functions	3.0 Students graph and interpret linear and some nonlinear functions:	3.4 Plot the values of quantities whose ratios are always the same (e.g., cost to the number of an item, feet to inches, circumference to diameter of a circle). Fit a line to the plot and understand that the slope of the line equals the quantities.	Pre-Algebra Shape-Up; Basic Algebra Shape-Up

Algebra and Functions	4.0 Students solve simple linear equations and inequalities over the rational numbers:	4.1 Solve two-step linear equations and inequalities in one variable over the rational numbers, interpret the solution or solutions in the context from which they arose, and verify the reasonableness of the results.	Basic Algebra Shape-Up Set 1
Algebra and Functions	4.0 Students solve simple linear equations and inequalities over the rational numbers:	4.2 Solve multistep problems involving rate, average speed, distance, and time or a direct variation.	Basic Algebra Shape-Up Set 1
Algebra and Functions	4.0 Students solve simple linear equations and inequalities over the rational numbers:	1.2 Organize and display single-variable data in appropriate graphs and representations (e.g., histogram, circle graphs) and explain which types of graphs are appropriate for various data sets.	Basic Algebra Shape-Up Set 1
Algebra and Functions	4.0 Students solve simple linear equations and inequalities over the rational numbers:	1.3 Use fractions and percentages to compare data sets of different sizes.	Basic Algebra Shape-Up Set 1
Algebra and Functions	4.0 Students solve simple linear equations and inequalities over the rational numbers:	1.4 Identify ordered pairs of data from a graph and interpret the meaning of the data in terms of the situation depicted by the graph.	Basic Algebra Shape-Up Set 1
Algebra and Functions	4.0 Students solve simple linear equations and inequalities over the rational numbers:	1.5 Know how to write ordered pairs correctly; for example, (x, y).	Basic Algebra Shape-Up Set 1
Measurement and Geometry	1.0 Students choose appropriate units of measure and use ratios to convert within and between measurement systems to solve problems:	1.1 Compare weights, capacities, geometric measures, times, and temperatures within and between measurement systems (e.g., miles per hour and feet per second, cubic inches to cubic centimeters). 1.2 Construct and read drawings and models made to scale. 1.3 Use measures expressed as rates (e.g., speed, density) and measures expressed as products (e.g., person-days) to solve problems; check the units of the solutions; and use dimensional analysis to check the reasonableness of the answer.	Word Problem Shape-Up Set 1; Pre-Algebra Shape-Up

Measurement and Geometry	2.0 Students compute the perimeter, area, and volume of common geometric objects and use the results to find measures of less common objects. They know how perimeter, area, and volume are affected by changes of scale:	2.1 Use formulas routinely for finding the perimeter and area of basic two-dimensional figures and the surface area and volume of basic three-dimensional figures, including rectangles, parallelograms, trapezoids, squares, triangles, circles, prisms, and cylinders.	Word Problem Shape-Up Set 1
Measurement and Geometry	2.0 Students compute the perimeter, area, and volume of common geometric objects and use the results to find measures of less common objects. They know how perimeter, area, and volume are affected by changes of scale:	2.2 Estimate and compute the area of more complex or irregular two-and three-dimensional figures by breaking the figures down into more basic geometric objects.	Word Problem Shape-Up Set 1
Measurement and Geometry	2.0 Students compute the perimeter, area, and volume of common geometric objects and use the results to find measures of less common objects. They know how perimeter, area, and volume are affected by changes of scale:	2.3 Compute the length of the perimeter, the surface area of the faces, and the volume of a three-dimensional object built from rectangular solids. Understand that when the lengths of all dimensions are multiplied by a scale factor, the surface area is multiplied by the square of the scale factor and the volume is multiplied by the cube of the scale factor.	Word Problem Shape-Up Set 1
Measurement and Geometry	2.0 Students compute the perimeter, area, and volume of common geometric objects and use the results to find measures of less common objects. They know how perimeter, area, and volume are affected by changes of scale:	2.4 Relate the changes in measurement with a change of scale to the units used (e.g., square inches, cubic feet) and to conversions between units (1 square foot = 144 square inches or $[1 \text{ ft}]^2 = [144 \text{ in}]^2$, 1 cubic inch is approximately 16.38 cubic centimeters or $[1 \text{ in}]^3 = [16.38 \text{ cm}]^3$).	Word Problem Shape-Up Set 1
Measurement and Geometry	3.0 Students know the Pythagorean theorem and deepen their understanding of plane and solid geometric shapes by constructing figures that meet given conditions and by identifying attributes of figures:	3.1 Evaluate the reasonableness of the solution in the context of the original situation.	Word Problem Shape-Up Set 1, 2, 3; Basic Algebra Shape-Up Set 1 & 2
Mathematical Reasoning	2.0 Students use strategies, skills, and concepts in finding solutions:	2.1 Use estimation to verify the reasonableness of calculated results.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2

Mathematical Reasoning	2.0 Students use strategies, skills, and concepts in finding solutions:	2.2 Apply strategies and results from simpler problems to more complex problems.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Mathematical Reasoning	2.0 Students use strategies, skills, and concepts in finding solutions:	2.3 Estimate unknown quantities graphically and solve for them by using logical reasoning and arithmetic and algebraic techniques.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Mathematical Reasoning	2.0 Students use strategies, skills, and concepts in finding solutions:	2.4 Make and test conjectures by using both inductive and deductive reasoning.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Mathematical Reasoning	2.0 Students use strategies, skills, and concepts in finding solutions:	2.5 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Mathematical Reasoning	2.0 Students use strategies, skills, and concepts in finding solutions:	2.6 Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Mathematical Reasoning	2.0 Students use strategies, skills, and concepts in finding solutions:	2.7 Indicate the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Mathematical Reasoning	2.0 Students use strategies, skills, and concepts in finding solutions:	2.8 Make precise calculations and check the validity of the results from the context of the problem.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Mathematical Reasoning	3.0 Students determine a solution is complete and move beyond a particular problem by generalizing to other situations:	3.1 Evaluate the reasonableness of the solution in the context of the original situation.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Mathematical Reasoning	3.0 Students determine a solution is complete and move beyond a particular problem by generalizing to other situations:	3.2 Note the method of deriving the solution and demonstrate a conceptual understanding of the derivation by solving similar problems.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Mathematical Reasoning	3.0 Students determine a solution is complete and move beyond a particular problem by generalizing to other situations:	3.3 Develop generalizations of the results obtained and the strategies used and apply them to new problem situations.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2

Grades 8-12

Subhead	Standard	Benchmark	Merit Software
Algebra I	1.0 Students identify and use the arithmetic properties of subsets of integers and rational, irrational, and real numbers, including closure properties for the four basic arithmetic operations where applicable:	1.1 Students use properties of numbers to demonstrate whether assertions are true or false.	Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Algebra I	2.0 Students understand and use such operations as taking the opposite, finding the reciprocal, taking a root, and raising to a fractional power. They understand and use the rules of exponents.	no benchmark	Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Algebra I	4.0 Students simplify expressions before solving linear equations and inequalities in one variable, such as $3(2x-5) + 4(x-2) = 12$.	no benchmark	Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Algebra I	5.0 Students solve multistep problems, including word problems, involving linear equations and linear inequalities in one variable and provide justification for each step.	no benchmark	Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Algebra I	6.0 Students graph a linear equation and compute the x- and y-intercepts (e.g., graph $2x + 6y = 4$). They are also able to sketch the region defined by linear inequality (e.g., they sketch the region defined by $2x + 6y < 4$).	no benchmark	Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2