

SEVENTH GRADE

September State Goals For Math

6.7.03	Recognize, translate between, and apply multiple representations of rational numbers (decimals, fractions, mixed numbers, and percents less than 100%).
6.7.05	Order and compare integers, terminating decimals, fractions, and mixed numbers.
6.7.06	Identify and locate integers, decimals, and fractions/mixed numbers on a number line, and estimate the locations of square roots.
6.7.08	Solve problems and number sentences involving addition, subtraction, multiplication, and division using integers, fractions, and decimals.
6.7.09	Identify and apply order of operations to simplify numeric expressions involving whole numbers (including exponents), fractions, and decimals.
10.7.01	Read, interpret, and make predictions from data represented in a bar graph, line (dot) plot, Venn diagram (with two circles), chart/table, line graph, scatterplot, circle graph, or histogram.
10.7.02	Compare different representations of the same data.
10.7.03	Create a bar graph, chart/table, line graph, or circle graph for a given set of data.
10.7.04	Identify a reasonable approximation of the line of best fit from a set of data or a scatter plot.
10.7.05	Determine and use the mode, range, median, and mean to interpret data.

SEVENTH GRADE	
October State Goals For Math	
6.7.01	Read, write, and recognize equivalent representations of positive powers of 10.
6.7.02	Read, write, recognize, model, and interpret integers, including translating numerical expressions.
6.7.04	Represent repeated factors using exponents.
6.7.06	Identify and locate integers, decimals, and fractions/mixed numbers on a number line, and estimate the locations of square roots.
6.7.07	Solve problems involving descriptions of numbers, including characteristics and relationships (e.g., square numbers, prime/composite, prime factorization, greatest common factor, least common multiple).
6.7.08	Solve problems and number sentences involving addition, subtraction, multiplication, and division using integers, fractions, and decimals.
6.7.09	Identify and apply order of operations to simplify numeric expressions involving whole numbers (including exponents), fractions, and decimals.
6.7.13	Estimate the square root of a number less than 1,000 between two whole numbers (e.g., $\sqrt{41}$ is between 6 and 7)
8.7.01	Determine a missing term in a sequence, extend a sequence, and construct and identify a rule that can generate the terms of an arithmetic or geometric sequence.
8.7.05	Evaluate or simplify algebraic expressions with one or more integer variable values (e.g., $a^2 + b$ for $a = 3$ and $b = -4$).

SEVENTH GRADE	
November State Goals For Math	
6.7.12	Make estimates appropriate to a given situation, and analyze what effect the estimation method used has on the accuracy of results.
6.7.14	Create and explain ratios that represent a given situation.
6.7.15	Use proportional reasoning to model and solve problems.
6.7.16	Read, write, recognize, model, and interpret percents from 0% to 100%.
6.7.17	Solve number sentences and problems involving fractions, decimals, and percents (e.g., 50% of 10 is the same as $\frac{1}{2}$ of 10 is the same as 0.5×10 , sales tax, tips, interest, discounts).
9.7.12	Recognize which attributes (such as shape, perimeter, and area) change or don't change when plane figures are composed, decomposed, or rearranged.
9.7.13	Describe the difference between congruence and similarity.
9.7.14	Determine if figures are similar, and identify relationships between corresponding parts of similar figures.

SEVENTH GRADE	
December State Goals For Math	
6.7.02	Read, write, recognize, model, and interpret integers, including translating numerical expressions.
6.7.05	Order and compare integers, terminating decimals, fractions, and mixed numbers.
6.7.06	Identify and locate integers, decimals, and fractions/mixed numbers on a number line, and estimate the locations of square roots.
6.7.08	Solve problems and number sentences involving addition, subtraction, multiplication, and division using integers, fractions, and decimals.
7.7.06	Solve problems involving scale drawings and maps.
9.7.05	Graph points and identify coordinates of points on the Cartesian coordinate plane (all four quadrants).
9.7.15	Determine the distance between two points on a horizontal or vertical number line.

SEVENTH GRADE	
January State Goals For Math	
6.7.11	Demonstrate and apply the relationships between addition/subtraction and multiplication/division with rational numbers.
8.7.02	Write an expression using variables to represent unknown quantities.
8.7.03	Simplify algebraic expressions by identifying and combining like terms.
8.7.04	Recognize equivalent forms of algebraic expressions.
8.7.11	Solve linear equations in one variable (e.g., $2x + 3 = 13$) and inequalities involving $<$ or $>$ (e.g., $2x < 6$, $x + 7 > 10$).

SEVENTH GRADE

February State Goals For Math

6.7.10	Identify and apply the following properties of operations with rational numbers: ·the commutative and associative properties for addition and multiplication; ·the distributive property; ·the additive and multiplicative identity properties; ·the additive and multiplicative inverse properties; and ·the multiplicative property of zero.
8.7.06	Determine how a change in one variable relates to a change in a second variable.
8.7.07	Represent linear equations and quantitative relationships on a rectangular coordinate system, and interpret the meaning of a specific part of a graph.
8.7.08	Translate between different representations (table, written, graphical, or pictorial) of whole number relationships and linear expressions.
8.7.09	Identify, graph, and interpret inequalities on a number line.
8.7.10	Represent and analyze problems with linear equations and inequalities.
8.7.11	Solve linear equations in one variable (e.g., $2x + 3 = 13$) and inequalities involving $<$ or $>$ (e.g., $2x < 6$, $x + 7 > 10$).
8.7.12	Solve word problems involving unknown quantities.

SEVENTH GRADE	
March State Goals For Math	
7.7.02	Solve problems involving the perimeter and area of polygons and composite figures using diagrams, models, and grids or by measuring or using given formulas (may include sketching a figure from its description).
7.7.02	Solve problems involving the perimeter and area of polygons and composite figures using diagrams, models, and grids or by measuring or using given formulas (may include sketching a figure from its description).
7.7.04	Determine the volume and surface area of a right rectangular prism using an appropriate formula or strategy.
9.7.01	Classify, describe, and sketch regular and irregular two-dimensional shapes according to the number of sides, length of sides, number of vertices, and interior angles.
9.7.02	Solve problems involving two- and three-dimensional shapes.
9.7.03	Solve problems using properties of triangles and quadrilaterals (e.g., opposite sides of a parallelogram are congruent).
9.7.04	Identify, describe, and determine the radius and diameter of a circle.
9.7.06	Represent and identify geometric figures using coordinate geometry.

SEVENTH GRADE	
April State Goals For Math	
7.7.01	Select and use appropriate standard units and tools to measure length, mass/weight, capacity, and angles. Sketch, with given specifications, line segments, angles, triangles, and quadrilaterals.
7.7.03	Compare and estimate length (including perimeter), area, volume, weight/mass, and angles (0° to 180°) using referents.
7.7.05	Solve problems involving unit conversions within the same measurement system for length, weight/mass, capacity, and square units (e.g., $1 \text{ ft}^2 = 144 \text{ in}^2$).
9.7.07	Analyze the results of a combination of transformations.
9.7.08	Identify or analyze relationships of angles formed by intersecting lines.
9.7.09	Identify and sketch acute, right, and obtuse angles.
9.7.10	Solve problems involving complementary and supplementary angles.
9.7.11	Identify a three-dimensional object from its net.

SEVENTH GRADE	
May State Goals For Math	
6.7.11	Demonstrate and apply the relationships between addition/subtraction and multiplication/division with rational numbers.
8.7.04	Recognize equivalent forms of algebraic expressions.
8.7.10	Represent and analyze problems with linear equations and inequalities.
8.7.11	Solve linear equations in one variable (e.g., $2x + 3 = 13$) and inequalities involving $<$ or $>$ (e.g., $2x < 6$, $x + 7 > 10$).
8.7.12	Solve word problems involving unknown quantities.
10.7.06	Solve problems involving the probability of a simple or compound event, including representing the probability as a fraction, decimal, or percent.
10.7.07	Represent all possible outcomes for simple events.
10.7.08	Solve simple problems involving the number of ways objects can be arranged (permutations and combinations).