

First Nine Weeks NEW 2016 MATH SOL	Text book Topic	Old 2009 SOL
Review Number and Number Sense from 7.1 (negative exponents, powers of 10, scientific notation, square roots, perfect squares and absolute value,	TOPIC-1 51-57 VA3A-VA6 VA1-VA2 VA7A-VA10 7A-12B 31A-36B	7.1 The student will a) investigate and describe the concept of negative exponents for powers of ten; b) determine scientific notation for numbers greater than zero; c) compare and order fractions, decimals, percents, and numbers written in scientific notation; d) determine square roots; and e) identify and describe absolute value for rational numbers.
Compare and Order Real Numbers 8.1 The student will compare and order real numbers. (Included on SOL Test from EKS – Use rational approximations of irrational numbers to compare and order real numbers --Compare and order no more than five real numbers expressed as integers, fractions, mixed numbers, decimals, percents, numbers written in scientific notation, radicals (includes positive and negative square roots), and pi)	TOPIC-1 7A-12B, 19A-4B, 74-75	8.1 The student will a) simplify numerical expressions involving positive exponents, using rational numbers, order of operations, and properties of operations with real numbers; b) compare and order decimals, fractions, percents, and numbers written in scientific notation.
Real Number System 8.2 The student will describe the relationships between the subsets of the real number system.	TOPIC-1 13A-18B 74	8.2 The student will describe orally and in writing the relationships between the subsets of the real number system.
Square Roots 8.3 The student will a) estimate and determine the two consecutive integers between which a square root lies; and b) determine both the positive and negative square roots of a given perfect square. (Determine whether a given number is a perfect square was moved to 7th grade.)	TOPIC-1 19A-24B 75	8.5 The student will a) determine whether a given number is a perfect square; and b) find the two consecutive whole numbers between which a square root lies.
Consumer Applications –Simple Interest 8.4 The student will solve practical problems involving consumer applications. (Included on the SOL test from EKS:-- Limit computing simple interest given the principal, interest rate, and time (years)	TOPIC-2 VA5A-VA8 VA9-VA12 VA13A-VA16	8.3 The student will a) solve practical problems involving rational numbers, percents, ratios, and proportions; and b) determine the percent increase or decrease for a given situation.
Variables 8.14 The student will a) evaluate an algebraic expression for given replacement values of the variables; and b) simplify algebraic expressions in one variable. Included on SOL test from EKS: -- Simplify algebraic expressions in one variable; represent algebraic expressions using concrete materials)	TOPIC-2 VA1A-VA4	8.4 The student will apply the order of operations to evaluate algebraic expressions for given replacement values of the variables.
Benchmark One	Benchmark Assessment when instruction is complete	

Second Nine Weeks NEW MATH 2016 SOL	Text book Topic	Old 2009 SOL
Independent & Dependent Variable 8.16 c) determine the independent and dependent variable, given a practical situation modeled by a linear function;	TOPIC-2 171A-176B 183A-188B 201-203	8.17 The student will identify the domain, range, independent variable, or dependent variable in a given situation.
Multistep Linear Equations 8.17 The student will solve multistep linear equations in one variable with the variable on one or both sides of the equation, including practical problems that require the solution of a multistep linear equation in one variable. Included on SOL test from EKS: -- EKS – Write verbal expressions and sentences as algebraic expressions and equations; write algebraic expressions and equations as verbal expressions and sentences – Solve multistep equations, up to four steps; coefficients and numeric terms will be rational; equations may contain expressions that need expansion using the distributive property or require combining like terms)	TOPIC-2 85A-90B 91A-96B 97A-102B 103A-110B 147-149 251 371 411	8.15 The student will a) solve multistep linear equations in one variable with the variable on one and two sides of the equation; c) identify properties of operations used to solve an equation.
Multistep Linear Inequalities 8.18 The student will solve multistep linear inequalities in one variable with the variable on one or both sides of the inequality symbol, including practical problems, and graph the solution on a number line. (Solve two-step linear inequalities and graph the results on a number line moved to 7th grade.)	TOPIC-2 VA17A-VA20	8.15 The student will b) solve two-step linear inequalities and graph the results on a number line;
Relations & Functions 8.15 The student will a) determine whether a given relation is a function; and b) determine the domain and range of a function.	TOPIC-3 159A-164B 165A-170B 202 VA21-VA22	8.17 The student will identify the domain, range, independent variable, or dependent variable in a given situation.
Probability and Statistics 8.11 The student will a) compare and contrast the probability of independent and dependent events; and b) determine probabilities for independent and dependent events.	TOPIC-4 VA29A-VA32 VA33A-VA36	8.12 The student will determine the probability of independent and dependent events with and without replacement.
Pythagorean Theorem 8.9 The student will a) verify the Pythagorean Theorem; and b) apply the Pythagorean Theorem.	TOPIC-7 381A-386B 387A-392B 395A-400B 401A-406B	8.10 The student will a) verify the Pythagorean Theorem; and b) apply the Pythagorean Theorem.
BENCHMARK TWO	Benchmark Assessment when instruction is complete	

Third Nine Weeks NEW MATH 2016 SOL	Text book Topic, PAGE	Old 2009 SOL
SLOPE 8.16 The student will a) recognize and describe the graph of a linear function with a slope that is positive, negative, or zero; b) identify the slope and y -intercept of a linear function given a table of values, a graph, or an equation in $y = mx + b$ form; c) determine the independent and dependent variable, given a practical situation modeled by a linear function; d) graph a linear function given the equation in $y = mx + b$ form; and e) make connections between and among representations of a linear function using verbal descriptions, tables, equations, and graphs.	TOPIC-2 141A-146B 152 171A-176B 183A-188B 201-203 135A-140B	8.14 The student will make connections between any two representations (tables, graphs, words, and rules) of a given relationship. [Included in 8.15a EKS and 8.16e]
Angle Relationships 8.5 The student will use the relationships among pairs of angles that are vertical angles, adjacent angles, supplementary angles, and complementary angles to determine the measure of unknown angles. (Measure angles of less than 360° omitted.) (Included on SOL test from EKS:--Use the relationship between pairs of angles that are vertical, adjacent, supplementary, and complementary to determine the measure of an unknown angle.)	TOPIC-6 VA37A-VA40	8.6 The student will a) verify by measuring and describe the relationships among vertical angles, adjacent angles, supplementary angles, and complementary angles; and b) measure angles of less than 360° .
Volume and Surface Area 8.6 The student will a) solve problems, including practical problems, involving volume and surface area of cones and square-based pyramids; and b) describe how changing one measured attribute of a rectangular prism affects the volume and surface area. (Investigate and solve practical problems involving volume and surface area of rectangular prisms, and cylinders moved to 7th	TOPIC-8 417A-422B 431A-436B 448-449 VA45A-VA48	8.7 The student will a) investigate and solve practical problems involving volume and surface area of prisms, cylinders, cones, and pyramids; and b) describe how changing one measured attribute of a figure affects the volume and surface area
Area and Perimeter 8.10 The student will solve area and perimeter problems, including practical problems, involving composite plane figures.	TOPIC-8 VA41-VA42	8.11 The student will solve practical area and perimeter problems involving composite plane figures.
Third Nine Week Benchmark	Benchmark Assessment when instruction is complete	

Fourth Nine Weeks NEW MATH 2016 SOL	Text book Topic	Old 2009 SOL
Transformations 8.7 The student will a) given a polygon, apply transformations, to include translations, reflections, and dilations, in the coordinate plane; b) identify practical applications of transformations.	TOPIC-6 297A-302B 303A-308B 309A-314B 315A-320B 333A-338B 365-368	8.8 The student will a) apply transformations to plane figures; b) identify applications of transformations.
Three-dimensional models 8.8 The student will construct a three-dimensional model, given the top or bottom, side, and front views.	TOPIC-8 VA43A-VA44	8.9 The student will construct a three-dimensional model, given the top or bottom, side, and front views.
Data --Boxplots 8.12 The student will a) represent numerical data in boxplots; b) make observations and inferences about data represented in boxplots; and c) compare and analyze two data sets using boxplots.	TOPIC-4 VA23A-VA28	
Data --Scatterplots 8.13 The student will a) represent data in scatterplots; b) make observations about data represented in scatterplots; and c) use a drawing to estimate the line of best fit for data represented in a scatterplot	TOPIC-4 211A-216B 217A-222B 223A-228B 247-249	8.13 The student will a) make comparisons, predictions, and inferences, using information displayed in graphs; and b) construct and analyze scatterplots.
END OF FOURTH NINE-WEEKS NO BENCHMARK ASSESSMENT	Use Formative Assessment to acquire data concerning student understanding ... REVIEW FOR SOL WITH REMAINING TIME	

2018-2019 CIP PACING GUIDE FOR MATH 8

1ST QUARTER	
Standard	Bullet (s)
8.1	
8.2	
8.3	A, B
8.4	
8.14	A, B
BENCHMARK TEST	

2ND QUARTER	
Standard	Bullet (s)
8.9	A, B
8.11	A, B
8.15	A, B
8.16	
8.17	
8.18	
BENCHMARK TEST	

3RD QUARTER	
Standard	Bullet (s)
8.5	
8.6	A, B
8.7	A, B
8.8	
8.10	
8.12	A, B, C
8.13	A, B, C
BENCHMARK TEST	

4TH QUARTER	
Standard	Bullet (s)
REVIEW	
FOR	
SOL	
SOL TEST	