First Nine Weeks **NEW 2016 MATH SOL**	**Text Book Topic - Page**	**Old 2009 SOL**
Powers of 10, Perfect Squares, Absolute Value **7.1** The student will a) investigate and describe the concept of negative exponents for powers of ten; b) ***compare and order (no more than 4) numbers greater than zero written in scientific notation;** **c)** *compare and order **rational numbers;** **d)** *determine square roots of perfect squares; and e) identify and describe absolute values for rational numbers ***no calculator** **(Included on SOL test-From EKS: positive / negative as integers, proper/improper fractions, mixed numbers, decimals and percent)**	**TOPIC 1** VA3A-VA6 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. ***no calculator**
Rational Number Computation and Estimation **7.2** The student will solve practical problems involving operations with rational numbers.	**TOPIC 1** 31A-36B, 45A-50B, 57A-62B 63A-68B 76-78	
INCLUDED FROM SIXTH GRADE --INTEGERS **6.6** The student will a) model addition, subtraction, multiplication, and division of **integers**; and b)add, subtract, multiply, and divide **integers**. c) simplify numerical expressions involving **integers**	**Grade 6-Topic 2** VA1A-VA4, VA5A-VA8, VA9A-VA12 VA13A-VA16 131A-136B, 169	**7.3** The student will a) model addition, subtraction, multiplication, and division of **integers**; b) add, subtract, multiply, and divide **integers**.
REPLACEMENT **7.11** The student will evaluate algebraic expressions for given replacement values of the variables. **(Included on SOL test-From EKS: Represent using concrete materials and pictorial representations; evaluating exponents limited to 1,2,3 or 4; no braces; can include brackets and absolute value; square roots limited to perfect squares; apply properties)**	**TOPIC 4** 189A-194B, 244	**7.13** The student will a) write verbal expressions as algebraic expressions and sentences as equations and vice versa; and b) evaluate algebraic expressions for given replacement values of the variables.
BENCHMARK ONE	**Benchmark Assessment when instruction is complete …….**	

Second Nine Weeks **NEW 2016 MATH SOL**	**Text Book Topic**	**Old 2009 SOL**
Solve two-step Linear Equations **7.12** The student will solve two-step linear equations in one variable, including practical problems that require the solution of a two-step linear equation in one variable. **(Included on SOL test-From EKS: apply properties)** **(Solving one-step linear equations in one variable and practical problems moved to sixth grade)**	**TOPIC 5** 253A-258B, 259A-264B, 265A-270B, 302	**7.14** The student will a) solve one- and two-step linear equations in one variable; and b) solve practical problems requiring the solution of one- and two-step linear equations.
Solve one & two-step Inequalities **7.13** The student will solve one- and two-step linear inequalities in one variable, including practical problems, involving addition, subtraction, multiplication, and division, and graph the solution on a number line. **(Included on SOL test-from EKS: coefficients and terms are rational; apply properties)**	**TOPIC 5** 273A-278B, 279A-284B 289A-294B 303-304	**7.15** The student will a) solve one-step inequalities in one variable; and b) graph solutions to inequalities on the number line.
Slope **7.10 The student will** **a) determine the slope, *m*, as rate of change in a proportional relationship between two quantities and write an equation in the form *y* = *mx* to represent the relationship;** **b) graph a line representing a proportional relationship between two quantities given the slope and an ordered pair, or given the equation in *y* = *mx* form where *m* represents the slope as rate of change;** **c) determine the *y*-intercept, *b*, in an additive relationship between two quantities and write an equation in the form *y* = *x* + *b* to represent the relationship;** **d) graph a line representing an additive relationship between two quantities given the *y*-intercept and an ordered pair, or given the equation in the form *y* = *x* + *b*, where *b* represents the *y*-intercept; and** **e)make connections between and among representations of a proportional or additive relationship between two quantities using verbal descriptions, tables, equations, and graphs.**	**TOPIC 2** VA11A-VA14 VA15A-VA18 VA19-VA22 VA19A-VA22 VA11A-VA14 VA15A-VA18 VA19A-VA22	**7.12** The student will represent relationships with tables, graphs, rules, and words.
BENCHMARK TWO	**Benchmark Assessment when instruction is complete ……..**	

Third Nine Weeks **NEW 2016 MATH SOL**	**Text Book** **Topic, Page**	Old 2009 SOL
Proportional Reasoning **7.3** The student will solve single-step and multistep practical problems, using proportional reasoning. **(Included on SOL test-From EKS: Create and use a ratio table to determine missing values; apply proportional reasoning to convert units of measure given the conversion factor**)	**TOPIC 2, 3, 6, 8** 91A-96B, 103A-108B, 121A-126B, 137A-142B, 143A-148B, 149A-154B, 305 415A-420B	**7.4** The student will solve single-step and multistep practical problems, using proportional reasoning.
Probability **7.8** The student will **a) determine the theoretical and experimental probabilities** of an event; and b) investigate and describe the difference between the experimental probability and theoretical probability of an event.	**TOPIC 7** 355A-360B, 361A-366B, 367A-372B, 373A-378B, 403-406 405-406	**7.9** The student will investigate and describe the difference between the experimental probability and theoretical probability of an event.
Histograms, Data from Graphs **7.9** The student, given data in a practical situation, will a) represent data in a histogram; b) make observations and inferences about data represented in a histogram; and c) compare histograms with the same data represented in stem-and-leaf plots, line plots, and circle graphs. **(Included on SOL test-from EKS: no limit to number of data)**	**TOPIC 6** VA23A-VA26	**7.11** The student, given data for a practical situation, will a) construct and analyze histograms; and b) compare and contrast histograms with other types of graphs presenting information from the same data set.
BENCHMARK THREE	**Benchmark Assessment when instruction is complete ……..**	

Fourth Nine Weeks **NEW MATH 2016 SOL**	**Text Book Topic, Page**	**Old 2009 SOL**
Similar Figures **7.5** The student will solve problems, including practical problems, involving the relationship between corresponding sides and corresponding angles of similar quadrilaterals and triangles. **(Determine whether two figures are similar moved to Geometry)**	**TOPIC 8** VA33A-VA36	**7.6** The student will determine whether plane figures—quadrilaterals and triangles—are similar and write proportions to express the relationships between corresponding sides of similar figures.
Quadrilaterals **7.6** The student will a) compare and contrast quadrilaterals based on their properties; and **b) determine unknown side lengths or angle measures of quadrilaterals**.	**TOPIC 8** 421A-426B 478, VA27-VA28	**7.7** The student will compare and contrast the following quadrilaterals based on properties: parallelogram, rectangle, square, rhombus, and trapezoid.
Translations & Reflections **7.7** The student will **apply translations and reflections of right triangles or rectangles** in the coordinate plane. **(Included on SOL test --From EKS: Transformations can include both translation and then reflection over y- axis or x-axis OR reflection then translation)** **(Dilations moved to eighth grade and rotations moved to Geometry)**	**TOPIC 8** VA29A-VA32	**7.8** The student, given a polygon in the coordinate plane, will represent transformations (reflections, dilations, rotations, and translations) by graphing in the coordinate plane.
Volume & Surface Area **7.4** The student will a) describe and determine the volume and surface area of rectangular prisms and cylinders; and b) solve problems, including practical problems, involving the volume and surface area of rectangular prisms and cylinders. **(Describe how changing one attribute of a rectangular prism affects surface area and volume moved to eighth grade)**	VA37A-VA40, VA41A-VA44, VA45A-VA48	**7.5** The student will a) describe volume and surface area of cylinders; b) solve practical problems involving the volume and surface area of rectangular prisms and cylinders; and c) describe how changing one measured attribute of a rectangular prism affects its volume and surface area.
END OF FOURTH NINE-WEEKS **NO FORMAL BENCHMARK**	**Use Formative Assessment to acquire data concerning student understanding**	

2018-2019 CIP PACING GUIDE FOR MATH 7

1ST QUARTER	
Standard	Bullet (s)
6.6	A, B
7.1	A-E
7.2	
7.11	
BENCHMARK TEST	

2ND QUARTER	
Standard	Bullet (s)
7.10	A-E
7.12	
7.13	
BENCHMARK TEST	

3RD QUARTER	
Standard	Bullet (s)
7.3	
7.8	A-B
7.9	A-C
BENCHMARK TEST	

4TH QUARTER	
Standard	Bullet (s)
7.4	
7.5	
7.6	
7.7	
SOL TEST	