

Fall Semester Math 8 Pacing Guide

First 4.5 Weeks		Second 4.5 Weeks		Third 4.5 Weeks		Fourth 4.5 Weeks	
Standard	Days	Standard	Days	Standards	Days	Standards	Days
<p>Build Relationships & Establish Routines Spend at least 5-15 minutes each day with number sense routines *this is to continue at least 3 times a week throughout the rest of the course*</p> <p>Spiral Reviews will be done daily throughout the course</p>	3	<p>8.17 & 8.18 - Equations/Inequalities Graph Inequality Solutions Just 2-step/variable both sides</p> <p>8.17 The student will solve multistep linear equations in one variable on one or both sides of the equation, including practical problems that require the solution of a multistep linear equation in one variable.</p> <p>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.</p>	4	<p>8.10 - Composite Plane Figures Review Area & Perimeter of triangles, circles, rectangles Area & Perimeter Composite Figures</p> <p>8.10 The student will solve practical area and perimeter problems involving composite plane figures.</p>	5	<p>8.12 & 8.13 - Graphical Methods Create Boxplots (AKA Box-and-Whisker), make observations/inferences from Boxplots, compare/analyze two Boxplots Creat Scatterplots, make observations/inferences from Scatterplots using a drawn line of best fit</p> <p>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.</p> <p>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.</p>	5
<p>8.2 - Real Numbers Subsets of real numbers</p> <p>8.2 The student will describe the relationships between the subsets of the real number system.</p>	2	<p>8.15- Function Vocabulary Domain/Range Ind/Dependent Variable</p> <p>8.15 The student will a) determine whether a given relation is a function; and b) determine the domain and range of a function.</p>	4	<p>8.7 - Transformations ID & Apply Transformations</p> <p>8.7 The student will a) given a polygon, apply transformations, to include translations, reflections, and dilations, in the coordinate plane; and b) identify practical applications of transformations.</p>	3		
<p>8.1 & 8.3 - Expressions & Square Roots Compare/order decimals, fractions, percents, scientific notation, rational approximation for irrational numbers Estimate/determine consecutive integers between which square root lies & positive/negative square roots</p> <p>8.1 The student will compare and order real numbers. 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.</p>	3	<p>8.16 - Graphing Equations Graph Linear Equations using table or slope/y-int form (identify slope & y-int)</p> <p>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.</p>	6	<p>8.8 - 3D Models Top,Side,Front of 3D Models</p> <p>8.8 The student will construct a three-dimensional model, given the top or bottom, side, and front views.</p>	3	<p>Review for SOL</p> <p>*Try to incorporate some of DOE most missed problems into the review*</p>	10
<p>8.14 - Order of Operations Evaluate for given values, Simplify algebraic expressions *Make sure to incorporate properties used to simplify, such as commutative, distributive, associative, etc.*</p> <p>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</p>	2	<p>8.5 - Angles Vertical, Adjacent Supplementary/Complementary</p> <p>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.</p>	4	<p>8.6 - 3D Figures Volume/Surface Area of prisms, cylinders, cones, & pyramids Changes in one attribute of rectangular prism affects volume and surface area</p> <p>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</p>	5		

<p>8.4 - Problem Solving Practical problems with percents, ratios & proportions Percent Increase/Decrease, Discount/Markup/Tax Reconciling</p> <p>8.4 The student will solve practical problems involving consumer applications.</p>	9	<p>8.9 - Pythagorean Theorem Verify & Apply Pyth. Theorem</p> <p>8.9 The student will a) verify the Pythagorean Theorem; and b) apply the Pythagorean Theorem</p>	4	<p>8.11 - Probability Ind/Dependent Events</p> <p>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.</p>	4	Prepare for Algebra I	10
<p>8.17 & 8.18 - Equations/Inequalities Properties Just 1-step/single variable</p> <p>8.17 The student will solve multistep linear equations in one variable on one or both sides of the equation, including practical problems that require the solution of a multistep linear equation in one variable. 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.</p>	3						
Standards covered = 6	22	Standards covered = 6	22	Standards covered = 5	20	Standards covered = All	25
					Total = including 4 days for Benchmarks and Review for Benchmarks		89