

<b>Math 7 Pacing Guide</b>		<b>KEY:</b>
This Pacing Guide was revised in June 2017.		Blue = 2016 SOL standard
Chapters referenced are from old adopted text, Glencoe: Course 2		Black = 2009 and 2016 standard
unless noted as PreAlgebra (PA)		Red = 2009 SOL standard
		* = No calculator
<b>SOL #</b>	<b>Standards</b>	<b>Textbook</b>
<b>First Quarter</b>		
7.1a	a) The student will investigate and describe the concept of negative exponents for powers of ten	4-7 in PA
7.1b	* b) The student will compare and order numbers greater than zero written in scientific notation	1-9, 4-8 in PA
7.1d	* d) The student will determine square roots of perfect squares	11-1, 11-2
7.16	The student will apply the following properties of operations with real numbers: a) the commutative and associative properties for addition and multiplication; b) the distributive property; c) the additive and multiplicative identity properties; d) the additive and multiplicative inverse properties; and e) the multiplicative property of zero	1-6, 3-4, 6-5, 1-4 in PA
7.1e	e) The student will identify and describe absolute value of rational numbers	3-1
7.3a	a) The student model addition, subtraction, multiplication, division of integers	3-4a, 3-5a, Supplement
7.3b	b) The student will add, subtract, multiply, divide integers	3-4, 3-5, 3-6, 3-7
7.1c	* c) The student will compare and order rational numbers	5-4, 5-5, 5-6, 7-5, 5-8, 4-8 in PA
7.2	The student will solve practical problems involving operations with rational numbers	1-3, Supplement
7.11, 7.13b	The student will evaluate algebraic expressions for given replacement values of the variables	1-4
7.13a	The student will write verbal expressions as algebraic expressions and sentences as equations and vice versa	4-1
<b>Second Quarter</b>		
7.12, 7.14a,b	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	1-5, 4-2, 4-3, 6-5, 3-4 in PA, 4-4, 3-5 in PA, 3-3, 3-4, 3-5 in PA
7.13, 7.15a,b	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	4-5, 7-3 & 7-4 in PA, Supplement
7.3, 7.4	The student will solve single-step and multistep practical problems, using proportional reasoning	7-1, 7-2, 7-3, 7-4, 8-1, 6-6 in PA, 7-7, 7-8, 8-3, 8-5, Supplement
7.6a, 7.7	a) The student will compare and contrast quadrilaterals based on their properties	10-5
7.6b	b) The student will determine unknown side lengths or angle measures of quadrilaterals	10-4 in PA
7.5, 7.6	The student will solve problems, including practical problems, involving the relationship between corresponding sides and corresponding angles of similar quadrilaterals and triangles	10-6, 9-7 in PA
<b>Third Quarter</b>		

7.2	The student will describe and represent arithmetic and geometric sequences, using variable expressions	
7.10a	a) The student will 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	
7.10b	b) The student will 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	
7.10c	c) The student will 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	
7.10d	d) The student will 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	
7.10e, 7.12	e) The student will make connections between and among representations of a proportional or additive relationship between two quantities using verbal descriptions, tables, equations, and graphs	
7.9a, 7.11a	a) The student will represent data in a histogram	
7.9b, 7.11a	b) The student will make observations and inferences about data represented in a histogram	
7.9c, 7.11b	c) The student will compare histograms with the same data represented in stem-and-leaf plots, line plots, and circle graphs	
Fourth Quarter		
7.7	The student will apply translations and reflections of right triangles or rectangles in the coordinate plane	
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	
7.4a, 7.5a	a) The student will describe and determine the volume and surface area of rectangular prisms and cylinders	
7.4b, 7.5b	b) The student will solve problems, including practical problems, involving the volume and surface area of rectangular prisms and cylinders	
7.5c	The student will describe how changing one measured attribute of a rectangular prism affects its volume and surface area	
7.8a	a) The student will determine the theoretical and experimental probabilities of an event	
7.8b, 7.9	b) The student will investigate and describe the difference between the experimental probability and theoretical probability of an event	
7.10	The student will determine the probability of compound events, using the Fundamental (Basic) Counting Principle	