2016 VIRGINIA MATHEMATICS STANDARDS OF LEARNING CORRELATED TO *MOVING WITH MATH EXTENSIONS 2nd Edition GRADE 8*

		Lesson Plan/ Student Book	Skill Builders
	NUMBER AND NUMBER SENSE		
8.1	The student will compare and order real numbers.	17, 53	11-3, 20-2, 20-3, 20-4, 48-4, 49-2
8.2	The student will describe the relationships between the subsets of the real number system.		20-2, 20-3
8.3	The student will		
a.	estimate and determine the two consecutive integers between which a square root lies; and	3, 78	20-4
b.	determine both the positive and negative square roots of a given perfect square.		
	COMPUTATION AND ESTIMATION		
8.4	The student will solve practical problems involving consumer applications.	10-12, 30, 31, 65	28-1, 28-2, 28-3, 43-1, 43-2, 43-3, 46-1
	MEASUREMENT AND GEOMETRY		
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.	34, 35, 36	33-1, 33-2
8.6	The student will		
a.	solve problems, including practical problems, involving volume and surface area of cones and square-based pyramids; and	46, 68	41-3, 53-3, 53-4
b.	describe how changing one measured attribute of a rectangular prism affects the volume and surface area.		
8.7	The student will		
a.	given a polygon, apply transformations, to include translations, reflections, and dilations, in the coordinate plane; and	52	32-4, 32-5
b.	identify practical applications of transformations.	52	
8.8	The student will construct a three-dimensional model, given the top or bottom, side, and front views.	44, 46	
8.9	The student will		
a.	verify the Pythagorean Theorem; and	79	56-1
b.	apply the Pythagorean Theorem.	79, 80, 81	56-1, 56-2, 56-3
8.10	The student will solve area and perimeter problems, including practical problems, involving composite plane figures.		
	PROBABILITY AND STATISTICS		
8.11	The student will		

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a.	compare and contrast the probability of independent and dependent events; and		55-4
b.	determine probabilities for independent and dependent events.	33, 76, 77	47-1, 55-1, 55-3, 55-4
8.12	The student will		
a.	represent numerical data in boxplots;	71	
b.	make observations and inferences about data represented in boxplots; and	71	54-2
c.	compare and analyze two data sets using boxplots.	71	54-2
8.13	The student will		
a.	represent data in scatterplots;	94, 96	
b.	make observations about data represented in scatterplots; and	94, 95, 96	60-1
c.	use a drawing to estimate the line of best fit for data represented in a scatterplot.	96	
	PATTERNS, FUNCTIONS, AND ALGEBRA		
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.		48-1, 48-3, 50-4
8.15	The student will		
a.	determine whether a given relation is a function; and	82	57-1
b.	determine the domain and range of a function.		
8.16	The student will		
a.	recognize and describe the graph of a linear function with a slope that is positive, negative, or zero;	83	57-2
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;	87, 88	58-1, 58-2, 58-3, 58-5
c.	determine the independent and dependent variable, given a practical situation modeled by a linear function;	64, 65	
d.	graph a linear function given the equation in $y = mx + b$ form; and	85, 87, 88	58-1, 58-2
e.	make connections between and among representations of a linear function using verbal descriptions, tables, equations, and graphs.	85	52-3, 57-3
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.	56, 57, 60	50-1, 50-5, 50-6, 50-7
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.	62, 63	51-1, 51-2