



# Math Teachers Press, Inc.

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## VIRGINIA MATHEMATICS STANDARDS OF LEARNING CORRELATED TO MOVING WITH MATH EXTENSIONS GRADE 8

		Student Book	Skill Builders
<b>NUMBER AND NUMBER SENSE</b>			
<b>8.1</b>	The student will		
<b>a.</b>	simplify numerical expressions involving positive exponents, using rational numbers, order of operations, and properties of operations with real numbers; and	5	6-1
<b>b.</b>	compare and order decimals, fractions, percents, and numbers written in scientific notation.		
<b>8.2</b>	The student will describe orally and in writing the relationships between the subsets of the real number system.		
<b>COMPUTATION AND ESTIMATION</b>			
<b>8.3</b>	The student will		
<b>a.</b>	solve practical problems involving rational numbers, percents, ratios, and proportions; and	33, 36, 38-40	26-2, 27-1, 28-1
<b>b.</b>	determine the percent increase or decrease for a given situation.		
<b>8.4</b>	The student will apply the order of operations to evaluate algebraic expressions for given replacement values of the variables.		59-2
<b>8.5</b>	The student will		
<b>a.</b>	determine whether a given number is a perfect square; and		
<b>b.</b>	find the two consecutive whole numbers between which a square root lies.		
<b>MEASUREMENT</b>			
<b>8.6</b>	The student will		
<b>a.</b>	verify by measuring and describe the relationships among vertical angles, adjacent angles, supplementary angles; and	48, 49	33-1
<b>b.</b>	measure angles of less than $360^\circ$ .		
<b>8.7</b>	The student will		
<b>a.</b>	investigate and solve practical problems involving volume and surface area of prisms, cylinders, cones, and pyramids; and		41-1
<b>b.</b>	describe how changing one measured attribute of a figure affects the volume and surface area.		
<b>GEOMETRY</b>			
<b>8.8</b>	The student will		

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<b>a.</b>	apply transformations to plane figures; and	46	
<b>b.</b>	identify applications of transformations.	46	
<b>8.9</b>	The student will construct a three-dimensional model, given the top or bottom, side, and front views.		41-2
<b>8.10</b>	The student will		
<b>a</b>	verify the Pythagorean Theorem; and	54	
<b>b</b>	apply the Pythagorean Theorem.	55	54-1
<b>8.11</b>	The student will solve practical area and perimeter problems involving composite plane figures.	58	
<b>PROBABILITY AND STATISTICS</b>			
<b>8.12</b>	The student will determine the probability of independent and dependent events with and without replacement.	26	47-1
<b>8.13</b>	The student will		
<b>a.</b>	make comparisons, predictions, and inferences, using information displayed in graphs; and	15, 16	
<b>b.</b>	construct and analyze scatterplots.		
<b>PATTERNS, FUNCTIONS, AND ALGEBRA</b>			
<b>8.14</b>	The student will make connections between any two representations (tables, graphs, words, and rules) of a given relationship.		
<b>8.15</b>	The student will		
<b>a.</b>	solve multistep linear equations in one variable with the variable on one and two sides of the equation;	80	50-3
<b>b.</b>	solve two-step linear inequalities and graph the results on a number line; and		
<b>c.</b>	identify properties of operations used to solve an equation.		
<b>8.16</b>	The student will graph a linear equation in two variables.		
<b>8.17</b>	The student will identify the domain, range, independent variable, or dependent variable in a given situation.		