



# Math Teachers Press, Inc.

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## VIRGINIA MATHEMATICS STANDARDS OF LEARNING CORRELATED TO MOVING WITH MATH® MIDDLE/HIGH (MH) GRADE 8

		<b>MH1</b> <i>Number Sense, Reasoning &amp; Data</i> Lesson Plan/ Student Book Skill Builders (SB)	<b>MH2</b> <i>Fractions &amp; Decimals</i> Lesson Plan/ Student Book Skill Builders (SB)	<b>MH3</b> <i>Percent &amp; Probability</i> Lesson Plan/ Student Book Skill Builders (SB)	<b>MH4</b> <i>Geometry &amp; Measurement</i> Lesson Plan/ Student Book Skill Builders (SB)	<b>MH5</b> <i>Algebra</i> Lesson Plan/ Student Book Skill Builders (SB)
	<b>NUMBER AND NUMBER SENSE</b>					
<b>8.1</b>	The student will compare and order real numbers.		9, 11, 44, 47, 55 <b>SB:</b> 11-2, 18-4, 65-1			5 <b>SB:</b> 48-2
<b>8.2</b>	The student will describe the relationships between the subsets of the real number system.	6-8 <b>SB:</b> 1-3	55 <b>SB:</b> 65-1			26, 27 <b>SB:</b> 58-8
<b>8.3</b>	The student will					
<b>a.</b>	estimate and determine the two consecutive integers between which a square root lies; and	24 <b>SB:</b> 54-2				
<b>b.</b>	determine both the positive and negative square roots of a given perfect square.					
	<b>COMPUTATION AND ESTIMATION</b>					

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<b>8.4</b>	The student will solve practical problems involving consumer applications.		25, 27, 57, 63, 67-69, 72 <b>SB:</b> 43-1, 43-2, 46-1	3, 5, 22, 33-44, 50, 51 <b>SB:</b> 27-1, 27-2, 28-1 to 28-8, 43-1, 43-2	28, 58, 59 <b>SB:</b> 26-3, 27-1, 28-1, 43-2, 44-1	
	<b>MEASUREMENT AND GEOMETRY</b>					
<b>8.5</b>	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.				17-19 <b>SB:</b> 33-1, 33-2	
<b>8.6</b>	The student will					
<b>a.</b>	solve problems, including practical problems, involving volume and surface area of cones and square-based pyramids; and				74	
<b>b.</b>	describe how changing one measured attribute of a rectangular prism affects the volume and surface area.				76 <b>SB:</b> 63-1	
<b>8.7</b>	The student will					
<b>a.</b>	given a polygon, apply transformations, to include translations, reflections, and dilations, in the coordinate plane; and				14, 16 <b>SB:</b> 49-1, 53-3	

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<b>b.</b>	identify practical applications of transformations.					
<b>8.8</b>	The student will construct a three-dimensional model, given the top or bottom, side, and front views.				37, 38	
<b>8.9</b>	The student will					
<b>a.</b>	verify the Pythagorean Theorem; and				34 <b>SB:</b> 54-2	
<b>b.</b>	apply the Pythagorean Theorem.				34, 35 <b>SB:</b> 54-2, 54-3	
<b>8.10</b>	The student will solve area and perimeter problems, including practical problems, involving composite plane figures.				70	
	<b>PROBABILITY AND STATISTICS</b>					
<b>8.11</b>	The student will					
<b>a.</b>	compare and contrast the probability of independent and dependent events; and			70-73		
<b>b.</b>	determine probabilities for independent and dependent events.			61-68, 70-74 <b>SB:</b> 47-3		
<b>8.12</b>	The student will					
<b>a.</b>	represent numerical data in boxplots;	71, 72 <b>SB:</b> 67-3				
<b>b.</b>	make observations and inferences about data represented in boxplots; and	71, 72 <b>SB:</b> 67-3				
<b>c.</b>	compare and analyze two data sets using boxplots.	72				

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<b>8.13</b>	The student will					
<b>a.</b>	represent data in scatterplots;	75, 76 <b>SB:</b> 70-1				
<b>b.</b>	make observations about data represented in scatterplots; and	75, 76 <b>SB:</b> 70-1				
<b>c.</b>	use a drawing to estimate the line of best fit for data represented in a scatterplot.	75 <b>SB:</b> 70-1				
	<b>PATTERNS, FUNCTIONS, AND ALGEBRA</b>					
<b>8.14</b>	The student will					
<b>a.</b>	evaluate an algebraic expression for given replacement values of the variables; and					58, 59 <b>SB:</b> 59-2
<b>b.</b>	simplify algebraic expressions in one variable.					36, 37, 38, 49, 50 <b>SB:</b> 59-3, 59-4, 59-5
<b>8.15</b>	The student will					
<b>a.</b>	determine whether a given relation is a function; and					<b>SB:</b> 60-5
<b>b.</b>	determine the domain and range of a function.					
<b>8.16</b>	The student will					
<b>a.</b>	recognize and describe the graph of a linear function with a slope that is positive, negative, or zero;					
<b>b.</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;					77

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<b>c.</b>	determine the independent and dependent variable, given a practical situation modeled by a linear function;					62, 64
<b>d.</b>	graph a linear function given the equation in $y = mx + b$ form; and					67
<b>e.</b>	make connections between and among representations of a linear function using verbal descriptions, tables, equations, and graphs.					60-64, 68 <b>SB:</b> 60-1
<b>8.17</b>	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.					46-48, 57 <b>SB:</b> 50-4
<b>8.18</b>	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.					<b>SB:</b> 50-5