



Math Teachers Press, Inc.

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West Virginia Mathematics Content Standards Correlated to Moving with Math Middle/High Grade 8

		MH1 <i>Number Sense, Reasoning & Data</i> Student Book Skill Builders (SB)	MH2 <i>Fractions & Decimals</i> Student Book Skill Builders (SB)	MH3 <i>Percent & Probability</i> Student Book Skill Builders (SB)	MH4 <i>Geometry & Measurement</i> Student Book Skill Builders (SB)	MH5 <i>Algebra</i> Student Book Skill Builders (SB)
	STANDARD 1. NUMBER AND OPERATIONS					
M.O.8.1.1	analyze, describe and compare the characteristics of rational and irrational numbers	8 SB: 1-3	55 SB: 65-1	SB: 65-1		27 SB: 58-5
M.O.8.1.2	analyze and solve application problems with:					
•	powers	21-23, 25-30 SB: 3-3, 6-1, 6-2, 42-5, 54-1, 57-1, 57-2, 69-1	SB: 6-1	SB: 6-1, 57-1	33-35, 65, 68, 72-76 SB: 6-1, 40-2, 41-2, 54-1 to 54-3, 56-1, 62-2, 63-1	58, 59, 69-76 SB: 6-1, 40-1, 50-1, 54-1, 56-1, 57-1, 59-2, 59-6, 60-4, 60-5, 61-1 to 61-4
•	squares	21-23, 25-29 SB: 3-3, 6-1, 6-2, 42-5, 54-1, 57-1, 69-1	SB: 6-1	SB: 6-1, 57-1	33-35, 65, 68, 73-76 SB: 6-1, 40-2, 41-2, 54-1 to 54-3, 56-1, 62-2, 63-1	69-76 SB: 6-1, 40-1, 50-1, 54-1, 56-1, 57-1, 59-2, 59-6, 60-4, 60-5, 61-1 to 61-4

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•	square roots	23, 24 SB: 54-1, 54-2			33, 35 SB: 54-1 to 54-3	33, 74 SB: 54-1, 61-4
•	scientific notation	29, 30 SB: 57-1, 57-2	SB: 57-1	SB: 57-1		SB: 57-1
•	verify solutions using estimation techniques	38, 43, 45-49, 54 SB: 43-1, 43-4, 43-8, 43-11, 43-13, 44-1, 44-2	21-23, 34-36, 58, 71-74 SB: 10-1, 22-2, 23-3, 44-1	31-34, 57 SB: 10-1, 14-1, 44-1, 44-3	5, 45, 46, 49, 50 SB: 27-1, 30-2, 34-3, 36-1 to 36-3, 43-1, 44-1, 52-2, 54-3	SB: 30-1, 36-1, 43-1, 44-1, 52-1
M.O.8.1.3	analyze and solve grade-appropriate real-world problems with:					
	whole numbers	Throughout	26, 27, 31-33, 35-38, 53, 58, 59, 61, 63-65, 67, 69-74 SB: 7-1, 8-1, 10-1, 14-2, 17-2, 22-1, 22-2, 23-1, 43-1, 43-2, 44-1, 45-1, 46-1, 46-2	Throughout	Throughout	Throughout
•	decimals		Throughout	Throughout	28, 30, 48, 54 SB: 9-1, 22-1, 23-1, 27-1, 39-1, 41-2	29-31, 52, 64, 68 SB: 18-1, 19-1, 20-1, 21-1, 22-1, 23-1, 24-1, 37-1, 38-1, 39-1, 40-1, 41-1, 42-1, 56-1, 57-1

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M.O.8.2.1	use a variety of strategies to solve one and two-step linear equations and inequalities with rational solutions; defend the selection of the strategy; graph the solutions and justify the reasonableness of the solution	61, 70 SB: 42-3, 60-1				11, 12, 48, 53-57, 61-68 SB: 50-5, 50-6, 60-1 to 60-3, 60-5 to 60-6a
M.O.8.2.2	identify proportional relationships in real-world situations, then find and select an appropriate method to determine the solution; justify the reasonableness of the solution		37, 38 SB: 46-1, 46-2	24-28, 30, 32, 36, 37, 40, 42, 45, 49, 50, 52, 60 SB: 26-2, 43-3, 46-1	27-32 SB: 26-1 to 26-3, 46-1 to 46-3, 53-2	SB: 26-1, 46-1, 53-1
M.O.8.2.3	add and subtract polynomials limited to two variables and positive exponents					34-38 SB: 50-5, 59-3 to 59-5
M.O.8.2.4	use systems of linear equations to analyze situations and solve problems	61, 70 SB: 42-3, 60-1				11, 12, 48, 56, 57, 61-68 SB: 50-6, 60-1 to 60-3, 60-5 to 60-6a
M.O.8.2.5	apply inductive and deductive reasoning to write a rule from data in an input/output table, analyze the table and the rule to determine if a functional relationship exists	61 SB: 42-3				61-64, 68 SB: 60-1, 60-4 to 60-6a

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M.O.8.2.6	graph linear equations and inequalities within the Cartesian coordinate plane by generating a table of values (with and without technology)	61, 70 SB: 42-3, 60-1			14, 69 SB: 32-1, 49-1, 53-3	12, 48, 53-57, 61-68 SB: 50-5, 50-6, 60-1 to 60-3, 60-5 to 60-6a
M.O.8.2.7	formulate and apply a rule to generate an arithmetic, geometric and algebraic pattern	31-34, 61, 69, 70 SB: 42-1 to 42-5, 60-1	SB: 42-1	SB: 42-1	SB: 42-1	60-69 SB: 42-1, 60-1 to 60-5, 60-6b, 60-6c
M.O.8.2.8	determine the slope of a line using a variety of methods including:					
•	graphing					77
•	change in y over change in x					77
•	equation					
M.O.8.2.9	represent and solve real-world grade-appropriate problems using multiple strategies and justify solutions	Throughout	Throughout	Throughout	Throughout	Throughout
M.O.8.2.10	identify a real life problem involving change over time; make a hypothesis as to the outcome; develop, justify, and implement a method to collect, organize, analyze data; generalize the results to make a conclusion; compare the hypothesis and the results of the investigation; present the project using words, graphs, drawings, models, or tables	61, 70 SB: 42-3, 60-1				12, 61-66, 68 SB: 53-1, 60-2, 60-6c

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M.O.8.3.5	create scale models of similar figures using ratio, proportion with pencil/paper and technology and determine scale factor			29-32 SB: 46-2, 46-3, 53-1 to 53-3	SB: 46-1, 53-1
M.O.8.3.6	make and test a conjecture concerning				
•	regular polygons			Throughout	SB: 29-1, 31-1, 32-1, 38-1, 39-1, 40-1, 41-1, 46-1, 52-1, 53-1, 55-1, 56-1
•	the cross section of a solid such as a cylinder, cone and pyramid				
•	the intersection of two or more geometric figures in the plane (e.g., intersection of a circle and a line)				
•	justify the results			Throughout	SB: 52-1
M.O.8.4.1	STANDARD 4. MEASUREMENT select and apply an appropriate method to solve; justify the method and the reasonableness of the solution of problems involving volume of:				
•	prisms			51, 52, 71-73 SB: 36-3, 41-1, 41-2, 63-1	SB: 41-1

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M.O.8.5.2	compare the experimental and theoretical probability of a given situation (including compound probability of a dependent and independent event)		78 SB: 47-1	61-68, 70-74 SB: 47-1 to 47-6		
M.O.8.5.3	create and extrapolate information from multiple-bar graphs, box and whisker plots, and other data displays using appropriate technology			55, 56, 58-60 SB: 68-1 to 68-4		
M.O.8.5.4	analyze problem situations, games of chance, and consumer applications using random and non-random samplings to determine probability, make predictions, and identify sources of bias	77 SB: 45-5, 45-6, 68-4, 68-7	78 SB: 47-1	59, 61-68, 70-74 SB: 47-1 to 47-6, 68-4	SB: 47-1	SB: 47-1
M.O.8.5.5	draw inferences, make conjectures and construct convincing arguments involving:					
•	different effects that changes in data values have on measures of central tendency	56, 57, 59-60, 74 SB: 45-3 to 45-6, 67-2	75, 76 SB: 45-1	SB: 45-1	SB: 45-1	SB: 45-1
•	misuses of statistical or numeric information, based on data analysis of same and different sets of data					