

## Math Teachers Press, Inc.

4850 Park Glen Road, Minneapolis, MN 55416 phone (800) 852-2435 fax (952) 546-7502

## WASHINGTON STATE MATHEMATICS STANDARDS CORRELATED TO MOVING WITH ALGEBRA GRADE 8

		Part A Student Book Skill Builders (SB)	Part B Student Book Skill Builders (SB)
	8.1. LINEAR FUNCTIONS AND EQUATIONS (Algebra)		
8.1.A	Solve one-variable linear equations.		255-261, 266, 267, 270-272 <b>SB:</b> 212, 213, 216, 219, 221
8.1.B	Solve one- and two-step linear inequalities and graph the solutions on the number line.		282-287 <b>SB:</b> 225
8.1.C	Represent a linear function with a verbal description, table, graph, or symbolic expression, and make connections among these representations.		231, 232, 311- 317 <b>SB:</b> 196, 197, 236, 237, 254
8.1.D	Determine the slope and y-intercept of a linear function described by a symbolic expression, table, and graph.		321-325 <b>SB:</b> 241-243, 249
8.1.E	Interpret the slope and y-intercept of the graph of a linear function representing a contextual situation.		322, 332 <b>SB:</b> 242
8.1.F	Solve single- and multi-step word problems involving liner functions and verify the solutions.		231, 232, 279, 280, 312 <b>SB:</b> 197, 224, 236
8.1.G	Determine and justify whether a given verbal description, table, graph, or symbolic expression represents a liner relationship.		
	8.2. PROPERTIES OF GEOMETRIC FIGURES (Numbers, Geometry/Measurement)		
8.2.A	Identify pairs of angles as complementary, supplementary, adjacent, or vertical, and use these relationships to determine missing angle measures.		194, 195 <b>SB:</b> 163
8.2.B	Determine missing angle measures using the relationships among the angles formed by parallel lines and transversals.		200 <b>SB:</b> 167

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8.2.C	Demonstrate that the sum of the angle measures in a triangle is 180 degrees, and apply this fact to determine the sum of the angle measures of polygons and to determine unknown angle measures.		196-199 <b>SB:</b> 164-166
8.2.D	Represent and explain the effect of one or more translations, rotations, reflections, or dilations (centered a the origin) of a geometric figures on the coordinate plane.		204 (T.G.)
8.2.E	Quickly recall the square roots of the perfect squares from 1 through 225 and estimate the square roots of other positive numbers.		216, 217 <b>SB:</b> 184, 185
8.2.F	Demonstrate the Pythagorean Theorem and its converse and apply them to solve problems.		218, 219 <b>SB:</b> 186
8.2.G	Apply the Pythagorean Theorem to determine the distance between two points on the coordinate plane.		
	8.3. SUMMARY AND ANALYSIS OF DATA SETS (Algebra, Data/Statistics/Probability)		
8.3.A	Summarize and compare data sets in terms of variability and measures of center.	56, 57 <b>SB:</b> 47-50	
8.3.B	Select, construct, and analyze data displays including box- and-whisker plots to compare two sets of data.	179	
8.3.C	Create a scatterplot for a two-variable data set, and when appropriate, sketch and use a trend line to make predictions.		
8.3.D	Describe different methods of selecting statistical samples and analyze the strengths and weaknesses of each method.		
8.3.E	Determine whether conclusions of statistical studies reported in the media are reasonable.		
8.3.F	Determine probabilities for mutually exclusive, dependent, and independent events from small sample spaces.		
8.3.G	Solve single- and multi-step problems using counting techniques and Venn diagrams and verify the solutions.	87 (T.G.)	
	8.4. ADDITIONAL KEY CONTENT (Numbers, Operations)		
8.4.A	Represent numbers in scientific notation, and translate numbers written in scientific notation into standard form.	22, 23, 25 <b>SB:</b> 17, 18	
8.4.B	Solve problems involving operations with numbers in scientific notation and verify solutions.		

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8.4.C	Evaluate numerical expressions involving non-negative integer exponents using the laws of exponents and the order of operations.	16-19 <b>SB:</b> 13, 14	215, 292-294, 296, 301 <b>SB:</b> 226-229
8.4.D	Identify rational and irrational numbers.	80 SB: 61	
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8.5.A	8.5. REASONING, PROBLEM SOLVING, AND Analyze a problem situation to determine the question(s) to be answered.	32, 54	273
8.5.B	identify relevant, missing, and extraneous information related to the solution to a problem.	32, 54	273, 274
8.5.C	Analyze and compare mathematical strategies for solving problems, and select and use one or more strategies to solve a problem.	33, 34, 55, 58	273
8.5.D	Represent a problem situation, describe the process used to solve the problem, and verify the reasonableness of the solution.	33, 34, 118	231
8.5.E	Communicate the answer(s) to the question(s) in a problem using appropriate representations, including symbols and informal and formal mathematical language.	34, 58	307
8.5.F	Apply a previously used problem-solving strategy in a new context.	35, 144	322
8.5.G	Extract and organize mathematical information from symbols, diagrams, and graphs to make inferences, draw conclusions, and justify reasoning.	113, 129, 179	315
8.5.H	Make and test conjectures based on data (or information) collected from explorations and experiments.	35, 85, 86, 122 <b>SB:</b> 142, 143	199, 245-248, 307-309 <b>SB:</b> 203, 205, 206. 234, 235