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Course 1 Middle School Math Solution
Correlation to The Alaska Mathematics Standards

CARNEGIE LEARNING

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
6.RP.1	Write and describe the relationship in real life context between two quantities using ratio language. For example, "The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak." "For every vote candidate A received, candidate C received nearly three votes."	Textbook	2: Relating Quantities	1: Ratios	1: It's All Relative: Introduction to Ratio and Rate Reasoning pp. M2-7–M2-24
					2: Going Strong: Comparing Ratios to Solve Problems pp. M2-25–M2-36
					3: Oh, Yes, I Am the Muffin Man: Determining Equivalent Ratios pp. M2-37–M2-56
					4: A Trip to the Moon: Using Tables to Represent Equivalent Ratios pp. M2-57–M2-68
					5: They're Growing!: Graphs of Ratios pp. M2-69–M2-84
					6: One Is Not Enough: Using and Comparing Ratio Representations pp. M2-85–M2-98
		MATHia Software	2: Relating Quantities	1: Ratios	1: Introduction to Ratio and Ratio Reasoning
6.RP.2	Understand the concept of a unit rate (a/b associated with a ratio a:b with b not equal to 0, and use rate language in the context of a ratio relationship) and apply it to solve real world problems (e.g., unit pricing, constant speed). For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is 3/4 cup of flour for each cup of sugar." "We paid $75 for 15 hamburgers, which is a rate of $5 per hamburger."	Textbook	2: Relating Quantities	3: Unit Rates and Conversions	2: What Is the Best Buy?: Introduction to Unit Rates pp. M2-185–M2-198
		MATHia Software	2: Relating Quantities	3: Unit Rates and Conversions	8: Introduction to Unit Rates
6.RP.3	Use ratio and rate reasoning to solve real-world and mathematical problems (e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations).	Textbook	2: Relating Quantities	1: Ratios	2: Going Strong: Comparing Ratios to Solve Problems pp. M2-25–M2-36
					3: Oh, Yes, I Am the Muffin Man: Determining Equivalent Ratios pp. M2-37–M2-56
		MATHia Software	2: Relating Quantities	1: Ratios	2: Determining Equivalent Ratios

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
6.RP.3.a	Make tables of equivalent ratios relating quantities with whole number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios, and understand equivalencies.	Textbook	2: Relating Quantities	1: Ratios	4: A Trip to the Moon: Using Tables to Represent Equivalent Ratios pp. M2-57–M2-68
					5: They're Growing!: Graphs of Ratios pp. M2-69–M2-84
					6: One Is Not Enough: Using and Comparing Ratio Representations pp. M2-85–M2-98
		MATHia Software	2: Relating Quantities	1: Ratios	2: Determining Equivalent Ratios
					2: Determining Equivalent Ratios
					3: Using Tables to Represent Equivalent Ratios
					4: Graphs of Ratios
6.RP.3.b	Solve unit rate problems including those involving unit pricing and constant speed. For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?	Textbook	2: Relating Quantities	3: Unit Rates and Conversions	2: What Is the Best Buy?: Introduction to Unit Rates pp. M2-185–M2-198
					3: Seeing Things Differently: Multiple Representations of Unit Rates pp. M2-199-M2-208
		MATHia Software	2: Relating Quantities	3: Unit Rates and Conversions	8: Introduction to Unit Rates
6.RP.3.c	Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.	Textbook	2: Relating Quantities	2: Percents	1: We Are Family!: Percent, Fraction, and Decimal Equivalence pp. M2-109–M2-122
					2: Warming the Bench: Using Estimation and Benchmark Percents pp. M2-123–M2_136
					3: The Forest for the Trees: Determining the Part and the Whole in Percent Problems pp. M2-137–M2-156
		MATHia Software	2: Relating Quantities	2: Percents	5: Percent, Fraction, and Decimal Equivalence
					5: Percent, Fraction, and Decimal Equivalence
					6: Determining the Part and the Whole in Perent Problems
					6: Determining the Part and the Whole in Perent Problems
6.RP.3.d	Use ratio reasoning to convert measurement units between given measurement systems (e.g., convert kilometers to miles); manipulate and transform units appropriately when multiplying or dividing quantities.	Textbook	2: Relating Quantities	3: Unit Rates and Conversions	1: Many Ways to Measure: Using Ratio Reasoning to Convert Units pp. M2-165–M2-184
		MATHia Software	2: Relating Quantities	3: Unit Rates and Conversions	7: Using Ratio Reasoning to Convert Units
					7: Using Ratio Reasoning to Convert Units

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
6.NS.1	Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions (e.g., by using visual fraction models and equations to represent the problem).	Textbook	1: Composing and Decomposing	2: Positive Rational Numbers	1: Thnking Rationally: Identifying and Ordering Rational Numbers pp. M1-83–M1-92
					2: Did You Get the Part?: Multiplying and Dividing with Fractions pp. M1-93–M1-106
					3: Yours IS to Reason Why!: Fraction by Fraction Division pp. M1-93–M1-106
		MATHia Software	1: Composing and Decomposing	2: Positive Rational Numbers	6: Fraction by Fraction Division
					6: Fraction by Fraction Division
					6: Fraction by Fraction Division
					6: Fraction by Fraction Division
6.NS.2	Fluently multiply and divide multi-digit whole numbers using the standard algorithm. Express the remainder as a whole number, decimal, or simplified fraction; explain or justify your choice based on the context of the problem.	Textbook	1: Composing and Decomposing	3: Decimals and Volume	4: Dividend in the House: Dividing with Surface Area and Volume pp. M1-165–M1-175
		MATHia Software	1: Composing and Decomposing	3: Decimals and Volume	7: Decimal Operations
					7: Decimal Operations
6.NS.3	Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. Express the remainder as a terminating decimal, or a repeating decimal, or rounded to a designated place value.	Textbook	1: Composing and Decomposing	3: Decimals and Volume	1: Length, Width, and Depth: Deepening Understanding of Volume pp. M1-115–M1-130
					2: Which Warehouse?: Volume Composition and Decomposition pp. M1-131–M1-142
					3: Breaking the Fourth Wall: Surface Area of Rectangular Prisms and Pyramids pp. M1-143–M1-163

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
6.NS.3	Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. Express the remainder as a terminating decimal, or a repeating decimal, or rounded to a designated place value.	Textbook	1: Composing and Decomposing	3: Decimals and Volume	4: Dividend in the House: Dividing with Surface Area and Volume pp. M1-165–M1-175
		MATHia Software	1: Composing and Decomposing	3: Decimals and Volume	7: Decimal Operations
					7: Decimal Operations
					7: Decimal Operations
					7: Decimal Operations
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					7: Decimal Operations
					7: Decimal Operations
6.NS.4	Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor. For example, express 36 + 8 as 4 (9 + 2).	Textbook	1: Composing and Decomposing	1: Factors and Area	4: Searching for Common Ground: Common Factors and Common Multiples pp. M1-51–M1-60
					5: Composing and Decomposing Numbers: Least Common Multiple and Greatest Common Factor pp. M1-39–M1-50
		MATHia Software	1: Composing and Decomposing	1: Factors and Area	4: Common Factors and Common Multiples
					4: Common Factors and Common Multiples
					5: Least Common Multiple and Greatest Common Factor
6.NS.5	Understand that positive and negative numbers describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explain the meaning of 0 in each situation.	Textbook	4: Moving Beyond Positive Quantities	1: Signed Numbers	1: Human Number Line: Introduction to Negative Numbers pp. M4-7–M4-23
		MATHia Software	4: Moving Beyond Positive Quantities	1: Signed Numbers	1: Introduction to Negative Numbers

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
6.NS.6	Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.	Textbook	4: Moving Beyond Positive Quantities	1: Signed Numbers	3: What's In a Name?: Rational Number System pp. M4-35–M4-46
		MATHia Software	4: Moving Beyond Positive Quantities	1: Signed Numbers	1: Introduction to Negative Numbers
					3: Rational Number System
6.NS.6.a	Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; Recognize that the opposite of the opposite of a number is the number itself [e.g., –(–3) = 3] and that 0 is its own opposite.	Textbook	4: Moving Beyond Positive Quantities	1: Signed Numbers	1: Human Number Line: Introduction to Negative Numbers pp. M4-7–M4-23
		MATHia Software	4: Moving Beyond Positive Quantities	1: Signed Numbers	1: Introduction to Negative Numbers
6.NS.6.b	Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.	Textbook	4: Moving Beyond Positive Quantities	2: The Four Quadrants	1: Four Is Better Than One: Extending the Coordinate Plane pp. M4-57–M4-72
		MATHia Software	4: Moving Beyond Positive Quantities	2: The Four Quadrants	4: Extending the Coordinate Plane
6.NS.6.c	Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.	Textbook	4: Moving Beyond Positive Quantities	1: Signed Numbers	1: Human Number Line: Introduction to Negative Numbers pp. M4-7–M4-23
				2: The Four Quadrants	1: Four Is Better Than One: Extending the Coordinate Plane pp. M4-57–M4-72
		MATHia Software	4: Moving Beyond Positive Quantities	2: The Four Quadrants	4: Extending the Coordinate Plane
					4: Extending the Coordinate Plane
					4: Extending the Coordinate Plane
6.NS.7	Understand ordering and absolute value of rational numbers.	Textbook	4: Moving Beyond Positive Quantities	1: Signed Numbers	1: Human Number Line: Introduction to Negative Numbers pp. M4-7–M4-23
					2: Magnificent Magnitude: Absolute Value pp. M4-23–M4-34
6.NS.7.a	Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. For example, interpret –3 > –7 as a statement that –3 is located to the right of –7 on a number line oriented from left to right.	Textbook	4: Moving Beyond Positive Quantities	1: Signed Numbers	1: Human Number Line: Introduction to Negative Numbers pp. M4-7–M4-23
		MATHia Software	4: Moving Beyond Positive Quantities	1: Signed Numbers	1: Introduction to Negative Numbers

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
6.NS.7.b	Write, interpret, and explain statements of order for rational numbers in real-world contexts. For example, write –3˚C > –7˚C to express the fact that –3˚C is warmer than –7 ˚C	Textbook	4: Moving Beyond Positive Quantities	1: Signed Numbers	1: Human Number Line: Introduction to Negative Numbers pp. M4-7–M4-23
		MATHia Software	4: Moving Beyond Positive Quantities	1: Signed Numbers	2: Absolute Value
6.NS.7.c	Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. For example, for an account balance of –30 dollars, write |–30| = 30 to describe the size of the debt in dollars.	Textbook	4: Moving Beyond Positive Quantities	1: Signed Numbers	2: Magnificent Magnitude: Absolute Value pp. M4-23–M4-34
		MATHia Software	4: Moving Beyond Positive Quantities	1: Signed Numbers	2: Absolute Value
6.NS.7.d	Distinguish comparisons of absolute value from statements about order. For example, recognize that an account balance less than -30 dollars represents a debt greater than 30 dollars.	Textbook	4: Moving Beyond Positive Quantities	1: Signed Numbers	2: Magnificent Magnitude: Absolute Value pp. M4-23–M4-34
		MATHia Software	4: Moving Beyond Positive Quantities	1: Signed Numbers	2: Absolute Value
6.NS.8	Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.	Textbook	4: Moving Beyond Positive Quantities	2: The Four Quadrants	1: Four Is Better Than One: Extending the Coordinate Plane pp. M4-57–M4-72
					2: It's a Bird, It's a Plane . . . It's a Polygon on the Plane!: Graphing Geometric Figures pp. M4-73–M4-86
					3: There Are Many Paths . . .: Problem Solving on the Coordinate Plane pp. M4-87–M4-111
		MATHia Software	4: Moving Beyond Positive Quantities	2: The Four Quadrants	5: Graphing Geometric Figures
6.EE.1	Write and evaluate numerical expressions involving whole-number exponents For example multiply by powers of 10 and products of numbers using exponents.	Textbook	3: Determining Unknown Quantities	1: Expressions	1: Relationships Matter: Creating Numeric Expressions pp. M3-7–M3-22
		MATHia Software	3: Determining Unknown Quantities	1: Expressions	1: Evaluating Numeric Expressions
					1: Evaluating Numeric Expressions
					1: Evaluating Numeric Expressions
					1: Evaluating Numeric Expressions
					1: Evaluating Numeric Expressions
					1: Evaluating Numeric Expressions
					1: Evaluating Numeric Expressions

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
6.EE.2	Write, read, and evaluate expressions in which letters stand for numbers.	Textbook	3: Determining Unknown Quantities	1: Expressions	2: Into the Unknown: Introduction to Algebraic Expressions pp. M3-23–M3-34
		MATHia Software	3: Determining Unknown Quantities	1: Expressions	2: Introduction to Algebraic Expressions
					2: Introduction to Algebraic Expressions
6.EE.2.a	Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation "Subtract y from 5" as 5 – y".	Textbook	3: Determining Unknown Quantities	1: Expressions	2: Into the Unknown: Introduction to Algebraic Expressions pp. M3-23–M3-34
					3: Second Verse, Same as the First: Equivalent Expressions pp. M3-35–M3-52
					5: DVDs and Songs: Using Algebraic Expressions to Analyze and Solve Problems pp. M3-67–M3-76
6.EE.2.b	Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. For example, describe the expression 2 (8 + 7) as a product of two factors; view (8 + 7) as both a single entity and a sum of two terms.	Textbook	1: Composing and Decomposing	1: Factors and Area	1: Taking Apart Numbers and Shapes: Writing Equivalent Expressions Using the Distributive Property pp. M1-7–M1-12
			3: Determining Unknown Quantities	1: Expressions	2: Into the Unknown: Introduction to Algebraic Expressions pp. M3-23–M3-34
		MATHia Software	3: Determining Unknown Quantities	1: Expressions	2: Introduction to Algebraic Expressions
6.EE.2.c	Evaluate expressions and formulas. Include formulas used in real-world problems. Perform arithmetic operations, including those involving whole number exponents, in the conventional order with or without parentheses. (Order of Operations)	Textbook	3: Determining Unknown Quantities	1: Expressions	2: Into the Unknown: Introduction to Algebraic Expressions pp. M3-23–M3-34
					5: DVDs and Songs: Using Algebraic Expressions to Analyze and Solve Problems pp. M3-67–M3-76
		MATHia Software	3: Determining Unknown Quantities	1: Expressions	2: Introduction to Algebraic Expressions
					2: Introduction to Algebraic Expressions

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
6.EE.3	Apply the properties of operations to generate equivalent expressions. Model (e.g., manipulatives, graph paper) and apply the distributive, commutative, identity, and inverse properties with integers and variables by writing equivalent expressions. For example, apply the distributive property to the expression 3 (2 + x) to produce the equivalent expression 6 + 3x.	Textbook	1: Composing and Decomposing	1: Factors and Area	1: Taking Apart Numbers and Shapes: Writing Equivalent Expressions Using the Distributive Property pp. M1-7–M1-12
			3: Determining Unknown Quantities	1: Expressions	3: Second Verse, Same as the First: Equivalent Expressions pp. M3-35–M3-52
					5: DVDs and Songs: Using Algebraic Expressions to Analyze and Solve Problems pp. M3-67–M3-76
		MATHia Software	1: Composing and Decomposing	1: Factors and Area	1: Writing Equivalent Expressions Using the Distributive Property
					1: Writing Equivalent Expressions Using the Distributive Property
					1: Writing Equivalent Expressions Using the Distributive Property
			3: Determining Unknown Quantities	1: Expressions	3: Equivalent Algebraic Expressions
					3: Equivalent Algebraic Expressions
					3: Equivalent Algebraic Expressions
					3: Equivalent Algebraic Expressions
					3: Equivalent Algebraic Expressions
					3: Equivalent Algebraic Expressions
6.EE.4	Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). For example, the expressions y + y + y and 3y are equivalent because they name the same number regardless of which number y stands for.	Textbook	3: Determining Unknown Quantities	1: Expressions	4: Are They Saying the Same Thing?: Verifying Equivalent Expressions pp. M3-53–M3-66
		MATHia Software	3: Determining Unknown Quantities	1: Expressions	3: Equivalent Algebraic Expressions
6.EE.5	Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true. For example: does 5 make 3x > 7 true?	Textbook	3: Determining Unknown Quantities	2: Equations	1: First Among Equals: Reasoning with Equal Expressions pp. M3-87–M3-106
		MATHia Software	3: Determining Unknown Quantities	2: Equations	5: Reasoning with Algebraic Expressions
					5: Reasoning with Algebraic Expressions

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
6.EE.6	Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.	Textbook	3: Determining Unknown Quantities	1: Expressions	5: DVDs and Songs: Using Algebraic Expressions to Analyze and Solve Problems pp. M3-67–M3-76
				2: Equations	2: Bar None: Solving One-Step Addition Equations pp. M3-107–M3-117
					3: Play It in Reverse: Solving One-Step Multiplication Equations pp. M3-119–M3-134
					4: Getting Real: Solving Equations to Solve Problems pp. M3-135–M3-144
		MATHia Software	3: Determining Unknown Quantities	1: Expressions	4: Using Algebraic Expressions to Analyze and Solve Problems
				3: Graphing Quantitative Relationships	9: Multiple Representations of Equations
					9: Multiple Representations of Equations
					9: Multiple Representations of Equations

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
6.EE.7	Solve real-world and mathematical problems by writing and solving equations of the form x + p = q and px = q for cases in which p, q and x are all nonnegative rational numbers.	Textbook	3: Determining Unknown Quantities	2: Equations	2: Bar None: Solving One-Step Addition Equations pp. M3-107–M3-117
					3: Play It in Reverse: Solving One-Step Multiplication Equations pp. M3-119–M3-134
					4: Getting Real: Solving Equations to Solve Problems pp. M3-135–M3-144
		MATHia Software	3: Determining Unknown Quantities	1: Expressions	4: Using Algebraic Expressions to Analyze and Solve Problems
					4: Using Algebraic Expressions to Analyze and Solve Problems
					4: Using Algebraic Expressions to Analyze and Solve Problems
				2: Equations	6: Solving One-Step Addition and Subtraction Equations
					6: Solving One-Step Addition and Subtraction Equations
					6: Solving One-Step Addition and Subtraction Equations
					7: Solving One-Step Multiplication and Division Equations
					7: Solving One-Step Multiplication and Division Equations
				3: Graphing Quantitative Relationships	9: Multiple Representations of Equations
					9: Multiple Representations of Equations
					9: Multiple Representations of Equations
6.EE.8	Write an inequality of the form x > c or x < c to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form x > c or x < c have infinitely many solutions; represent solutions of such inequalities on number line diagrams.	Textbook	3: Determining Unknown Quantities	2: Equations	1: First Among Equals: Reasoning with Equal Expressions pp. M3-87–M3-106
		MATHia Software	3: Determining Unknown Quantities	2: Equations	5: Reasoning with Algebraic Expressions
			4: Moving Beyond Positive Quantities	1: Signed Numbers	1: Introduction to Negative Numbers

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
6.EE.9	Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation d = 65t to represent the relationship between distance and time.	Textbook	3: Determining Unknown Quantities	2: Equations	4: Getting Real: Solving Equations to Solve Problems pp. M3-135–M3-144
				3: Graphing Quantitative Relationships	1: Every Graph Tells a Story: Independent and Dependent Variables pp. M3-155–M3-182
					2: The Power of the Horizontal Line: Using Graphs to Solve One-Step Equations pp. M3-183–M3-192
					3: Planes, Trains, and Paychecks: Multiple Representations of Equations pp. M3-193–M3-206
					4: Triathlon Training: Relating Distance, Rate, and Time pp. M3-207–M3-220
			4: Moving Beyond Positive Quantities	2: The Four Quadrants	3: There Are Many Paths . . .: Problem Solving on the Coordinate Plane pp. M4-87–M4-111
		MATHia Software	3: Determining Unknown Quantities	3: Graphing Quantitative Relationships	8: Independent and Dependent Variables
					8: Independent and Dependent Variables
			4: Moving Beyond Positive Quantities	2: The Four Quadrants	6: Problem Solving on the Coordinate Plane
					6: Problem Solving on the Coordinate Plane
6.G.1	Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing or decomposing into other polygons (e.g., rectangles and triangles). Apply these techniques in the context of solving real-world and mathematical problems.	Textbook	1: Composing and Decomposing	1: Factors and Area	2: All About That Base. . .and Height: Area of Triangles and Quadrilaterals pp. M1-15–M1-28
					3: Slicing and Dicing: Composite Figures pp. M1-29–M1-38
		MATHia Software	1: Composing and Decomposing	1: Factors and Area	2: Area of Triangles and Quadrilaterals
					2: Area of Triangles and Quadrilaterals
					2: Area of Triangles and Quadrilaterals
					3: Composite Figures
					3: Composite Figures

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
6.G.2	Apply the standard formulas to find volumes of prisms. Use the attributes and properties (including shapes of bases) of prisms to identify, compare or describe three-dimensional figures including prisms and cylinders.	Textbook	1: Composing and Decomposing	3: Decimals and Volume	1: Length, Width, and Depth: Deepening Understanding of Volume pp. M1-115–M1-130
					2: Which Warehouse?: Volume Composition and Decomposition pp. M1-131–M1-142
		MATHia Software	1: Composing and Decomposing	3: Decimals and Volume	8: Volume and Surface Area of Rectangular Prisms
					8: Volume and Surface Area of Rectangular Prisms
6.G.3	Draw polygons in the coordinate plane given coordinates for the vertices; determine the length of a side joining the coordinates of vertices with the same first or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.	Textbook	4: Moving Beyond Positive Quantities	2: The Four Quadrants	2: It's a Bird, It's a Plane . . . It's a Polygon on the Plane!: Graphing Geometric Figures pp. M4-73–M4-86
		MATHia Software	4: Moving Beyond Positive Quantities	2: The Four Quadrants	5: Graphing Geometric Figures
6.G.4	Represent three-dimensional figures (e.g., prisms) using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	Textbook	1: Composing and Decomposing	3: Decimals and Volume	3: Breaking the Fourth Wall: Surface Area of Rectangular Prisms and Pyramids pp. M1-143–M1-163
		MATHia Software	1: Composing and Decomposing	3: Decimals and Volume	8: Volume and Surface Area of Rectangular Prisms
					8: Volume and Surface Area of Rectangular Prisms
6.SP.1	Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. For example, "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because one anticipates variability in students' ages.	Textbook	5: Describing Variability of Quantities	1: The Statistical Process	1: What's Your Question?: Understanding the Statistical Process pp. M5-5–M5-23
		MATHia Software	5: Describing Variability of Quantities	1: The Statistical Process	1: Understanding the Statistical Process

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
6.SP.2	Understand that a set of data has a distribution which can be described by its center (mean, median, or mode), spread (range), and overall shape and can be used to answer a statistical question.	Textbook	5: Describing Variability of Quantities	1: The Statistical Process	2: Get in Shape: Analyzing Numerical Data Displays pp. M5-25–M5-46
					3: Skyscrapers: Using Histograms to Display Data pp. M5-47–M5-60
				2: Numerical Summaries of Data	1: In the Middle: Analyzing Data Using Measures of Center pp. M5-71–M5-85
					2: Box It Up: Displaying the Five-Number Summary pp. M5-87–M5-103
					3: March MADness: Mean Absolute Deviation pp. M5-105–M5-116
6.SP.3	Recognize that a measure of center (mean, median, or mode) for a numerical data set summarizes all of its values with a single number, while a measure of variation (range) describes how its values vary with a single number.	Textbook	5: Describing Variability of Quantities	2: Numerical Summaries of Data	1: In the Middle: Analyzing Data Using Measures of Center pp. M5-71–M5-85
					2: Box It Up: Displaying the Five-Number Summary pp. M5-87–M5-103
					3: March MADness: Mean Absolute Deviation pp. M5-105–M5-116
		MATHia Software	5: Describing Variability of Quantities	2: Numerical Summaries of Data	6: Mean Absolute Deviation
					6: Mean Absolute Deviation
6.SP.4	Display numerical data in plots on a number line, including dot or line plots, histograms and box (box and whisker) plots.	Textbook	5: Describing Variability of Quantities	1: The Statistical Process	2: Get in Shape: Analyzing Numerical Data Displays pp. M5-25–M5-46
					3: Skyscrapers: Using Histograms to Display Data pp. M5-47–M5-60
				2: Numerical Summaries of Data	2: Box It Up: Displaying the Five-Number Summary pp. M5-87–M5-103
		MATHia Software	5: Describing Variability of Quantities	1: The Statistical Process	2: Analyzing Numerical Data Displays
					3: Using Histograms to Display Data
				2: Numerical Summaries of Data	5: Displaying the Five-Number Summary
					5: Displaying the Five-Number Summary

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
6.SP.5	Summarize numerical data sets in relation to their context, such as by:	Textbook	5: Describing Variability of Quantities	2: Numerical Summaries of Data	3: March MADness: Mean Absolute Deviation pp. M5-105–M5-116
		MATHia Software	5: Describing Variability of Quantities	2: Numerical Summaries of Data	5: Displaying the Five-Number Summary
					5: Displaying the Five-Number Summary
6.SP.5.a	Reporting the number of observations (occurrences).	Textbook	5: Describing Variability of Quantities	1: The Statistical Process	2: Get in Shape: Analyzing Numerical Data Displays pp. M5-25–M5-46
					3: Skyscrapers: Using Histograms to Display Data pp. M5-47–M5-60
				2: Numerical Summaries of Data	4: You Chose . . . Wisely: Choosing Appropriate Measures pp. M5-117–M5-130
		MATHia Software	5: Describing Variability of Quantities	1: The Statistical Process	2: Analyzing Numerical Data Displays
					3: Using Histograms to Display Data
					3: Using Histograms to Display Data
6.SP.5.b	Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.	Textbook	5: Describing Variability of Quantities	1: The Statistical Process	2: Get in Shape: Analyzing Numerical Data Displays pp. M5-25–M5-46
					3: Skyscrapers: Using Histograms to Display Data pp. M5-47–M5-60
		MATHia Software	5: Describing Variability of Quantities	1: The Statistical Process	2: Analyzing Numerical Data Displays
					3: Using Histograms to Display Data
					3: Using Histograms to Display Data
6.SP.5.c	Giving quantitative measures of center (median and/or mean) and variability (interquartile range), as well as describing any overall pattern and any outliers with reference to the context in which the data were gathered.	Textbook	5: Describing Variability of Quantities	1: The Statistical Process	2: Get in Shape: Analyzing Numerical Data Displays pp. M5-25–M5-46

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
6.SP.5.c	Giving quantitative measures of center (median and/or mean) and variability (interquartile range), as well as describing any overall pattern and any outliers with reference to the context in which the data were gathered.	Textbook	5: Describing Variability of Quantities	1: The Statistical Process	3: Skyscrapers: Using Histograms to Display Data pp. M5-47–M5-60
				2: Numerical Summaries of Data	1: In the Middle: Analyzing Data Using Measures of Center pp. M5-71–M5-85
					2: Box It Up: Displaying the Five-Number Summary pp. M5-87–M5-103
					4: You Chose . . . Wisely: Choosing Appropriate Measures pp. M5-117–M5-130
		MATHia Software	5: Describing Variability of Quantities	2: Numerical Summaries of Data	4: Analyzing Data Using Measures of Center
					4: Analyzing Data Using Measures of Center
					4: Analyzing Data Using Measures of Center
					6: Mean Absolute Deviation
					6: Mean Absolute Deviation
6.SP.5.d	Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.	Textbook	5: Describing Variability of Quantities	2: Numerical Summaries of Data	4: You Chose . . . Wisely: Choosing Appropriate Measures pp. M5-117–M5-130
		MATHia Software	5: Describing Variability of Quantities	2: Numerical Summaries of Data	7: Choosing Appropriate Measures