CARNEGIE LEARNING

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Course 3 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)
8.NS.1	Classify real numbers as either rational (the ratio of two integers, a terminating decimal number, or a repeating decimal number) or irrational.	Textbook	4: Expanding Number Systems	1: The Real Number System	1: So Many Numbers, So Little Time: Number Sort pp. M4-7–M4-16
					2: Rational Decisions: Rational and Irrational Numbers pp. M4-17–M4-30
		MATHia Software	4: Expanding Number Systems	1: The Real Number System	1: The Real Numbers
					1: The Real Numbers
					1: The Real Numbers
8.NS.2	Order real numbers, using approximations of irrational numbers, locating them on a number line. For example, show that sqrt(2) is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.	Textbook	4: Expanding Number Systems	1: The Real Number System	3: What Are Those?!: The Real Numbers pp. M4-31–M4-45
		MATHia Software	4: Expanding Number Systems	1: The Real Number System	1: The Real Numbers
					1: The Real Numbers
					1: The Real Numbers
8.EE.1	Apply the properties (product, quotient, power, zero, negative exponents, and rational exponents) of integer exponents to generate equivalent numerical expressions. For example, 32 × 3–5 = 3–3 = 1/33 = 1/27.	Textbook	5: Applying Powers	1: Exponents and Scientific Notation	1: It's a Generational Thing: Properties of Powers with Integer Exponents pp. M5-7–M5-27
					2: Show What You Know: Analyzing Properties of Powers pp. M5-29–M5-41
		MATHia Software	5: Applying Powers	1: Exponents and Scientific Notation	1: Properties of Powers with Integer Exponents
					1: Properties of Powers with Integer Exponents
					1: Properties of Powers with Integer Exponents
					1: Properties of Powers with Integer Exponents
					1: Properties of Powers with Integer Exponents
					1: Properties of Powers with Integer Exponents

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8.EE.2	Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that sqrt(2) is irrational.	Textbook	4: Expanding Number Systems	1: The Real Number System	3: What Are Those?!: The Real Numbers pp. M4-31–M4-45
				2: Pythagorean Theorem	1: The Right Triangle Connection: The Pythagorean Theorem pp. M4-55–M4-74
					2: Can That Be Right?: The Converse of the Pythagorean Theorem pp. M4-75–M4-86
					4: Catty Corner: Side Lengths in Two and Three Dimensions pp. M4-99–M4-112
		MATHia Software	4: Expanding Number Systems	1: The Real Number System	1: The Real Numbers
					1: The Real Numbers
				2: Pythagorean Theorem	2: The Pythagorean Theorem
					3: The Converse of the Pythagorean Theorem
					4: Distances in a Coordinate Plane
8.EE.3	Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other.	Textbook	5: Applying Powers	1: Exponents and Scientific Notation	3: The Big and Small of It: Scientific Notation pp. M5-43–M5-60
					4: How Much Larger?: Operations with Scientific Notation pp. M5-61–M5-76
		MATHia Software	5: Applying Powers	1: Exponents and Scientific Notation	2: Scientific Notation
					2: Scientific Notation
8.EE.4	Perform operations with numbers expressed in scientific notation, including problems where both standard notation and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities. Interpret scientific notation that has been generated by technology.	Textbook	5: Applying Powers	1: Exponents and Scientific Notation	3: The Big and Small of It: Scientific Notation pp. M5-43–M5-60
					4: How Much Larger?: Operations with Scientific Notation pp. M5-61–M5-76
		MATHia Software	5: Applying Powers	1: Exponents and Scientific Notation	2: Scientific Notation
					2: Scientific Notation

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
8.EE.5	Graph linear equations such as y=mx+b, interpreting m as the slope or rate of change of the graph and b as the y-intercept or starting value. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.	Textbook	2: Developing Functional Foundations	1: From Proportions to Linear Relationships	1: Post-Secondary Proportions: Representations of Proportional Relationships pp. M2-7–M2-22
					2: Jack and Jill Went Up the Hill: Using Similar Triangles to Describe the Steepness of a Line pp. M2-23–M2-42
		MATHia Software	2: Developing Functional Foundations	1: From Proportions to Linear Relationship	1: Representations of Proportional Relationships
					1: Representations of Proportional Relationships
					1: Representations of Proportional Relationships
					3: Exploring Slopes
					3: Exploring Slopes
8.EE.6	Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation y = mx for a line through the origin and the equation y = mx + b for a line intercepting the vertical axis at b.	Textbook	2: Developing Functional Foundations	1: From Proportions to Linear Relationships	2: Jack and Jill Went Up the Hill: Using Similar Triangles to Describe the Steepness of a Line pp. M2-23–M2-42
					3: Slippery Slopes: Exploring Slopes Using Similar Triangles pp. M2-43–M2-52
					4: Up, Down, and All Around: Transformations of Lines pp. M2-53–M2-72
		MATHia Software	2: Developing Functional Foundations	1: From Proportions to Linear Relationship	2: Using Similar Triangles to Describe the Steepness of a Line
					2: Using Similar Triangles to Describe the Steepness of a Line
					3: Exploring Slopes
					3: Exploring Slopes
8.EE.7	Solve linear equations in one variable.	Textbook	3: Modeling Linear Equations	1: Solving Linear Equations	3: Tic-Tac-Bingo: Creating Linear Equations pp. M3-31–M3-38
8.EE.7.a	Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form x = a, a = a, or a = b results (where a and b are different numbers).	Textbook	3: Modeling Linear Equations	1: Solving Linear Equations	2: MP3s and DVDs: Analyzing and Solving Linear Equations pp. M3-17–M3-30
					3: Tic-Tac-Bingo: Creating Linear Equations pp. M3-31–M3-38
		MATHia Software	3: Modeling Linear Equations	1: Solving Linear Equations	3: Interpreting the Number of Solutions to Equations
					3: Interpreting the Number of Solutions to Equations

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8.EE.7.b	Solve linear equations with rational coefficients, including equations whose solutions require expanding expressions using the distributive property and combining like terms.	Textbook	3: Modeling Linear Equations	1: Solving Linear Equations	1: Strategic Solving: Equations with Variables on Both Sides pp. M3-7–M3-16
					3: Tic-Tac-Bingo: Creating Linear Equations pp. M3-31–M3-38
		MATHia Software	3: Modeling Linear Equations	1: Solving Linear Equations	1: Solving Multi-Step Equations
					1: Solving Multi-Step Equations
					1: Solving Multi-Step Equations
					1: Solving Multi-Step Equations
					1: Solving Multi-Step Equations
					4: Solving Linear Equations with Variables on Both Sides
					4: Solving Linear Equations with Variables on Both Sides
					4: Solving Linear Equations with Variables on Both Sides
					4: Solving Linear Equations with Variables on Both Sides
8.EE.8	Analyze and solve systems of linear equations.	Textbook	3: Modeling Linear Equations	2: Systems of Linear Equations	3: The County Fair: Using Substitution to Solve Linear Systems pp. M3-75–M3-92
					4: Rockin' Roller Rinks: Choosing a Method to Solve a Linear System pp. M3-93–M3-104
		MATHia Software	3: Modeling Linear Equations	2: Systems of Linear Equations	5: Systems of Linear Equations
					5: Systems of Linear Equations
8.EE.8.a	Show that the solution to a system of two linear equations in two variables is the intersection of the graphs of those equations because points of intersection satisfy both equations simultaneously.	Textbook	3: Modeling Linear Equations	2: Systems of Linear Equations	1: Crossing Paths: Creating Linear Equations pp. M3-47–M3-60
					3: The County Fair: Using Substitution to Solve Linear Systems pp. M3-75–M3-92
					4: Rockin' Roller Rinks: Choosing a Method to Solve a Linear System pp. M3-93–M3-104
		MATHia Software	3: Modeling Linear Equations	2: Systems of Linear Equations	5: Systems of Linear Equations
					5: Systems of Linear Equations
					5: Systems of Linear Equations

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
8.EE.8.b	Solve systems of two linear equations in two variables and estimate solutions by graphing the equations. Simple cases may be done by inspection. For example, 3x + 2y = 5 and 3x + 2y = 6 have no solution because 3x + 2y cannot simultaneously be 5 and 6.	Textbook	3: Modeling Linear Equations	2: Systems of Linear Equations	2: The Road Less Traveled: Systems of Linear Equations pp. M3-61–M3-74
					3: The County Fair: Using Substitution to Solve Linear Systems pp. M3-75–M3-92
					4: Rockin' Roller Rinks: Choosing a Method to Solve a Linear System pp. M3-93–M3-104
		MATHia Software	3: Modeling Linear Equations	2: Systems of Linear Equations	5: Systems of Linear Equations
					5: Systems of Linear Equations
					5: Systems of Linear Equations
8.EE.8.c	Solve real-world and mathematical problems leading to two linear equations in two variables. For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.	Textbook	3: Modeling Linear Equations	2: Systems of Linear Equations	3: The County Fair: Using Substitution to Solve Linear Systems pp. M3-75–M3-92
					4: Rockin' Roller Rinks: Choosing a Method to Solve a Linear System pp. M3-93–M3-104
		MATHia Software	3: Modeling Linear Equations	2: Systems of Linear Equations	5: Systems of Linear Equations
					5: Systems of Linear Equations
8.F.1	Understand that a function is a rule that assigns to each input (the domain) exactly one output (the range). The graph of a function is the set of ordered pairs consisting of an input and the corresponding output. For example, use the vertical line test to determine functions and non-functions.	Textbook	2: Developing Functional Foundations	3: Introduction to Functions	1: Patterns, Sequences, Rules â€¦: Analyzing Sequences as Rules pp. M2-179–M2-188
					3: One or More Xs to One Y: Defining Functional Relationships pp. M2-205–M2-221
		MATHia Software	2: Developing Functional Foundations	3: Introduction to Functions	9: Defining Functional Relationships
					9: Defining Functional Relationships
					10: Describing Graphs of Functions
8.F.2	Compare properties of two functions, each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.	Textbook	2: Developing Functional Foundations	3: Introduction to Functions	5: Comparing Apples to Oranges: Comparing Functions using Different Representations pp. M2-241–M2-256
		MATHia Software	2: Developing Functional Foundations	3: Introduction to Functions	11: Comparing Functions Using Different Representations

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8.F.3	Interpret the equation y = mx + b as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line.	Textbook	2: Developing Functional Foundations	3: Introduction to Functions	4: Over the River and Through the Woods: Describing Functions pp. M2-223–M2-240
		MATHia Software	2: Developing Functional Foundations	2: Linear Relationships	6: Slope-Intercept Form of a Line
8.F.4	Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.	Textbook	2: Developing Functional Foundations	2: Linear Relationships	1: U.S. Shirts: Using Tables, Graphs, and Equations pp. M2-81–M2-92
					2: At the Arcade: Linear Relationships in Tables pp. M2-93–M2-108
					3: Dining, Dancing, and Driving: Linear Relationships in Contexts pp. M2-109–M2-118
					4: Derby Day: Slope-Intercept Form of a Line pp. M2-119–M2-133
					5: What's the Point?: Point-Slope Form of a Line pp. M2-135–M2-150
					6: The Arts Are Alive: Using Linear Equations pp. M2-151–M2-167
				3: Introduction to Functions	4: Over the River and Through the Woods: Describing Functions pp. M2-223–M2-240
		MATHia Software	2: Developing Functional Foundations	2: Linear Relationships	4: Using Tables, Graphs, and Equations
					4: Using Tables, Graphs, and Equations
					5: Linear Relationships in Tables
					6: Slope-Intercept Form of a Line
					6: Slope-Intercept Form of a Line
					6: Slope-Intercept Form of a Line
					7: Point-Slope Form of a Line
					7: Point-Slope Form of a Line
					8: Graphing Linear Equations
					8: Graphing Linear Equations
					8: Graphing Linear Equations
					8: Graphing Linear Equations

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8.F.4	Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.	MATHia Software	2: Developing Functional Foundations	2: Linear Relationships	8: Graphing Linear Equations
			3: Modeling Linear Equations	1: Solving Linear Equations	2: Analyzing Linear Equations Involving the Distributive Property
					2: Analyzing Linear Equations Involving the Distributive Property
					2: Analyzing Linear Equations Involving the Distributive Property
					2: Analyzing Linear Equations Involving the Distributive Property
8.F.5	Given a verbal description between two quantities, sketch a graph. Conversely, given a graph, describe a possible real-world example. For example, graph the position of an accelerating car or tossing a ball in the air.	Textbook	2: Developing Functional Foundations	3: Introduction to Functions	2: Once Upon a Graph: Analyzing the Characteristics of Graphs of Relationships pp. M2-189–M2-204
					4: Over the River and Through the Woods: Describing Functions pp. M2-223–M2-240
		MATHia Software	2: Developing Functional Foundations	3: Introduction to Functions	10: Describing Graphs of Functions
8.G.1	Through experimentation, verify the properties of rotations, reflections, and translations (transformations) to figures on a coordinate plane).	Textbook	1: Transforming Geometric Objects	1: Rigid Motion Transformations	2: Slides, Flips, and Spins: Introduction to Rigid Motions pp. M1-17–M1-38
		MATHia Software	1: Transforming Geometric Objects	1: Rigid Motion Transformations	1: Rigid Motions on the Coordinate Plane
8.G.1.a	Lines are taken to lines, and line segments to line segments of the same length.	Textbook	1: Transforming Geometric Objects	1: Rigid Motion Transformations	1: Patty Paper, Patty Paper: Introduction ot Congruent Figures pp. M1-7–M1-16
					2: Slides, Flips, and Spins: Introduction to Rigid Motions pp. M1-17–M1-38
			2: Developing Functional Foundations	1: From Proportions to Linear Relationships	4: Up, Down, and All Around: Transformations of Lines pp. M2-53–M2-72
		MATHia Software	1: Transforming Geometric Objects	1: Rigid Motion Transformations	1: Rigid Motions on the Coordinate Plane
8.G.1.b	Angles are taken to angles of the same measure.	Textbook	1: Transforming Geometric Objects	1: Rigid Motion Transformations	1: Patty Paper, Patty Paper: Introduction ot Congruent Figures pp. M1-7–M1-16
					2: Slides, Flips, and Spins: Introduction to Rigid Motions pp. M1-17–M1-38
		MATHia Software	1: Transforming Geometric Objects	1: Rigid Motion Transformations	1: Rigid Motions on the Coordinate Plane

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8.G.1.c	Parallel lines are taken to parallel lines.	Textbook	1: Transforming Geometric Objects	1: Rigid Motion Transformations	2: Slides, Flips, and Spins: Introduction to Rigid Motions pp. M1-17–M1-38
			2: Developing Functional Foundations	1: From Proportions to Linear Relationships	4: Up, Down, and All Around: Transformations of Lines pp. M2-53–M2-72
		MATHia Software	1: Transforming Geometric Objects	1: Rigid Motion Transformations	1: Rigid Motions on the Coordinate Plane
8.G.2	Demonstrate understanding of congruence by applying a sequence of translations, reflections, and rotations on two-dimensional figures. Given two congruent figures, describe a sequence that exhibits the congruence between them.	Textbook	1: Transforming Geometric Objects	1: Rigid Motion Transformations	1: Patty Paper, Patty Paper: Introduction ot Congruent Figures pp. M1-7–M1-16
					2: Slides, Flips, and Spins: Introduction to Rigid Motions pp. M1-17–M1-38
					3: Lateral Moves: Translations of Figures on the Coordinate Plane pp. M1-39–M1-52
					4: Mirror, Mirror: Reflections of Figures on the Coordinate Plane pp. M1-53–M1-66
					5: Half Turns and Quarter Turns: Rotations of Figures on the Coordinate Plane pp. M1-67–M1-82
					6: Every Which Way: Combining Rigid Motions pp. M1-83–M1-97
		MATHia Software	1: Transforming Geometric Objects	1: Rigid Motion Transformations	1: Rigid Motions on the Coordinate Plane
					1: Rigid Motions on the Coordinate Plane
					1: Rigid Motions on the Coordinate Plane
				2: Similarity	3: Mapping Similar Figures Using Transformations
					3: Mapping Similar Figures Using Transformations
					3: Mapping Similar Figures Using Transformations
8.G.3	Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.	Textbook	1: Transforming Geometric Objects	1: Rigid Motion Transformations	3: Lateral Moves: Translations of Figures on the Coordinate Plane pp. M1-39–M1-52

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8.G.3	Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.	Textbook	1: Transforming Geometric Objects	1: Rigid Motion Transformations	4: Mirror, Mirror: Reflections of Figures on the Coordinate Plane pp. M1-53–M1-66
					5: Half Turns and Quarter Turns: Rotations of Figures on the Coordinate Plane pp. M1-67–M1-82
					6: Every Which Way: Combining Rigid Motions pp. M1-83–M1-97
				2: Similarity	2: Rising, Running, Stepping, Scaling: Dilating Figures on the Coordinate Plane pp. M1-125–M1-140
		MATHia Software	1: Transforming Geometric Objects	1: Rigid Motion Transformations	1: Rigid Motions on the Coordinate Plane
					1: Rigid Motions on the Coordinate Plane
					1: Rigid Motions on the Coordinate Plane
					1: Rigid Motions on the Coordinate Plane
				2: Similarity	2: Dilating Figures on the Coordinate Plane
					3: Mapping Similar Figures Using Transformations
					3: Mapping Similar Figures Using Transformations
					3: Mapping Similar Figures Using Transformations
8.G.4	Demonstrate understanding of similarity, by applying a sequence of translations, reflections, rotations, and dilations on two-dimensional figures. Describe a sequence that exhibits the similarity between them.	Textbook	1: Transforming Geometric Objects	2: Similarity	1: Pinch-Zoom Geometry: Dilations of Figures pp. M1-109–M1-124
					2: Rising, Running, Stepping, Scaling: Dilating Figures on the Coordinate Plane pp. M1-125–M1-140
					3: From Here to There: Mapping Similar Figures Using Transformations pp. M1-141–M1-157
		MATHia Software	1: Transforming Geometric Objects	2: Similarity	2: Dilating Figures on the Coordinate Plane
					2: Dilating Figures on the Coordinate Plane
					3: Mapping Similar Figures Using Transformations
					3: Mapping Similar Figures Using Transformations
					3: Mapping Similar Figures Using Transformations

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8.G.5	Justify using informal arguments to establish facts about o the angle sum of triangles (sum of the interior angles of a triangle is 180º o measures of exterior angles of triangles, o angles created when parallel lines are cut be a transversal (e.g., alternate interior angles) and o angle-angle criterion for similarity of triangles.	Textbook	1: Transforming Geometric Objects	3: Line and Angle Relationships	1: Pulling a One-Eighty!: Triangle Sum and Exterior Angle Theorems pp. M1-167–M1-180
					2: Crisscross Applesauce: Angle Relationships Formed by Lines Intersected by a Transversal pp. M1-181–M1-202
					3: The Vanishing Point: The Angle-Angle Similarity Theorem pp. M1-203–M1-212
		MATHia Software	1: Transforming Geometric Objects	3: Line and Angle Relationships	4: Triangle Sums and Exterior Angle Theorems
					4: Triangle Sums and Exterior Angle Theorems
					5: Angle Relationships Formed by Lines Intersected by a Transversal
					5: Angle Relationships Formed by Lines Intersected by a Transversal
					5: Angle Relationships Formed by Lines Intersected by a Transversal
					6: The Angle-Angle Similarity Theorem
8.G.6	Explain the Pythagorean Theorem and its converse.	Textbook	4: Expanding Number Systems	2: Pythagorean Theorem	1: The Right Triangle Connection: The Pythagorean Theorem pp. M4-55–M4-74
					2: Can That Be Right?: The Converse of the Pythagorean Theorem pp. M4-75–M4-86
		MATHia Software	4: Expanding Number Systems	2: Pythagorean Theorem	2: The Pythagorean Theorem
8.G.7	Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.	Textbook	4: Expanding Number Systems	2: Pythagorean Theorem	1: The Right Triangle Connection: The Pythagorean Theorem pp. M4-55–M4-74
					2: Can That Be Right?: The Converse of the Pythagorean Theorem pp. M4-75–M4-86
					4: Catty Corner: Side Lengths in Two and Three Dimensions pp. M4-99–M4-112
		MATHia Software	4: Expanding Number Systems	2: Pythagorean Theorem	2: The Pythagorean Theorem
					3: The Converse of the Pythagorean Theorem

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8.G.8	Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.	Textbook	4: Expanding Number Systems	2: Pythagorean Theorem	3: Pythagoras Meets Descartes: Distances in a Coordinate System pp. M4-87–M4-98
		MATHia Software	4: Expanding Number Systems	2: Pythagorean Theorem	4: Distances in a Coordinate Plane
8.G.9	Identify and apply the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.	Textbook	5: Applying Powers	2: Volume of Curved Figures	1: Drum Roll, Please!: Volume of a Cylinder pp. M5-85–M5-98
					2: Cone of Silence: Volume of a Cone pp. M5-99–M5-112
					3: Pulled in All Directions: Volume of a Sphere pp. M5-113–M5-122
					4: Silos, Frozen Yogurt, and Popcorn: Volume Problems with Cylinders, Cones, and Spheres pp. M5-123–M5-132
		MATHia Software	5: Applying Powers	2: Volume of Curved Figures	3: Volume of a Cylinder
					3: Volume of a Cylinder
					3: Volume of a Cylinder
					4: Volume of a Cone
					4: Volume of a Cone
					5: Volume of a Sphere
					5: Volume of a Sphere
8.SP.1	Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.	Textbook	2: Developing Functional Foundations	4: Patterns in Bivariate Data	1: Pass the Squeeze: Analyzing Patterns in Scatter Plots pp. M2-267–M2-288
		MATHia Software	2: Developing Functional Foundations	4: Patterns in Bivariate Data	12: Estimating Lines of Best Fit
8.SP.2	Explain why straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.	Textbook	2: Developing Functional Foundations	4: Patterns in Bivariate Data	2: Where Do You Buy Your Books?: Drawing Lines of Best Fit pp. M2-289–M2-304
					3: Mia Is Growing Like a Weed: Analyzing Lines of Best Fit pp. M2-305–M2-318
		MATHia Software	2: Developing Functional Foundations	4: Patterns in Bivariate Data	12: Estimating Lines of Best Fit
					12: Estimating Lines of Best Fit

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
8.SP.3	Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and y-intercept. For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.	Textbook	2: Developing Functional Foundations	4: Patterns in Bivariate Data	2: Where Do You Buy Your Books?: Drawing Lines of Best Fit pp. M2-289–M2-304
					3: Mia Is Growing Like a Weed: Analyzing Lines of Best Fit pp. M2-305–M2-318
					4: The Stroop Test: Comparing Slopes and Intercepts of Data from Experiments pp. M2-319–M2-327
		MATHia Software	2: Developing Functional Foundations	4: Patterns in Bivariate Data	12: Estimating Lines of Best Fit
8.SP.4	Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects and use relative frequencies to describe possible association between the two variables. For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?	Textbook	2: Developing Functional Foundations	4: Patterns in Bivariate Data	5: Would You Rather â€¦ ?: Patterns of Association in Two-Way Tables pp. M2-329–M2-346
		MATHia Software	2: Developing Functional Foundations	4: Patterns in Bivariate Data	13: Patterns of Association in Two-Way Tables
					13: Patterns of Association in Two-Way Tables
					13: Patterns of Association in Two-Way Tables
					13: Patterns of Association in Two-Way Tables