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Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.7.1</b>	Calculate unit rates of length, area, and other quantities measured in like or different units that include ratios or fractions.	Textbook	1: Thinking Proportionally	2: Fractional Rates	1: Making Punch: Unit Rate Representations pp. M1-51–M1-58 2: Eggzactly!: Solving Problems with Ratios of Fractions pp. M1-59–M1-68
		MATHia Software	1: Thinking Proportionally	2: Ratio and Rate Reasoning	1: Fractional Rates 2: Determining and Comparing Unit Rates
<b>M.7.2</b>	Represent a relationship between two quantities and determine whether the two quantities are related proportionally.	Textbook	1: Thinking Proportionally	3: Proportionality	4: Minding Your Ps and Qs: Constant of Proportionality in Multiple Representations pp. M1-139–M1-152
<b>M.7.2a</b>	Use equivalent ratios displayed in a table or in a graph of the relationship in the coordinate plane to determine whether a relationship between two quantities is proportional.	Textbook	1: Thinking Proportionally	3: Proportionality	1: How Does Your Garden Grow?: Proportional Relationships pp. M1-91–M1-108
		MATHia Software	1: Thinking Proportionally	3: Proportional Reasoning	1: Proportional Relationships
				4: Representing Proportional Relationships by Equations	2: Determining Characteristics of Graphs of Proportional Relationships 1: Exploring Proportions
<b>M.7.2b</b>	Identify the constant of proportionality (unit rate) and express the proportional relationship using multiple representations including tables, graphs, equations, diagrams, and verbal descriptions.	Textbook	1: Thinking Proportionally	3: Proportionality	2: Complying with Title IX: Constant of Proportionality pp. M1-109–M1-125 3: Fish-Inches: Identifying the Constant of Proportionality in Graphs pp. M1-127–M1-138
		MATHia Software	1: Thinking Proportionally	4: Representing Proportional Relationships by Equations	1: Exploring Proportions 2: Writing Proportional Relationships with Equations 3: Converting Between Forms of Proportional Relationships 4: Modeling the Constant of Proportionality
<b>M.7.2c</b>	Explain in context the meaning of a point $(x, y)$ on the graph of a proportional relationship, with special attention to the points $(0, 0)$ and $(1, r)$ where $r$ is the unit rate.	Textbook	1: Thinking Proportionally	3: Proportionality	3: Fish-Inches: Identifying the Constant of Proportionality in Graphs pp. M1-127–M1-138
		MATHia Software	1: Thinking Proportionally	4: Representing Proportional Relationships by Equations	4: Modeling the Constant of Proportionality

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.7.3</b>	Solve multi-step percent problems in context using proportional reasoning, including simple interest, tax, gratuities, commissions, fees, markups and markdowns, percent increase, and percent decrease.	Textbook	1: Thinking Proportionally	2: Fractional Rates	3: Tagging Sharks: Solving Proportions Using Means and Extremes pp. M1-69–M1-82
				4: Proportional Relationships	1: Markups and Markdowns: Introducing Proportions to Solve Percent Problems pp. M1-161–M1-176
			2: Perks of Work: Calculating Tips, Commission, and Simple Interest pp. M1-177–M1-195		
			3: No Taxation Without Calculation: Sales Tax, Income Tax, and Fees pp. M1-197–M1-208		
			4: More Ups and Downs: Percent Increase and Percent Decrease pp. M1-209–M1-222		
			2: Operating with Signed Numbers	2: Multiplying and Dividing Rational Numbers	3: Building a Wright Brothers' Flyer: Simplifying Expressions to Solve Problems pp. M2-113–M2-124
		4: Analyzing Populations and Probabilities	1: Introduction to Probability	3: Toss the Cup: Determining Experimental Probability of Simple Events pp. M4-33–M4-46	
		MATHia Software	1: Thinking Proportionally	5: Percent Conversions	1: Fractional Percent Models
					2: Converting with Fractional Percents
				6: Proportional Reasoning and Percents	1: Using Proportions to Solve Percent Problems
2: Solving Simple Percent Problems					
7: Problem Solving with Percents Using Proportional Relationships	1: Calculating Percent Change and Final Amounts				
	2: Using Percents and Percent Change				
8: Calculating Sales Tax and Discounts	1: Calculating Sales Tax or Discounts				
	2: Solving Problems with Both Sales Tax and Discounts				
	3: Analyzing Different Forms of Expressions				
<b>M.7.4</b>	Apply and extend knowledge of operations of whole numbers, fractions, and decimals to add, subtract, multiply, and divide rational numbers including integers, signed fractions, and decimals.	Textbook	2: Operating with Signed Numbers	1: Adding and Subtracting Rational Numbers	1: Math Football: Using Models to Understand Integer Addition pp. M2-7–M2-16
				2: Multiplying and Dividing Rational Numbers	4: Properties Schmo-properties: Using Number Properties to Interpret Expressions with Signed Numbers pp. M2-125–M2-134

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.7.4a</b>	Identify and explain situations where the sum of opposite quantities is 0 and opposite quantities are defined as additive inverses.	Textbook	2: Operating with Signed Numbers	1: Adding and Subtracting Rational Numbers	3: Two-Color Counters: Adding Integers, Part II pp. M2-31–M2-48
		MATHia Software	2: Operating with Signed Numbers	1: Integer Operations	1: Understanding Opposites
<b>M.7.4b</b>	Interpret the sum of two or more rational numbers, by using a number line and in real-world contexts.	Textbook	2: Operating with Signed Numbers	1: Adding and Subtracting Rational Numbers	2: Walk the Line: Adding Integers, Part I pp. M2-17–M2-30 3: Two-Color Counters: Adding Integers, Part II pp. M2-31–M2-48
		MATHia Software	2: Operating with Signed Numbers	1: Integer Operations	1: Understanding Opposites
					2: Adding and Subtracting Negative Integers
					3: Using Number Lines to Add and Subtract Integers
4: Developing Algorithms for Adding or Subtracting Integers					
<b>M.7.4c</b>	Explain subtraction of rational numbers as addition of additive inverses.	Textbook	2: Operating with Signed Numbers	1: Adding and Subtracting Rational Numbers	4: What's the Difference?: Subtracting Integers pp. M2-49–M2-68
		MATHia Software	2: Operating with Signed Numbers	1: Integer Operations	2: Adding and Subtracting Negative Integers
					3: Using Number Lines to Add and Subtract Integers
4: Developing Algorithms for Adding or Subtracting Integers					
<b>M.7.4d</b>	Use a number line to demonstrate that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.	Textbook	2: Operating with Signed Numbers	1: Adding and Subtracting Rational Numbers	4: What's the Difference?: Subtracting Integers pp. M2-49–M2-68
		MATHia Software	2: Operating with Signed Numbers	1: Integer Operations	3: Using Number Lines to Add and Subtract Integers
<b>M.7.4e</b>	Extend strategies of multiplication to rational numbers to develop rules for multiplying signed numbers, showing that the properties of the operations are preserved.	Textbook	2: Operating with Signed Numbers	2: Multiplying and Dividing Rational Numbers	1: Equal Groups: Multiplying and Dividing Integers pp. M2-89–M2-102
<b>M.7.4f</b>	Divide integers and explain that division by zero is undefined. Interpret the quotient of integers (with a non-zero divisor) as a rational number.	Textbook	2: Operating with Signed Numbers	2: Multiplying and Dividing Rational Numbers	2: Be Rational!: Quotients of Integers pp. M2-103–M2-112
		MATHia Software	2: Operating with Signed Numbers	1: Integer Operations	5: Multiplying and Dividing Integers
<b>M.7.4g</b>	Convert a rational number to a decimal using long division, explaining that the decimal form of a rational number terminates or eventually repeats.	Textbook	2: Operating with Signed Numbers	2: Multiplying and Dividing Rational Numbers	2: Be Rational!: Quotients of Integers pp. M2-103–M2-112
		MATHia Software	2: Operating with Signed Numbers	1: Integer Operations	6: Converting Rational Numbers to Decimals

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
M.7.5	Solve real-world and mathematical problems involving the four operations of rational numbers, including complex fractions. Apply properties of operations as strategies where applicable.	Textbook	2: Operating with Signed Numbers	1: Adding and Subtracting Rational Numbers	5: All Mixed Up: Adding and Subtracting Rational Numbers pp. M2-69–M2-80
				2: Multiplying and Dividing Rational Numbers	1: Equal Groups: Multiplying and Dividing Integers pp. M2-89–M2-102
			2: Evaluating Numeric Expressions		3: Building a Wright Brothers' Flyer: Simplifying Expressions to Solve Problems pp. M2-113–M2-124
				2: Evaluating Numeric Expressions	4: Properties Schmo-properties: Using Number Properties to Interpret Expressions with Signed Numbers pp. M2-125–M2-134
		MATHia Software	2: Operating with Signed Numbers		2: Evaluating Numeric Expressions
				2: Evaluating Numeric Expressions Involving Integers with Parentheses and Exponents	
3: Evaluating Simple Numeric Expressions with Rational Numbers					
4: Evaluating Complex Numeric Expressions with Rational Numbers					
M.7.6	Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.	Textbook	3: Reasoning Algebraically	1: Algebraic Expressions	2: Mathematics Gymnastics: Rewriting Expressions Using the Distributive Property pp. M3-19–M3-32
					MATHia Software
		1: Factoring Linear Expressions			
		2: Rewriting Simple Algebraic Expressions Involving Integer Coefficients			
		3: Rewriting Algebraic Expressions Involving Integer Coefficients with Four Operations			
		MATHia Software	3: Reasoning Algebraically	1: Variable Expressions	4: Rewriting Algebraic Expressions Involving Integer Coefficients with Parentheses and Exponents
5: Rewriting Complex Algebraic Expressions Involving Integer Coefficients					
MATHia Software	3: Reasoning Algebraically	1: Variable Expressions	6: Rewriting Algebraic Expressions Involving Integer Coefficients		

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.7.7</b>	Generate expressions in equivalent forms based on context and explain how the quantities are related.	Textbook	3: Reasoning Algebraically	1: Algebraic Expressions	3: All My Xs: Combining Like Terms pp. M3-33–M3-43
				3: Multiple Representations of Equations	2: Stretches, Stacks, and Structure: Structure of Linear Equations pp. M3-139–M3-153
		MATHia Software	1: Thinking Proportionally	8: Calculating Sales Tax and Discounts	3: Analyzing Different Forms of Expressions
<b>M.7.8</b>	Solve multi-step real-world and mathematical problems involving rational numbers (integers, signed fractions and decimals), converting between forms as needed. Assess the reasonableness of answers using mental computation and estimation strategies.	Textbook	3: Reasoning Algebraically	1: Algebraic Expressions	1: No Substitute for Hard Work: Evaluating Algebraic Expressions pp. M3-7–M3-18
				MATHia Software	3: Reasoning Algebraically
<b>M.7.9</b>	Use variables to represent quantities in real-world or mathematical problems and construct algebraic expressions, equations, and inequalities to solve problems by reasoning about the quantities.	Textbook	3: Reasoning Algebraically	3: Multiple Representations of Equations	4: Texas Tea and Temperature: Using Multiple Representations to Solve Problems pp. M3-169–M3-180
				MATHia Software	3: Reasoning Algebraically

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.7.9a</b>	Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$ , where $p$ , $q$ , and $r$ are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach.	Textbook	3: Reasoning Algebraically	2: Two-Step Equations and Inequalities	1: Picture Algebra: Modeling Equations by Equal Expressions pp. M3-53–M3-63
					2: Expressions That Play Together...: Solving Equations on a Double Number Line pp. M3-65–M3-75
					3: Formally Yours: Using Inverse Operations to Solve Equations pp. M3-77–M3-94
				3: Multiple Representations of Equations	1: Put It on the Plane: Representing Equations with Tables and Graphs pp. M3-125–M3-138
					2: Stretches, Stacks, and Structure: Structure of Linear Equations pp. M3-139–M3-153
				MATHia Software	3: Reasoning Algebraically
		2: Identifying Attributes of Linear Relationships			
		3: Analyzing Models of Two-Step Linear Relationships			
		4: Modeling Two-Step Expressions			
		3: Solving Two-Step Equations	1: Checking Solutions to Linear Equations		
			2: Solving with Multiplication (No Type In)		
			3: Solving with Multiplication (Type In)		
			4: Solving with Division (No Type In)		
			5: Solving with Division (Type In)		
5: Problem Solving with Two-Step Equations and Inequalities	6: Solving Two-Step Equations				
	1: Determining the Value of an Independent Variable				
	3: Solving Problems with Integers				
6: The Coordinate Plane and Two-Step Equations	4: Solving Problems with Decimals and Fractions				
	1: Graphs of Equations				
2: Using Graphs to Solve Equations					

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.7.9b</b>	Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$ , where $p$ , $q$ , and $r$ are specific rational numbers. Graph the solution set of the inequality, and interpret it in the context of the problem.	Textbook	3: Reasoning Algebraically	2: Two-Step Equations and Inequalities	4: Be Greater Than: Solving Inequalities with Inverse Operations pp. M3-95–M3-116
		MATHia Software	3: Reasoning Algebraically	3: Multiple Representations of Equations	3: Deep Flight I: Building Inequalities and Equations to Solve Problems pp. M3-155–M3-168
				4: Solving Two-Step Inequalities	1: Graphing Inequalities with Rational Numbers 2: Solving One-Step Linear Inequalities 3: Solving Two-Step Linear Inequalities
<b>M.7.10</b>	Examine a sample of a population to generalize information about the population.	Textbook	4: Analyzing Populations and Probabilities	3: Drawing Inferences	1: We Want to Hear From You!: Collecting Random Samples pp. M4-133–M4-149
		MATHia Software	4: Analyzing Populations and Probability	3: Numerical Data Displays Comparisons	2: Tiles, Gumballs, and Pumpkins: Using Random Samples to Draw Inferences pp. M4-151–M4-167 1: Using Statistics to Draw Inferences About a Population
<b>M.7.10a</b>	Differentiate between a sample and a population.	Textbook	4: Analyzing Populations and Probabilities	3: Drawing Inferences	1: We Want to Hear From You!: Collecting Random Samples pp. M4-133–M4-149
		MATHia Software	4: Analyzing Populations and Probability	3: Numerical Data Displays Comparisons	1: Using Statistics to Draw Inferences About a Population
<b>M.7.10b</b>	Compare sampling techniques to determine whether a sample is random and thus representative of a population, explaining that random sampling tends to produce representative samples and support valid inferences.	Textbook	4: Analyzing Populations and Probabilities	3: Drawing Inferences	1: We Want to Hear From You!: Collecting Random Samples pp. M4-133–M4-149
		MATHia Software	4: Analyzing Populations and Probability	3: Numerical Data Displays Comparisons	2: Tiles, Gumballs, and Pumpkins: Using Random Samples to Draw Inferences pp. M4-151–M4-167 1: Using Statistics to Draw Inferences About a Population
<b>M.7.10c</b>	Determine whether conclusions and generalizations can be made about a population based on a sample.	Textbook	4: Analyzing Populations and Probabilities	3: Drawing Inferences	1: We Want to Hear From You!: Collecting Random Samples pp. M4-133–M4-149
		MATHia Software	4: Analyzing Populations and Probability	3: Numerical Data Displays Comparisons	1: Using Statistics to Draw Inferences About a Population
<b>M.7.10d</b>	Use data from a random sample to draw inferences about a population with an unknown characteristic of interest, generating multiple samples to gauge variation and making predictions or conclusions about the population.	Textbook	4: Analyzing Populations and Probabilities	3: Drawing Inferences	2: Tiles, Gumballs, and Pumpkins: Using Random Samples to Draw Inferences pp. M4-151–M4-167
		MATHia Software	4: Analyzing Populations and Probability	3: Numerical Data Displays Comparisons	1: Using Statistics to Draw Inferences About a Population



Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.7.10e</b>	Informally explain situations in which statistical bias may exist.	Textbook	4: Analyzing Populations and Probabilities	3: Drawing Inferences	1: We Want to Hear From You!: Collecting Random Samples pp. M4-133–M4-149
<b>M.7.11</b>	Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability.	Textbook	4: Analyzing Populations and Probabilities	3: Drawing Inferences	3: Spicy or Dark?: Comparing Two Populations pp. M4-169–M4-180
		MATHia Software	4: Analyzing Populations and Probability	3: Numerical Data Displays Comparisons	4: Finding Your Spot to Live: Using Random Samples from Two Populations to Draw Conclusions pp. M4-181–M4-204
					2: Comparing Characteristics of Data Displays 3: Comparing Populations Using Data Displays
<b>M.7.12</b>	Make informal comparative inferences about two populations using measures of center and variability and/or mean absolute deviation in context.	Textbook	4: Analyzing Populations and Probabilities	3: Drawing Inferences	4: Finding Your Spot to Live: Using Random Samples from Two Populations to Draw Conclusions pp. M4-181–M4-204
<b>M.7.13</b>	Use a number from 0 to 1 to represent the probability of a chance event occurring, explaining that larger numbers indicate greater likelihood of the event occurring, while a number near zero indicates an unlikely event.	Textbook	4: Analyzing Populations and Probabilities	1: Introduction to Probability	1: Rolling, Rolling, Rolling...: Defining and Representing Probability pp. M4-7–M4-22
		MATHia Software	4: Analyzing Populations and Probability	1: Introduction to Probability	1: Determining Probabilities

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.7.14</b>	Define and develop a probability model, including models that may or may not be uniform, where uniform models assign equal probability to all outcomes and non-uniform models involve events that are not equally likely.	Textbook	4: Analyzing Populations and Probabilities	1: Introduction to Probability	2: Give the Models a Chance: Probability Models pp. M4-23–M4-32
					3: Toss the Cup: Determining Experimental Probability of Simple Events pp. M4-33–M4-46
					4: A Simulating Conversation: Simulating Simple Experiments pp. M4-47–M4-64
		MATHia Software	4: Analyzing Populations and Probability	1: Introduction to Probability	1: Evens or Odds?: Using Arrays to Organize Outcomes pp. M4-73–M4-88
					2: Three Girls and No Boys?: Using Tree Diagrams pp. M4-89–M4-100
					3: Pet Shop Probability: Determining Compound Probability pp. M4-101–M4-112
<b>M.7.14a</b>	Collect and use data to predict probabilities of events.	Textbook	4: Analyzing Populations and Probabilities	1: Introduction to Probability	3: Toss the Cup: Determining Experimental Probability of Simple Events pp. M4-33–M4-46
					4: A Simulating Conversation: Simulating Simple Experiments pp. M4-47–M4-64
					1: Evens or Odds?: Using Arrays to Organize Outcomes pp. M4-73–M4-88
		MATHia Software	4: Analyzing Populations and Probability	1: Introduction to Probability	4: On a Hot Streak: Simulating Probability of Compound Events pp. M4-113–M4-124
					2: Comparing Experimental and Theoretical Probabilities
					2: Comparing Experimental and Theoretical Probabilities

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.7.14b</b>	Compare probabilities from a model to observed frequencies, explaining possible sources of discrepancy.	Textbook	4: Analyzing Populations and Probabilities	1: Introduction to Probability	2: Give the Models a Chance: Probability Models pp. M4-23–M4-32
				2: Compound Probability	2: Three Girls and No Boys?: Using Tree Diagrams pp. M4-89–M4-100
		MATHia Software	4: Analyzing Populations and Probability	1: Introduction to Probability	2: Comparing Experimental and Theoretical Probabilities
<b>M.7.15</b>	Approximate the probability of an event using data generated by a simulation (experimental probability) and compare it to the theoretical probability.	Textbook	4: Analyzing Populations and Probabilities	1: Introduction to Probability	3: Toss the Cup: Determining Experimental Probability of Simple Events pp. M4-33–M4-46
					4: A Simulating Conversation: Simulating Simple Experiments pp. M4-47–M4-64
		MATHia Software	4: Analyzing Populations and Probability	2: Compound Probability	1: Evens or Odds?: Using Arrays to Organize Outcomes pp. M4-73–M4-88
					4: On a Hot Streak: Simulating Probability of Compound Events pp. M4-113–M4-124
		1: Introduction to Probability	2: Comparing Experimental and Theoretical Probabilities		
<b>M.7.15a</b>	Observe the relative frequency of an event over the long run, using simulation or technology, and use those results to predict approximate relative frequency.	Textbook	4: Analyzing Populations and Probabilities	1: Introduction to Probability	3: Toss the Cup: Determining Experimental Probability of Simple Events pp. M4-33–M4-46
					4: A Simulating Conversation: Simulating Simple Experiments pp. M4-47–M4-64
				2: Compound Probability	4: On a Hot Streak: Simulating Probability of Compound Events pp. M4-113–M4-124
<b>M.7.16</b>	Find probabilities of simple and compound events through experimentation or simulation and by analyzing the sample space, representing the probabilities as percents, decimals, or fractions.	Textbook	4: Analyzing Populations and Probabilities	1: Introduction to Probability	3: Toss the Cup: Determining Experimental Probability of Simple Events pp. M4-33–M4-46
					4: A Simulating Conversation: Simulating Simple Experiments pp. M4-47–M4-64
				2: Compound Probability	1: Evens or Odds?: Using Arrays to Organize Outcomes pp. M4-73–M4-88
					2: Three Girls and No Boys?: Using Tree Diagrams pp. M4-89–M4-100

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<b>M.7.16</b>	Find probabilities of simple and compound events through experimentation or simulation and by analyzing the sample space, representing the probabilities as percents, decimals, or fractions.	Textbook	4: Analyzing Populations and Probabilities	2: Compound Probability	3: Pet Shop Probability: Determining Compound Probability pp. M4-101–M4-112
					4: On a Hot Streak: Simulating Probability of Compound Events pp. M4-113–M4-124
<b>M.7.16a</b>	Represent sample spaces for compound events using methods such as organized lists, tables, and tree diagrams, and determine the probability of an event by finding the fraction of outcomes in the sample space for which the compound event occurred.	Textbook	4: Analyzing Populations and Probabilities	2: Compound Probability	1: Evens or Odds?: Using Arrays to Organize Outcomes pp. M4-73–M4-88
					2: Three Girls and No Boys?: Using Tree Diagrams pp. M4-89–M4-100
					3: Pet Shop Probability: Determining Compound Probability pp. M4-101–M4-112
		MATHia Software	4: Analyzing Populations and Probability	2: Compound Probability	2: Calculating Compound Probabilities
<b>M.7.16b</b>	Design and use a simulation to generate frequencies for compound events.	Textbook	4: Analyzing Populations and Probabilities	2: Compound Probability	4: On a Hot Streak: Simulating Probability of Compound Events pp. M4-113–M4-124
		MATHia Software	4: Analyzing Populations and Probability	1: Introduction to Probability 2: Compound Probability	3: Simulating Simple Events 3: Simulating Compound Events
<b>M.7.16c</b>	Represent events described in everyday language in terms of outcomes in the sample space which composed the event.	Textbook	4: Analyzing Populations and Probabilities	2: Compound Probability	1: Evens or Odds?: Using Arrays to Organize Outcomes pp. M4-73–M4-88
					2: Three Girls and No Boys?: Using Tree Diagrams pp. M4-89–M4-100
					3: Pet Shop Probability: Determining Compound Probability pp. M4-101–M4-112
					4: On a Hot Streak: Simulating Probability of Compound Events pp. M4-113–M4-124
<b>M.7.17</b>	Solve problems involving scale drawings of geometric figures, including computation of actual lengths and areas from a scale drawing and reproduction of a scale drawing at a different scale.	Textbook	1: Thinking Proportionally	4: Proportional Relationships	5: Pound for Pound, Inch for Inch: Scale and Scale Drawings pp. M1-223–M1-240

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.7.17</b>	Solve problems involving scale drawings of geometric figures, including computation of actual lengths and areas from a scale drawing and reproduction of a scale drawing at a different scale.	MATHia Software	1: Thinking Proportionally	9: Scale Drawings	1: Critical Attributes of Similar Figures
					2: Using Scale Drawings
					3: Using Scale Factor
<b>M.7.18</b>	Construct geometric shapes (freehand, using a ruler and a protractor, and using technology), given a written description or measurement constraints with an emphasis on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	Textbook	5: Constructing and Measuring	1: Angles and Triangles	1: Here's Lookin' at Euclid: Geometric Constructions pp. M5-7-M5-18
					3: Consider Every Side: Constructing Triangles Given Sides pp. M5-39-M5-52
					4: Unique or Not?: Constructing Triangles Given Angles pp. M5-53-M5-66
<b>M.7.19</b>	Describe the two-dimensional figures created by slicing three-dimensional figures into plane sections.	Textbook	5: Constructing and Measuring	2: Three-Dimensional Figures	1: Slicing and Dicing: Cross-Sections of Rectangular Prisms pp. M5-75-M5-96
		MATHia Software	5: Constructing and Measuring	2: Three-Dimensional Figures	2: Dissecting a Pyramid: Cross-Sections of Rectangular Pyramids pp. M5-97-M5-106
<b>M.7.20</b>	Explain the relationships among circumference, diameter, area, and radius of a circle to demonstrate understanding of formulas for the area and circumference of a circle.	Textbook	1: Thinking Proportionally	1: Circles and Ratio	1: Pi: The Ultimate Ratio: Exploring the Ratio of Circle Circumference to Diameter pp. M1-7-M1-18
					2: That's a Spicy Pizza: Area of Circles pp. M1-19-M1-32
					3: Circular Reasoning: Solving Area and Circumference Problems pp. M1-33-M1-42
		MATHia Software	1: Thinking Proportionally	1: Circles	1: Investigating Circles
<b>M.7.20a</b>	Informally derive the formula for area of a circle.	Textbook	1: Thinking Proportionally	1: Circles and Ratio	2: That's a Spicy Pizza: Area of Circles pp. M1-19-M1-32
		MATHia Software	1: Thinking Proportionally	1: Circles	1: Investigating Circles

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.7.20b</b>	Solve area and circumference problems in real-world and mathematical situations involving circles.	Textbook	1: Thinking Proportionally	1: Circles and Ratio	2: That's a Spicy Pizza: Area of Circles pp. M1-19–M1-32
		MATHia Software	1: Thinking Proportionally	1: Circles	3: Circular Reasoning: Solving Area and Circumference Problems pp. M1-33–M1-42
<b>M.7.21</b>	Use facts about supplementary, complementary, vertical, and adjacent angles in multi-step problems to write and solve simple equations for an unknown angle in a figure.	Textbook	5: Constructing and Measuring	1: Angles and Triangles	2: Special Delivery: Special Angle Relationships pp. M5-19–M5-38
		MATHia Software	5: Constructing and Measuring	1: Angle Properties	1: Calculating Angles 2: Classifying Angles and Determining Unknown Measures
<b>M.7.22</b>	Solve real-world and mathematical problems involving area, volume, and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right rectangular prisms.	Textbook	1: Thinking Proportionally	4: Proportional Relationships	4: More Ups and Downs: Percent Increase and Percent Decrease pp. M1-209–M1-222
			5: Constructing and Measuring	2: Three-Dimensional Figures	3: Hey, Mister, Got Some Bird Seed?: Volume of Pyramids pp. M5-107–M5-127
		MATHia Software	5: Constructing and Measuring	3: Volume of Prisms and Pyramids	4: The Sound of Surface Area: Surface Area of Pyramids pp. M5-129–M5-142
					5: More Than Four Sides of the Story: Volume and Surface Area of Prisms and Pyramids pp. M5-143–M5-156
1: Understanding Volume Formulas for Right Prisms					
2: Using Volume of Right Prisms					
3: Calculating Volume of Pyramids					
4: Using Volume of Pyramids					