

Table of Contents

M.6.1.....	1	M.6.15b.....	7	M.6.25c.....	14
M.6.2.....	1	M.6.15c.....	8	M.6.26.....	15
M.6.3.....	1	M.6.15d.....	8	M.6.26a.....	15
M.6.3.....	2	M.6.16.....	8	M.6.27.....	15
M.6.4.....	2	M.6.16.....	9	M.6.28.....	15
M.6.4.....	3	M.6.17.....	9	M.6.28a.....	16
M.6.4a.....	3	M.6.18.....	9		
M.6.5.....	3	M.6.19.....	9		
M.6.6.....	3	M.6.19.....	10		
M.6.6.....	4	M.6.19a.....	10		
M.6.7.....	4	M.6.20.....	10		
M.6.8.....	4	M.6.20a.....	10		
M.6.8a.....	4	M.6.20b.....	11		
M.6.9.....	5	M.6.21.....	11		
M.6.10.....	5	M.6.21a.....	11		
M.6.10a.....	5	M.6.21a.....	12		
M.6.10b.....	5	M.6.22.....	12		
M.6.11.....	5	M.6.23.....	12		
M.6.11a.....	5	M.6.23.....	13		
M.6.11b.....	5	M.6.23a.....	13		
M.6.11c.....	5	M.6.23b.....	13		
M.6.11d.....	6	M.6.24.....	13		
M.6.12.....	6	M.6.24a.....	14		
M.6.13.....	6	M.6.24b.....	14		
M.6.14.....	6	M.6.25.....	14		
M.6.15.....	6	M.6.25a.....	14		
M.6.15a.....	7	M.6.25b.....	14		

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
M.6.1	Use appropriate notations [a/b , a to b , $a : b$] to represent a proportional relationship between quantities and use ratio language to describe the relationship between quantities.	Textbook	2: Relating Quantities	1: Ratios	1: It's All Relative: Introduction to Ratio and Ratio Reasoning pp. M2-7–M2-24 2: Going Strong: Comparing Quantities 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: Ratio Reasoning	1: Understanding Ratio Relationships
M.6.2	Use unit rates to represent and describe ratio relationships.	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	4: Rate Reasoning	1: Determining and Comparing Unit Rates
M.6.3	Use ratio and rate reasoning to solve mathematical and real-world problems (including but not limited to percent, measurement conversion, and equivalent ratios) using a variety of models, including tables of equivalent ratios, tape diagrams, double number lines, and equations.	Textbook	2: Relating Quantities	1: Ratios	2: Going Strong: Comparing Quantities 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

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M.6.3	Use ratio and rate reasoning to solve mathematical and real-world problems (including but not limited to percent, measurement conversion, and equivalent ratios) using a variety of models, including tables of equivalent ratios, tape diagrams, double number lines, and equations.	Textbook	2: Relating Quantities	2: Percents	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
				3: Unit Rates and Conversions	1: Many Ways to Measure: Using Ratio Reasoning to Convert Units pp. M2-165–M2-184
					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
					2: Equivalent Ratios
		MATHia Software	2: Relating Quantities	1: Ratio Reasoning	3: Multiple Representations of Ratios
					2: Problem Solving Using Ratio and Rate Reasoning
				2: Problem Solving with Equivalent Ratios and Rates using Double Number Lines	
				3: Problem Solving with Equivalent Ratios and Rates using Graphs	
				3: Introduction to Percent	1: Percent Models
					2: Fraction, Decimal, Percent Conversions
3: Determining a Part Given a Percent and a Whole					
5: Ratio Reasoning to Convert Units	4: Determining a Whole Given a Percent and a Part				
	1: Converting Within Systems				
	2: Converting Between Systems				
	M.6.4	Interpret and compute quotients of fractions using visual models and equations to represent problems.	Textbook	1: Composing and Decomposing	2: Positive Rational Numbers

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
M.6.4	Interpret and compute quotients of fractions using visual models and equations to represent problems.	Textbook	1: Composing and Decomposing	2: Positive Rational Numbers	2: Did You Get the Part?: Multiplying and Dividing with Fractions pp. M1-83–M1-92
					3: Yours IS to Reason Why!: Fraction by Fraction Division pp. M1-93–M1-106
		MATHia Software	1: Composing and Decomposing	3: Fraction Division	1: Representing Fraction Division
					2: Interpreting Remainders Using Models
3: Developing the Fraction Division Algorithm					
4: Multiplying and Dividing Rational Numbers					
M.6.4a	Use quotients of fractions to analyze and solve problems.	Textbook	1: Composing and Decomposing	2: Positive Rational Numbers	2: Did You Get the Part?: Multiplying and Dividing with Fractions pp. M1-83–M1-92
					3: Yours IS to Reason Why!: Fraction by Fraction Division pp. M1-93–M1-106
		MATHia Software	1: Composing and Decomposing	3: Fraction Division	1: Representing Fraction Division
					2: Interpreting Remainders Using Models
3: Developing the Fraction Division Algorithm					
4: Multiplying and Dividing Rational Numbers					
M.6.5	Fluently divide multi-digit whole numbers using a standard algorithm to solve real-world and mathematical problems.	Textbook	1: Composing and Decomposing	3: Decimals and Volume	4: Dividend in the House: Dividing with Volume and Surface Area pp. M1-165–M1-175
					MATHia Software
					9: Whole Number and Decimal Quotients
M.6.6	Add, subtract, multiply, and divide decimals using a standard algorithm.	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

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
M.6.6	Add, subtract, multiply, and divide decimals using a standard algorithm.	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
					4: Dividend in the House: Dividing with Volume and Surface Area pp. M1-165–M1-175
		MATHia Software	1: Composing and Decomposing	4: Decimal Operations	1: Converting Fractions to Decimals
					2: Adding and Subtracting Decimals
					3: Decimal Sums and Differences
					4: Exploring Decimal Facts
					5: Patterns with Products and Quotients
					6: Multiplying Decimals
					7: Decimal Products
8: Dividing Decimals					
9: Whole Number and Decimal Quotients					
M.6.7	Use the distributive property to express the sum of two whole numbers with a common factor as a multiple of a sum of two whole numbers with no common factor.	Textbook	1: Composing and Decomposing	1: Factors and Area	4: Searching for Common Ground: Common Factors and Common Multiples pp. M1-39–M1-50
					5: Composing and Decomposing Numbers: Least Common Multiple and Greatest Common Factor pp. M1-51–M1-60
		MATHia Software	1: Composing and Decomposing	1: Number Properties	4: Identifying Greatest Common Factors and Least Common Multiples
M.6.8	Find the greatest common factor (GCF) and least common multiple (LCM) of two or more whole numbers.	Textbook	1: Composing and Decomposing	1: Factors and Area	4: Searching for Common Ground: Common Factors and Common Multiples pp. M1-39–M1-50
					5: Composing and Decomposing Numbers: Least Common Multiple and Greatest Common Factor pp. M1-51–M1-60
		MATHia Software	1: Composing and Decomposing	1: Number Properties	4: Identifying Greatest Common Factors and Least Common Multiples
M.6.8a	Use factors and multiples to determine prime factorization.	Textbook	1: Composing and Decomposing	1: Factors and Area	4: Searching for Common Ground: Common Factors and Common Multiples pp. M1-39–M1-50
					5: Composing and Decomposing Numbers: Least Common Multiple and Greatest Common Factor pp. M1-51–M1-60

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
M.6.9	Use signed numbers to describe quantities that have opposite directions or values and to represent quantities in real-world contexts.	Textbook	4: Moving Beyond Positive Quantities	1: Signed Numbers	1: Human Number Line: Introduction to Negative Numbers pp. M4-7-M4-22
		MATHia Software	4: Moving Beyond Positive Quantities	1: Integers	1: Introduction to Negative Numbers
M.6.10	Locate integers and other rational numbers on a horizontal or vertical line diagram.	Textbook	4: Moving Beyond Positive Quantities	1: Signed Numbers	1: Human Number Line: Introduction to Negative Numbers pp. M4-7-M4-22
		MATHia Software	4: Moving Beyond Positive Quantities	1: Integers	1: Introduction to Negative Numbers
M.6.10a	Define opposites as numbers located on opposite sides of 0 and the same distance from 0 on a number line.	Textbook	4: Moving Beyond Positive Quantities	1: Signed Numbers	1: Human Number Line: Introduction to Negative Numbers pp. M4-7-M4-22
		MATHia Software	4: Moving Beyond Positive Quantities	1: Integers	2: Representing Integers on Number Lines
M.6.10b	Use rational numbers in real-world and mathematical situations, explaining 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-M4-22
		MATHia Software	4: Moving Beyond Positive Quantities	1: Integers	1: Introduction to Negative Numbers
M.6.11	Find the position of pairs of integers and other rational numbers on the coordinate plan.	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 Coordinate Plane	1: Exploring Symmetry on the Coordinate Plane
					2: Identifying and Interpreting Ordered Pairs
3: Plotting Points					
M.6.11a	Identify quadrant locations of ordered pairs on the coordinate plane based on the signs of the x and y coordinates.	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 Coordinate Plane	1: Exploring Symmetry on the Coordinate Plane
M.6.11b	Identify (a, b) and $(a, -b)$ as reflections across the x -axis.	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 Coordinate Plane	1: Exploring Symmetry on the Coordinate Plane
M.6.11c	Identify (a, b) and $(-a, b)$ as reflections across the y -axis.	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 Coordinate Plane	1: Exploring Symmetry on the Coordinate Plane

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
M.6.11d	Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane, including finding distances between points with the same first or 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 Coordinate Plane	4: Drawing Polygons on the Coordinate Plane
M.6.12	Explain the meaning of absolute value and determine the absolute value of rational numbers in real-world contexts.	Textbook	4: Moving Beyond Positive Quantities	1: Signed Numbers	2: Magnificent Magnitude: Absolute Value pp. M4-23–M4-34 3: What's in a Name?: Rational Number System pp. M4-35–M4-46
		MATHia Software	4: Moving Beyond Positive Quantities	1: Integers	3: Using Absolute Value
M.6.13	Compare and order rational numbers and absolute value of rational numbers with and without a number line in order to solve real-world and mathematical problems.	Textbook	4: Moving Beyond Positive Quantities	1: Signed Numbers	1: Human Number Line: Introduction to Negative Numbers pp. M4-7–M4-22
		MATHia Software	4: Moving Beyond Positive Quantities	1: Integers	2: Representing Integers on Number Lines 3: Using Absolute Value
M.6.14	Write, evaluate, and compare expressions involving whole number exponents.	Textbook	3: Determining Unknown Quantities	1: Expressions	1: Relationships Matter: Evaluating Numeric Expressions pp. M3-7–M3-22
		MATHia Software	3: Determining Unknown Quantities	1: Numeric Expressions	3: Writing and Evaluating Exponent Expressions
					4: Order of Operations
					5: Applying the Order of Operations
					6: Using Order of Operations to Evaluate Simple Numeric Expressions
					7: Using Order of Operations to Evaluate Numeric Expressions with Four Operations
8: Using Order of Operations to Evaluate Numeric Expressions with Parentheses and Exponents					
9: Using Order of Operations to Evaluate Numeric Expressions					
M.6.15	Write, read, and evaluate expressions in which letter represent numbers in real-world contexts.	Textbook	3: Determining Unknown Quantities	1: Expressions	2: Into the Unknown: Introduction to Algebraic Expressions pp. M3-23–M3-34

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
M.6.15a	Interpret a variable as an unknown value for any number in a specified set, depending on the context.	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
M.6.15b	Write expressions to represent verbal statements and real-world scenarios.	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
				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	4: Reasoning with Expressions and Equations	4: Patterns and One-Step Expressions
				7: Problem Solving with One-Step Equations	3: Patterns and One-Step Equations
					4: Problem Solving Using Multiple Representations in the First Quadrant
					5: Problem Solving with Decimals

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
M.6.15c	Identify parts of an expression using mathematical terms such as sum, term, product, factor, quotient, and coefficient.	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–M1-14
			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	2: Algebraic Expressions	1: Identifying Parts of Simple Algebraic Expressions
M.6.15d	Evaluate expressions (which may include absolute value and whole number exponents) with respect to 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: Numeric Expressions	1: Evaluating One-Step Expressions with Whole Numbers
					2: Evaluating Two-Step Expressions with Whole Numbers
					2: Evaluating Multi-Step Expressions
2: Algebraic Expressions	3: Evaluating Expressions with Multiple Variables				
M.6.16	Generate equivalent algebraic expressions using the properties of operations, including inverse, identity, commutative, associative, and distributive.	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–M1-14
			3: Determining Unknown Quantities	1: Expressions	3: Second Verse, Same as the First: Equivalent Expressions pp. M3-35–M3-52

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
M.6.16	Generate equivalent algebraic expressions using the properties of operations, including inverse, identity, commutative, associative, and distributive.	Textbook	3: Determining Unknown Quantities	1: Expressions	5: DVDs and Songs: Using Algebraic Expressions to Analyze and Solve Problems pp. M3-67–M3-76
		MATHia Software	1: Composing and Decomposing	1: Number Properties	1: Commutative and Associative Properties
					2: Exploring the Distributive Property with Numeric Expressions
			3: Determining Unknown Quantities	3: Equivalent Algebraic Expressions	3: Using the Distributive Property with Numeric Expressions
					1: Modeling Equivalent Algebraic Expressions
					2: Exploring the Distributive Property with Algebraic Expressions
					3: Using Order of Operations to Rewrite Simple Algebraic Expressions
4: Using Order of Operations to Rewrite Algebraic Expressions with Four Operations					
5: Using Order of Operations to Rewrite Algebraic Expressions with Parentheses and Exponents					
6: Using Order of Operations to Rewrite Algebraic Expressions					
M.6.17	Determine whether two expressions are equivalent and justify the reasoning.	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	3: Equivalent Algebraic Expressions	1: Modeling Equivalent Algebraic Expressions
M.6.18	Determine whether a value is a solution to an equation or inequality by using substitution to conclude whether a given value makes the equation or inequality 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	5: Solving One-Step Equations	1: Using Substitution to Identify Solutions to Equations
				6: Solving One-Step Inequalities	2: Using Substitution to Identify Solutions to Inequalities
M.6.19	Write and solve an equation in the form of $x + p = q$ or $px = q$ for cases in which p , q , and x are all non-negative rational numbers to solve real-world and mathematical problems.	Textbook	3: Determining Unknown Quantities	2: Equations	2: Bar None: Solving One-Step Addition Equations pp. M3-107–M3-117

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
M.6.19	Write and solve an equation in the form of $x + p = q$ or $px = q$ for cases in which p , q , and x are all non-negative rational numbers to solve real-world and mathematical problems.	Textbook	3: Determining Unknown Quantities	2: Equations	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	4: Reasoning with Expressions and Equations	1: Using Picture Algebra with Addition, Subtraction and Multiplication
					2: Using Picture Algebra with Multiplication, Total Given
					3: Using Picture Algebra with Addition and Subtraction, Total Given
				5: Solving One-Step Equations	2: Solving One-Step Equations with a Balance
					3: Representing One-Step Equations
					4: Solving with Addition and Subtraction (No Type In)
					5: Solving with Multiplication and Division (No Type In)
				7: Problem Solving with One-Step Equations	6: Solving One-Step Equations (Type In)
3: Patterns and One-Step Equations					
4: Problem Solving Using Multiple Representations in the First Quadrant					
5: Problem Solving with Decimals					
M.6.19a	Interpret the solution of an equation in the context of the problem.	Textbook	3: Determining Unknown Quantities	2: Equations	4: Getting Real: Solving Equations to Solve Problems pp. M3-135–M3-144
M.6.20	Write and solve inequalities in the form of $x > c$, $x < c$, $x \geq c$, or $x \leq c$ to represent a constraint or condition in a real-world or mathematical problem.	Textbook	3: Determining Unknown Quantities	2: Equations	1: First Among Equals: Reasoning with Equal Expressions pp. M3-87–M3-106
					MATHia Software
		4: Moving Beyond Positive Quantities	1: Integers	4: Graphing Inequalities with Rational Numbers	
M.6.20a	Interpret the solution of an inequality in the context of a problem.	Textbook	3: Determining Unknown Quantities	2: Equations	1: First Among Equals: Reasoning with Equal Expressions pp. M3-87–M3-106

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
M.6.20b	Represent the solutions of inequalities on a number line and explain that the solution set may contain infinitely many solutions.	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	6: Solving One-Step Inequalities	1: Graphing Inequalities with Positive Rational Numbers
			4: Moving Beyond Positive Quantities	1: Integers	4: Graphing Inequalities with Rational Numbers
M.6.21	Identify, represent, and analyze two quantities that change in relationship to one another in real-world or mathematical situations.	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	7: Problem Solving with One-Step Equations	1: Modeling Scenarios with Equations 2: Analyzing Models of One-Step Linear Relationships
4: Moving Beyond Positive Quantities	3: Multiple Representations		1: Writing an Expression from a Scenario, Table, or Graph 2: Solving One-Step Equations Using Multiple Representations in Four Quadrants		
M.6.21a	Use tables, graphs, and equations to represent the relationship between independent and dependent variables.	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

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
M.6.21a	Use tables, graphs, and equations to represent the relationship between independent and dependent variables.	Textbook	3: Determining Unknown Quantities	3: Graphing Quantitative Relationships	3: Planes, Trains, and Paychecks: Multiple Representations of Equations pp. M3-193–M3-206
			4: Moving Beyond Positive Quantities	2: The Four Quadrants	4: Triathlon Training: Relating Distance, Rate, and Time pp. M3-207–M3-220
		MATHia Software	3: Determining Unknown Quantities	7: Problem Solving with One-Step Equations	3: There are Many Paths...: Problem Solving on the Coordinate Plane pp. M4-87–M4-111
			4: Moving Beyond Positive Quantities	3: Multiple Representations	1: Modeling Scenarios with Equations 2: Analyzing Models of One-Step Linear Relationships
M.6.22	Write examples and non-examples of statistical questions, explaining that a statistical question anticipates variability in the data related to the question.	Textbook	5: Describing Variability of Quantities	1: The Statistical Process	1: Writing an Expression from a Scenario, Table, or Graph 2: Solving One-Step Equations Using Multiple Representations in Four Quadrants
		MATHia Software	5: Describing Variability of Quantities	1: Displays of Numerical Data	1: What's Your Question?: Understanding the Statistical Process pp. M5-7–M5-23
M.6.23	Calculate, interpret, and compare measures of center (mean, median, mode) and variability (range and interquartile range) in real-world data sets.	Textbook	5: Describing Variability of Quantities	1: The Statistical Process	1: Analyzing Distributions with Shape, Center, and Spread
				2: Numerical Summaries of Data	2: Get in Shape: Analyzing Numerical Data Displays pp. M5-25–M5-46
		MATHia Software	5: Describing Variability of Quantities	2: Measures of Central Tendency	3: Skyscrapers: Using Histograms to Display Data pp. M5-47–M5-60
					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	
				4: You Chose...Wisely: Choosing Appropriate Measures pp. M5-117–M5-130	
				1: Calculating Mean, Median, Mode, and Range	

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
M.6.23	Calculate, interpret, and compare measures of center (mean, median, mode) and variability (range and interquartile range) in real-world data sets.	MATHia Software	5: Describing Variability of Quantities	2: Measures of Central Tendency	2: Determining Measures of Center 3: Measuring the Effects of Changing Data Sets
				3: Mean Absolute Deviation	1: Calculating Mean Absolute Deviation 2: Using Mean Absolute Deviation
M.6.23a	Determine which measure of center best represents a real-world data set.	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	4: Box Plots	3: Choosing Appropriate Measures
M.6.23b	Interpret the measures of center and variability in the context of a problem.	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
					3: March MADness: Mean Absolute Deviation pp. M5-105–M5-116
		MATHia Software	5: Describing Variability of Quantities	2: Measures of Central Tendency 3: Mean Absolute Deviation	3: Measuring the Effects of Changing Data Sets
					2: Using Mean Absolute Deviation
M.6.24	Represent numerical data graphically, using dot plots, line plots, histograms, stem and leaf plots, and box plots.	Textbook	5: Describing Variability of Quantities	1: The Statistical Process 2: Numerical Summaries of Data	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: Box It Up: Displaying the Five-Number Summary pp. M5-87–M5-103
		MATHia Software	5: Describing Variability of Quantities	1: Displays of Numerical Data 4: Box Plots	2: Creating and Interpreting Stem Plots
					3: Creating and Interpreting Dot Plots
					4: Creating and Interpreting Histograms
				1: Constructing Box Plots 2: Interpreting Box Plots	

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
M.6.24a	Analyze the graphical representation of data by describing the center, spread, shape (including approximately symmetric or skewed), and unusual features (including gaps, peaks, clusters, and extreme values).	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
		MATHia Software	5: Describing Variability of Quantities	1: Displays of Numerical Data	2: Box It Up: Displaying the Five-Number Summary pp. M5-87–M5-103
					1: Analyzing Distributions with Shape, Center, and Spread
					2: Creating and Interpreting Stem Plots
				3: Creating and Interpreting Dot Plots	
4: Creating and Interpreting Histograms					
4: Box Plots	2: Interpreting Box Plots				
M.6.24b	Use graphical representations of real-world data to describe the context from which they were collected.	Textbook	5: Describing Variability of Quantities	1: The Statistical Process	2: Get in Shape: Analyzing Numerical Data Displays pp. M5-25–M5-46
		MATHia Software	5: Describing Variability of Quantities	4: Box Plots	3: Skyscrapers: Using Histograms to Display Data pp. M5-47–M5-60
					1: Constructing Box Plots
2: Interpreting Box Plots					
M.6.25	Graph polygons in the coordinate plane given coordinates of the vertices to solve 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 Coordinate Plane	4: Drawing Polygons on the Coordinate Plane
M.6.25a	Determine missing vertices of a rectangle with the same x -coordinate or the same y -coordinate when graphed in the coordinate plane.	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
M.6.25b	Use coordinates to find the length of a side between points having the same x -coordinate or the same y -coordinate.	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 Coordinate Plane	4: Drawing Polygons on the Coordinate Plane
M.6.25c	Calculate perimeter and area of a polygon graphed in the coordinate plane (limiting to polygons in which consecutive vertices have the same x -coordinate or the same y -coordinate).	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

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
M.6.26	Calculate the area of triangles, special quadrilaterals, and other polygons by composing and decomposing them into known shapes.	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	2: Area	1: Calculating Area of Rectangles
					2: Developing Area Formulas
					3: Calculating Area of Various Figures
4: Solving Area Problems					
5: Calculating Area of Composite Figures					
M.6.26a	Apply the techniques of composing and decomposing polygons to find area 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	2: Area	4: Solving Area Problems
5: Calculating Area of Composite Figures					
M.6.27	Determine the surface area of three-dimensional figures by representing them with nets composed of rectangles and triangles to solve 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
4: Calculating Surface Area of Right Prisms					
M.6.28	Apply previous understanding of volume of right rectangular prisms to those with fractional edge lengths to solve real-world and mathematical problems.	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	5: Volume and Surface Area	1: Determining Volume Using Unit Fraction Cubes
2: Calculating Volume of Right Prisms					

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
M.6.28a	Use models (cubes or drawings) and the volume formulas ($V = lwh$ and $V = Bh$) to find and compare volumes of right rectangular prisms.	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	5: Volume and Surface Area	1: Determining Volume Using Unit Fraction Cubes
					2: Calculating Volume of Right Prisms