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Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.1</b>	Explain how the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for an additional notation for radicals using rational exponents.	Algebra I Textbook	3: Investigating Growth and Decay	1: Introduction to Exponential Functions	2: The Power Within: Rational Exponents and Graphs of Exponential Functions pp. M3-23–M3-44
		Algebra I MATHia Software	3: Investigating Growth and Decay	2: Rational Exponents	2: Properties of Rational Exponents
<b>M.ACC8.2</b>	Rewrite expressions involving radicals and rational exponents using the properties of exponents.	Algebra I Textbook	3: Investigating Growth and Decay	1: Introduction to Exponential Functions	2: The Power Within: Rational Exponents and Graphs of Exponential Functions pp. M3-23–M3-44
			5: Maximizing and Minimizing	2: Solving Quadratic Equations	2: Solutions, More or Less: Representing Solutions to Quadratic Equations pp. M5-127–M5-140 5: Ladies and Gentlemen: Please Welcome the Quadratic Formula: The Quadratic Formula pp. M5-175–M5-202
		Algebra I MATHia Software	3: Investigating Growth and Decay	2: Rational Exponents	3: Rewriting Expressions with Radical and Rational Exponents
<b>M.ACC8.3</b>	Define the imaginary number $i$ such that $i^2 = -1$ .	Algebra I Textbook	5: Maximizing and Minimizing	2: Solving Quadratic Equations	5: Ladies and Gentlemen: Please Welcome the Quadratic Formula: The Quadratic Formula pp. M5-175–M5-202
<b>M.ACC8.4</b>	Interpret linear, quadratic, and exponential expressions in terms of a context by viewing one or more of their parts as a single entity.	Algebra I Textbook	2: Exploring Constant Change	1: Linear Functions	2: Fun with Functions, Linear Ones: Making Sense of Different Representations of a Linear Function pp. M2-23–M2-40
			3: Investigating Growth and Decay	2: Using Exponential Equations	1: Uptown and Downtown: Exponential Equations for Growth and Decay pp. M3-81–M3-92
			5: Maximizing and Minimizing	1: Introduction to Quadratic Functions	2: Endless Forms Most Beautiful: Key Characteristics of Quadratic Functions pp. M5-23–M5-46 4: You Lose Some, You Lose Some: Comparing Functions Using Key Characteristics and Average Rate of Change pp. M5-73–M5-88
				2: Solving Quadratic Equations	1: This Time, with Polynomials: Adding, Subtracting, and Multiplying Polynomials pp. M5-101–M5-125 5: Ladies and Gentlemen: Please Welcome the Quadratic Formula: The Quadratic Formula pp. M5-175–M5-202

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)	
<b>M.ACC8.4</b>	Interpret linear, quadratic, and exponential expressions in terms of a context by viewing one or more of their parts as a single entity.	Algebra I Textbook	2: Exploring Constant Change	1: Linear Functions	2: Fun with Functions, Linear Ones: Making Sense of Different Representations of a Linear Function pp. M2-23–M2-40	
			3: Investigating Growth and Decay	2: Using Exponential Equations	1: Uptown and Downtown: Exponential Equations for Growth and Decay pp. M3-81–M3-92	
			5: Maximizing and Minimizing	1: Introduction to Quadratic Functions	2: Endless Forms Most Beautiful: Key Characteristics of Quadratic Functions pp. M5-23–M5-46	
		4: You Lose Some, You Lose Some: Comparing Functions Using Key Characteristics and Average Rate of Change pp. M5-73–M5-88				
		Algebra I MATHia Software	1: Searching for Patterns	1: Function Overview	2: Solving Quadratic Equations	1: This Time, with Polynomials: Adding, Subtracting, and Multiplying Polynomials pp. M5-101–M5-125
					5: Ladies and Gentlemen: Please Welcome the Quadratic Formula: The Quadratic Formula pp. M5-175–M5-202	
<b>M.ACC8.5</b>	Use the structure of an expression to identify ways to rewrite it.	Algebra I Textbook	5: Maximizing and Minimizing	2: Solving Quadratic Equations	4: Identifying Parts of Complex Algebraic Expressions	
					4: Identifying Parts of Complex Algebraic Expressions	
		Algebra I MATHia Software	5: Maximizing and Minimizing	5: Quadratic Equation Solving	2: Solutions, More or Less: Representing Solutions to Quadratic Equations pp. M5-127–M5-140	
<b>M.ACC8.6</b>	Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.	Algebra I Textbook	3: Investigating Growth and Decay	2: Using Exponential Equations	3: Transforming Solutions: Solutions to Quadratic Equations in Vertex Form pp. M5-141–M5-152	
			5: Maximizing and Minimizing	1: Introduction to Quadratic Functions	4: Factoring Using Difference of Squares	
					2: Powers and the Horizontal Line: Interpreting Parameters in Context pp. M3-93–M3-102	
					2: Endless Forms Most Beautiful: Key Characteristics of Quadratic Functions pp. M5-23–M5-46	

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<b>M.ACC8.6</b>	Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.	Algebra I Textbook	5: Maximizing and Minimizing	1: Introduction to Quadratic Functions	3: More Than Meets the Eye: Transformations of Quadratic Functions pp. M5-47–M5-72
				2: Solving Quadratic Equations	2: Solutions, More or Less: Representing Solutions to Quadratic Equations pp. M5-127–M5-140
					3: Transforming Solutions: Solutions to Quadratic Equations in Vertex Form pp. M5-141–M5-152
					4: The Missing Link: Factoring and Completing the Square pp. M5-153–M5-174
<b>M.ACC8.6a</b>	Factor quadratic expressions with leading coefficients of one, and use the factored form to reveal the zeros of the function it defines.	Algebra I Textbook	5: Maximizing and Minimizing	1: Introduction to Quadratic Functions	2: Endless Forms Most Beautiful: Key Characteristics of Quadratic Functions pp. M5-23–M5-46
				2: Solving Quadratic Equations	3: More Than Meets the Eye: Transformations of Quadratic Functions pp. M5-47–M5-72
					2: Solutions, More or Less: Representing Solutions to Quadratic Equations pp. M5-127–M5-140
					3: Transforming Solutions: Solutions to Quadratic Equations in Vertex Form pp. M5-141–M5-152
		Algebra I MATHia Software	5: Maximizing and Minimizing	5: Quadratic Equation Solving	2: Factoring Trinomials with Coefficients of One
				6: Forms of Quadratics	5: Factoring Quadratic Expressions
					7: Problem Solving Using Factoring
				6: Forms of Quadratics	1: Converting Quadratics to General Form
					2: Converting Quadratics to Factored Form
					3: Converting Quadratics to Vertex Form
<b>M.ACC8.6b</b>	Use the vertex form of a quadratic expression to reveal the maximum or minimum value and the axis of symmetry of the function it defines; complete the square to find the vertex form of quadratics with a leading coefficient of one.	Algebra I Textbook	5: Maximizing and Minimizing	2: Solving Quadratic Equations	4: The Missing Link: Factoring and Completing the Square pp. M5-153–M5-174
		Algebra I MATHia Software	5: Maximizing and Minimizing	5: Quadratic Equation Solving	9: Problem Solving Using Completing the Square
				6: Forms of Quadratics	1: Converting Quadratics to General Form
					2: Converting Quadratics to Factored Form
					3: Converting Quadratics to Vertex Form

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<b>M.ACC8.6c</b>	Use the properties of exponents to transform expressions for exponential functions.	Algebra I Textbook	3: Investigating Growth and Decay	2: Using Exponential Equations	2: Powers and the Horizontal Line: Interpreting Parameters in Context pp. M3-93–M3-102
<b>M.ACC8.7</b>	Add, subtract, and multiply polynomials, showing that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication.	Algebra I Textbook	5: Maximizing and Minimizing	2: Solving Quadratic Equations	1: This Time, with Polynomials: Adding, Subtracting, and Multiplying Polynomials pp. M5-101–M5-125
		Algebra I MATHia Software	5: Maximizing and Minimizing	4: Polynomial Operations	1: Introduction to Polynomial Arithmetic
					3: Adding Polynomials
					4: Subtracting Polynomials
5: Using a Factor Table to Multiply Binomials					
<b>M.ACC8.8</b>	Analyze the relationship (increasing or decreasing, linear or non-linear) between two quantities represented in a graph.	Course 3 Textbook	2: Developing Function Foundations	3: Introduction to Functions	2: Once Upon a Graph: Analyzing the Characteristics of Graphs of Relationships pp. M2-189–M2-204
		Course 3 MATHia Software	2: Developing Function Foundations	5: Relations and Functions	4: Over the River and Through the Woods: Describing Functions pp. M2-223–M2-240
<b>M.ACC8.9</b>	Solve systems of two linear equations in two variables by graphing and substitution.	Course 3 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
		Course 3 MATHia Software	3: Modeling Linear Equations	5: Systems of Linear Equations	2: Modeling Linear Systems Involving Integers
					3: Modeling Linear Systems Involving Decimals
4: Solving Linear Systems Using Substitution					

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.9a</b>	Explain that the solution(s) of systems of two linear equations in two variables corresponds to points of intersection on their graphs because points of intersection satisfy both equations simultaneously.	Course 3 Textbook	3: Modeling Linear Equations	2: Systems of Linear Equations	1: Crossing Paths: Point of Intersection of Linear Graphs pp. M3-47–M3-60
					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
		Course 3 MATHia Software	3: Modeling Linear Equations	5: Systems of Linear Equations	1: Introduction to Systems of Linear Equations
					2: Modeling Linear Systems Involving Integers
3: Modeling Linear Systems Involving Decimals					
<b>M.ACC8.9b</b>	Interpret and justify the results of systems of two linear equations in two variables (one solution, no solution, or infinitely many solutions) when applied to real-world and mathematical problems.	Course 3 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
		Course 3 MATHia Software	3: Modeling Linear Equations	5: Systems of Linear Equations	1: Introduction to Systems of Linear Equations
					2: Modeling Linear Systems Involving Integers
					3: Modeling Linear Systems Involving Decimals
<b>M.ACC8.11</b>	Select an appropriate method to solve a quadratic equation in one variable.	Algebra I Textbook	5: Maximizing and Minimizing	2: Solving Quadratic Equations	5: Ladies and Gentlemen: Please Welcome the Quadratic Formula: The Quadratic Formula pp. M5-175–M5-202
				3: Applications of Quadratics	1: Ahead of the Curve: Solving Quadratic Inequalities pp. M5-215–M5-224

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<b>M.ACC8.11a</b>	Use the method of completing the square to transform any quadratic equation in $x$ into an equation of the form $(x - p)^2 = q$ that has the same solutions. Explain how the quadratic formula is derived from this form.	Algebra I Textbook	5: Maximizing and Minimizing	2: Solving Quadratic Equations	4: The Missing Link: Factoring and Completing the Square pp. M5-153–M5-174 5: Ladies and Gentlemen: Please Welcome the Quadratic Formula: The Quadratic Formula pp. M5-175–M5-202			
				3: Applications of Quadratics	1: Ahead of the Curve: Solving Quadratic Inequalities pp. M5-215–M5-224			
		Algebra I MATHia	5: Maximizing and Minimizing	5: Quadratic Equation Solving	8: Completing the Square 10: Deriving the Quadratic Formula			
<b>M.ACC8.11b</b>	Solve quadratic equations by inspection (such as $x^2 = 49$ ), taking square roots, completing the square, the quadratic formula, and factoring, as appropriate to the initial form of the equation, and recognize that some solutions may not be real.	Algebra I Textbook	5: Maximizing and Minimizing	2: Solving Quadratic Equations	2: Solutions, More or Less: Representing Solutions to Quadratic Equations pp. M5-127–M5-140 5: Ladies and Gentlemen: Please Welcome the Quadratic Formula: The Quadratic Formula pp. M5-175–M5-202			
				3: Applications of Quadratics	1: Ahead of the Curve: Solving Quadratic Inequalities pp. M5-215–M5-224			
		Algebra I MATHia Software	5: Maximizing and Minimizing	5: Quadratic Equation Solving	6: Solving Quadratic Equations by Factoring 10: Deriving the Quadratic Formula 11: Solving Quadratic Equations			
<b>M.ACC8.12</b>	Select an appropriate method to solve a system of two linear equations in two variables.	Algebra I Textbook	2: Exploring Constant Change	3: Systems of Equations and Inequalities	1: Double the Fun: Introduction to Systems of Equations pp. M2-139–M2-154 2: The Elimination Round: Using Linear Combinations to Solve a System of Linear Equations pp. M2-155–M2-168 5: Working the System: Solving Systems of Equations and Inequalities pp. M2-199–M2-208			
					Algebra I MATHia	2: Exploring Constant Change	6: Systems of Linear Equations	1: Representing Systems of Linear Functions 3: Solving Linear Systems Using Any Method

Grade 8 Accelerated Middle School Math Solution  
Correlation to the 2019 Alabama Academic Standards



Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.12a</b>	Solve a system of two equations in two variables by using linear combinations; contrast situations in which use of linear combinations is more efficient with those in which substitution is more efficient.	Algebra I Textbook	2: Exploring Constant Change	3: Systems of Equations and Inequalities	2: The Elimination Round: Using Linear Combinations to Solve a System of Linear Equations pp. M2-155–M2-168
		Algebra I MATHia Software	2: Exploring Constant Change	6: Systems of Linear Equations	2: Solving Linear Systems Using Linear Combinations 3: Solving Linear Systems Using Any Method
<b>M.ACC8.12b</b>	Contrast solutions to a system of two linear equations in two variables produced by algebraic methods with graphical and tabular methods.	Algebra I Textbook	2: Exploring Constant Change	3: Systems of Equations and Inequalities	1: Double the Fun: Introduction to Systems of Equations pp. M2-139–M2-154
		Algebra I MATHia Software	2: Exploring Constant Change	6: Systems of Linear Equations	3: Solving Linear Systems Using Any Method



Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.13</b>	Create equations and inequalities in one variable and use them to solve problems in context, either exactly or approximately. Extend from contexts arising from linear functions to those involving quadratic, exponential, and absolute value functions.	Algebra I Textbook	2: Exploring Constant Change	1: Linear Functions	2: Fun with Functions, Linear Ones: Making Sense of Different Representations of a Linear Function pp. M2-23–M2-40
				2: Solving Linear Equations and Inequalities	1: Strike a Balance: Solving Linear Equations pp. M2-79–M2-90
					3: Not All Statements Are Made Equal: Modeling Linear Inequalities pp. M2-103–M2-116
			4: Functions Derived from Linear Relationships	4: Don't Confound Your Compounds: Solving and Graphing Compound Inequalities pp. M2-117–M2-130	
			3: Investigating Growth and Decay	1: Introduction to Exponential Functions	2: The Power Within: Rational Exponents and Graphs of Exponential Functions pp. M3-23–M3-44
				2: Using Exponential Equations	1: Uptown and Downtown: Exponential Equations for Growth and Decay pp. M3-81–M3-92
		5: Maximizing and Minimizing	3: Applications of Quadratics		2: Powers and the Horizontal Line: Interpreting Parameters in Context pp. M3-93–M3-102
				1: Ahead of the Curve: Solving Quadratic Inequalities pp. M5-215–M5-224	
		Algebra I MATHia Software	2: Exploring Constant Change	3: Modeling with Linear Functions	2: Modeling Linear Functions Using Multiple Representations
			3: Investigating Growth and Decay	2: Rational Exponents	4: Solving Contextual Exponential Equations Using Common Bases
			5: Maximizing and Minimizing	1: Modeling Quadratic Functions	1: Modeling Area as Product of Monomial and Binomial
		2: Modeling Area as Product of Two Binomials			
3: Interpreting Maximums of Quadratic Models					

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.14</b>	Create equations in two or more variables to represent relationships between quantities in context; graph equations on coordinate axes with labels and scales and use them to make predictions. Limit to contexts arising from linear, quadratic, exponential, absolute value, and linear piecewise functions.	Algebra I Textbook	2: Exploring Constant Change	3: Systems of Equations and Inequalities	1: Double the Fun: Introduction to Systems of Equations pp. M2-139–M2-154
					2: The Elimination Round: Using Linear Combinations to Solve a System of Linear Equations pp. M2-155–M2-168
					3: Throwing Shade: Graphing Inequalities in Two Variables pp. M2-169–M2-184
			4: Functions Derived from Linear Relationships	1: Putting the V in Absolute Value: Defining Absolute Value Functions and Transformations pp. M2-229–M2-246	
				2: Play Ball!: Absolute Value Equations and Inequalities pp. M2-247–M2-260	
				3: I Graph in Pieces: Linear Piecewise Functions pp. M2-261–M2-274	
		3: Investigating Growth and Decay	2: Using Exponential Equations	1: Uptown and Downtown: Exponential Equations for Growth and Decay pp. M3-81–M3-92	
				2: Powers and the Horizontal Line: Interpreting Parameters in Context pp. M3-93–M3-102	
		5: Maximizing and Minimizing	3: Applications of Quadratics	1: Ahead of the Curve: Solving Quadratic Inequalities pp. M5-215–M5-224	
				2: All Systems Are Go!: Systems of Quadratic Equations pp. M5-225–M5-236	
Algebra I MATHia Software	3: Investigating Growth and Decay	4: Compare Linear and Exponential Models	4: Modeling Equations with a Starting Point of 1		
			5: Modeling Equations with a Starting Point Other Than 1		

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.15</b>	Represent constraints by equations and/or inequalities, and solve systems of equations and/or inequalities, interpreting solutions as viable or nonviable options in a modeling context. Limit to contexts arising from linear, quadratic, exponential, absolute value, and linear piecewise functions.	Algebra I Textbook	2: Exploring Constant Change	2: Solving Linear Equations and Inequalities	3: Not All Statements Are Made Equal: Modeling Linear Inequalities pp. M2-103–M2-116
				3: Systems of Equations and Inequalities	3: Throwing Shade: Graphing Inequalities in Two Variables pp. M2-169–M2-184
					4: Working with Constraints: Systems of Linear Inequalities pp. M2-185–M2-198
					5: Working the System: Solving Systems of Equations and Inequalities pp. M2-199–M2-208
		5: Maximizing and Minimizing	3: Applications of Quadratics	6: Take It to the Max...or Min: Linear Programming pp. M2-209–M2-218	
				1: Ahead of the Curve: Solving Quadratic Inequalities pp. M5-215–M5-224	
Algebra I MATHia Software	2: Exploring Constant Change	8: Absolute Value Equations	2: All Systems Are Go!: Systems of Quadratic Equations pp. M5-225–M5-236		
			2: Graphing Simple Absolute Value Equations Using Number Lines		
			3: Solving Absolute Value Equations		
<b>M.ACC8.16</b>	Define a function as a mapping from one set (called the domain) to another set (called the range) that assigns to each element of the domain exactly one element of the range.	Algebra I Textbook	1: Searching for Patterns	1: Quantities and Relationships	3: F of X: Recognizing Functions and Function Families pp. M1-39–M1-62
		Course 3 Textbook	2: Developing Function Foundations	3: Introduction to Functions	1: Patterns, Sequences, Rules . . . : 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
<b>M.ACC8.16a</b>	Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.	Algebra I Textbook	2: Exploring Constant Change	1: Linear Functions	2: Fun with Functions, Linear Ones: Making Sense of Different Representations of a Linear Function pp. M2-23–M2-40
				3: Systems of Equations and Inequalities	6: Take It to the Max...or Min: Linear Programming pp. M2-209–M2-218

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.16b</b>	Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. Limit to linear, quadratic, exponential, and absolute value functions.	Algebra I Textbook	1: Searching for Patterns	1: Quantities and Relationships	3: F of X: Recognizing Functions and Function Families pp. M1-39–M1-62
				2: Sequences	1: Is There a Pattern Here?: Recognizing Patterns and Sequences pp. M1-87–M1-102
			5: Maximizing and Minimizing	1: Introduction to Quadratic Functions	1: Up and Down or Down and Up: Exploring Quadratic Functions pp. M5-7–M5-22
		Algebra I MATHia Software	3: Investigating Growth and Decay	1: Exponential Functions	3: Relating the Domain to Exponential Functions
<b>M.ACC8.17</b>	Given a relation defined by an equation in two variables, identify the graph of the relation as the set of all its solutions plotted in the coordinate plane. Note: The graph of a relation often forms a curve (which could be a line).	Algebra I Textbook	1: Searching for Patterns	1: Quantities and Relationships	1: A Picture is Worth a Thousand Words: Understanding Quantities and Their Relationships pp. M1-7–M1-20
				2: Exploring Constant Change	1: Linear Functions
			3: Investigating Growth and Decay		3: Systems of Equations and Inequalities
				5: Maximizing and Minimizing	1: Introduction to Exponential Functions
			2: Exploring Constant Change		2: Using Exponential Equations
				Algebra I MATHia Software	2: Exploring Constant Change
		3: Investigating Growth and Decay	2: Solving Quadratic Equations		
			2: Graphs of Linear Functions		1: Exploring Graphs of Linear Functions
		4: Compare Linear and Exponential Models	4: Modeling Equations with a Starting Point of 1 5: Modeling Equations with a Starting Point Other Than 1		

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.18</b>	Compare and contrast relations and functions represented by equations, graphs, or tables that show related values; determine whether a relation is a function. Explain that a function $f$ is a special kind of relation defined by the equation $y = f(x)$ .	Algebra I Textbook	1: Searching for Patterns	1: Quantities and Relationships	3: F of X: Recognizing Functions and Function Families pp. M1-39–M1-62
		Course 3 MATHia Software	2: Developing Function Foundations	5: Relations and Functions	1: Exploring Functions
					2: Exploring Graphs of Functions
3: Classifying Relations and Functions					
<b>M.ACC8.19</b>	Combine different types of standard functions to write, evaluate, and interpret functions in context. Limit to linear, quadratic, exponential, and absolute value functions.	Algebra I Textbook	3: Investigating Growth and Decay	2: Using Exponential Equations	3: Savings, Tea, and Carbon Dioxide: Modeling Using Exponential Functions pp. M3-103–M3-114
<b>M.ACC8.19a</b>	Use arithmetic operations to combine different types of standard functions to write and evaluate functions.	Algebra I Textbook	3: Investigating Growth and Decay	2: Using Exponential Equations	3: Savings, Tea, and Carbon Dioxide: Modeling Using Exponential Functions pp. M3-103–M3-114
		Algebra I MATHia Software	5: Maximizing and Minimizing	8: Function Operations	1: Adding and Subtracting Linear Functions
<b>M.ACC8.19b</b>	Use function composition to combine different types of standard functions to write and evaluate functions.	Algebra II Textbook	3: Inverting Functions	1: Radical Functions	2: Such a Rad Lesson: Radical Functions pp. M3-19–M3-40
<b>M.ACC8.20</b>	Explain why the $x$ -coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$ .	Algebra I Textbook	2: Exploring Constant Change	3: Systems of Equations and Inequalities	1: Double the Fun: Introduction to Systems of Equations pp. M2-139–M2-154
					6: Take It to the Max...or Min: Linear Programming pp. M2-209–M2-218

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.20</b>	Explain why the $x$ -coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$ .	Algebra I Textbook	2: Exploring Constant Change	4: Functions Derived from Linear Relationships	2: Play Ball!: Absolute Value Equations and Inequalities pp. M2-247–M2-260
			3: Investigating Growth and Decay	2: Using Exponential Equations	2: Powers and the Horizontal Line: Interpreting Parameters in Context pp. M3-93–M3-102
			5: Maximizing and Minimizing	1: Introduction to Quadratic Functions	1: Up and Down or Down and Up: Exploring Quadratic Functions pp. M5-7–M5-22
				3: Applications of Quadratics	2: All Systems Are Go!: Systems of Quadratic Equations pp. M5-225–M5-236
		Algebra I MATHia Software	2: Exploring Constant Change	6: Systems of Linear Equations	1: Representing Systems of Linear Functions
			3: Investigating Growth and Decay	5: Solving Exponential Equations	1: Solving Exponential Equations Using a Graph
5: Maximizing and Minimizing	5: Quadratic Equation Solving		1: Making Sense of Roots and Zeros		
<b>M.ACC8.20a</b>	Find the approximate solutions of an equation graphically, using tables of values, or finding successive approximations, using technology where appropriate. Note: Include cases where $f(x)$ is a linear, quadratic, exponential, or absolute value function and $g(x)$ is constant or linear.	Algebra I Textbook	2: Exploring Constant Change	3: Systems of Equations and Inequalities	1: Double the Fun: Introduction to Systems of Equations pp. M2-139–M2-154
				6: Take It to the Max...or Min: Linear Programming pp. M2-209–M2-218	
			4: Functions Derived from Linear Relationships	2: Play Ball!: Absolute Value Equations and Inequalities pp. M2-247–M2-260	
			3: Investigating Growth and Decay	2: Using Exponential Equations	2: Powers and the Horizontal Line: Interpreting Parameters in Context pp. M3-93–M3-102
			5: Maximizing and Minimizing	1: Introduction to Quadratic Functions	1: Up and Down or Down and Up: Exploring Quadratic Functions pp. M5-7–M5-22
		3: Applications of Quadratics		2: All Systems Are Go!: Systems of Quadratic Equations pp. M5-225–M5-236	
		Algebra I MATHia Software	2: Exploring Constant Change	6: Systems of Linear Equations	1: Representing Systems of Linear Functions

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.20a</b>	Find the approximate solutions of an equation graphically, using tables of values, or finding successive approximations, using technology where appropriate. Note: Include cases where $f(x)$ is a linear, quadratic, exponential, or absolute value function and $g(x)$ is constant or linear.	Algebra I MATHia Software	3: Investigating Growth and Decay	5: Solving Exponential Equations	1: Solving Exponential Equations Using a Graph
			5: Maximizing and Minimizing	5: Quadratic Equation Solving	1: Making Sense of Roots and Zeros
<b>M.ACC8.21</b>	Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes, using technology where appropriate.	Algebra I Textbook	2: Exploring Constant Change	3: Systems of Equations and Inequalities	3: Throwing Shade: Graphing Inequalities in Two Variables pp. M2-169–M2-184
					4: Working with Constraints: Systems of Linear Inequalities pp. M2-185–M2-198
					5: Working the System: Solving Systems of Equations and Inequalities pp. M2-199–M2-208
		Algebra I MATHia Software	2: Exploring Constant Change	7: Linear Inequalities in Two Variables	1: Exploring Linear Inequalities
<b>M.ACC8.22</b>	Solve systems consisting of linear and/or quadratic equations in two variables graphically, using technology where appropriate.	Algebra I Textbook	5: Maximizing and Minimizing	3: Applications of Quadratics	2: All Systems Are Go!: Systems of Quadratic Equations pp. M5-225–M5-236
					2: Exploring Constant Change
					3: Systems of Linear Inequalities

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.23</b>	Compare properties of two functions, each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). Include linear, quadratic, exponential, absolute value, and linear piecewise.	Algebra I Textbook	2: Exploring Constant Change	1: Linear Functions	4: Connect Four: Comparing Linear Functions in Different Forms pp. M2-59–M2-67
			3: Investigating Growth and Decay	2: Using Exponential Equations	3: Savings, Tea, and Carbon Dioxide: Modeling Using Exponential Functions pp. M3-103–M3-114
			5: Maximizing and Minimizing	1: Introduction to Quadratic Functions	4: You Lose Some, You Lose Some: Comparing Functions Using Key Characteristics and Average Rate of Change pp. M5-73–M5-88
		Algebra I MATHia Software	2: Exploring Constant Change	3: Modeling with Linear Functions	3: Comparing Linear Functions in Multiple Forms
			3: Investigating Growth and Decay	4: Compare Linear and Exponential Models	6: Comparing Exponential Functions in Different Forms
			5: Maximizing and Minimizing	3: Properties of Quadratic Functions	3: Comparing Quadratic Functions in Different Forms
<b>M.ACC8.23a</b>	Distinguish between linear and non-linear functions.	Course 3 Textbook	2: Developing Function Foundations	3: Introduction to Functions	4: Over the River and Through the Woods: Describing Functions pp. M2-223–M2-240
<b>M.ACC8.24a</b>	Write explicit and recursive formulas for arithmetic and geometric sequences and connect them to linear and exponential functions.	Algebra I Textbook	1: Searching for Patterns	2: Sequences	2: The Password Is...Operations!: Arithmetic and Geometric Sequences pp. M1-103–M1-134
					4: 3 Pegs, N Discs: Modeling Using Sequences pp. M1-147–M1-158



Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.25</b>	Identify the effect on the graph of replacing $f(x)$ by $f(x) + k$ , $k \cdot f(x)$ , $f(kx)$ , and $f(x + k)$ for specific values of $k$ (both positive and negative); find the value of $k$ given the graphs. Experiment with cases and explain the effects on the graph, using technology as appropriate. Extend from linear to quadratic, exponential, absolute value, and linear piecewise functions.	Algebra I Textbook	2: Exploring Constant Change	1: Linear Functions	2: Fun with Functions, Linear Ones: Making Sense of Different Representations of a Linear Function pp. M2-23–M2-40
					3: Get Your Move On: Transforming Linear Functions pp. M2-41–M2-57
			4: Functions Derived from Linear Relationships	1: Putting the V in Absolute Value: Defining Absolute Value Functions and Transformations pp. M2-229–M2-246	
			3: Investigating Growth and Decay	1: Introduction to Exponential Functions	3: Now I Know My A, B, C, Ds: Transformations of Exponential Functions pp. M3-45–M3-69
			5: Maximizing and Minimizing	1: Introduction to Quadratic Functions	3: More Than Meets the Eye: Transformations of Quadratic Functions pp. M5-47–M5-72
		Algebra I MATHia Software	2: Exploring Constant Change	2: Graphs of Linear Functions	1: Exploring Graphs of Linear Functions
			3: Investigating Growth and Decay	3: Linear and Exponential Transformations	1: Introduction to Transforming Exponential Functions
					2: Shifting Vertically
					3: Shifting Horizontally
					4: Reflecting and Dilating Using Graphs
					5: Transforming Using Tables of Values
			5: Maximizing and Minimizing	2: Linear and Quadratic Transformations	6: Using Multiple Transformations
1: Shifting Vertically					
		2: Shifting Horizontally			
		3: Reflecting and Dilating Using Graphs			
		4: Transforming Using Tables of Values			
		5: Using Multiple Transformations			
		4: Polynomial Operations	2: Operating with Functions on the Coordinate Plane		
<b>M.ACC8.26</b>	Distinguish between situations that can be modeled with linear functions and those that can be modeled with exponential functions.	Algebra I Textbook	3: Investigating Growth and Decay	2: Using Exponential Equations	1: Uptown and Downtown: Exponential Equations for Growth and Decay pp. M3-81–M3-92

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.26a</b>	Show that linear functions grow by equal differences over equal intervals, while exponential functions grow by equal factors over equal intervals.	Algebra I Textbook	2: Exploring Constant Change	1: Linear Functions	1: Connecting the Dots: Making Connections Between Arithmetic Sequences and Linear Functions pp. M2-7–M2-22
			3: Investigating Growth and Decay	1: Introduction to Exponential Functions	1: A Constant Ratio: Geometric Sequences and Exponential Functions pp. M3-7–M3-22
<b>M.ACC8.26b</b>	Define linear functions to represent situations in which one quantity changes at a constant rate per unit interval relative to another.	Algebra I Textbook	2: Exploring Constant Change	1: Linear Functions	1: Connecting the Dots: Making Connections Between Arithmetic Sequences and Linear Functions pp. M2-7–M2-22
		Algebra I MATHia Software	3: Investigating Growth and Decay	4: Compare Linear and Exponential Models	1: Recognizing Linear and Exponential Models
<b>M.ACC8.26c</b>	Define exponential functions to represent situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.	Algebra I Textbook	3: Investigating Growth and Decay	2: Using Exponential Equations	1: Uptown and Downtown: Exponential Equations for Growth and Decay pp. M3-81–M3-92
		Algebra I MATHia	3: Investigating Growth and Decay	4: Compare Linear and Exponential Models	1: Recognizing Linear and Exponential Models 2: Recognizing Growth and Decay
<b>M.ACC8.27</b>	Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).	Algebra I Textbook	2: Exploring Constant Change	1: Linear Functions	1: Connecting the Dots: Making Connections Between Arithmetic Sequences and Linear Functions pp. M2-7–M2-22
			3: Investigating Growth and Decay	1: Introduction to Exponential Functions	1: A Constant Ratio: Geometric Sequences and Exponential Functions pp. M3-7–M3-22 2: The Power Within: Rational Exponents and Graphs of Exponential Functions pp. M3-23–M3-44
<b>M.ACC8.28</b>	Use graphs and tables to show that a quantity increasing exponentially eventually exceeds a quantity increasing linearly or quadratically.	Algebra I Textbook	3: Investigating Growth and Decay	2: Using Exponential Equations	1: Uptown and Downtown: Exponential Equations for Growth and Decay pp. M3-81–M3-92
			5: Maximizing and Minimizing	1: Introduction to Quadratic Functions	4: You Lose Some, You Lose Some: Comparing Functions Using Key Characteristics and Average Rate of Change pp. M5-73–M5-88

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.29</b>	Interpret the parameters of functions in terms of a context. Extend from linear functions, written in the form $mx + b$ , to exponential functions, written in the form $ab^x$ .	Algebra I Textbook	3: Investigating Growth and Decay	1: Introduction to Exponential Functions	1: A Constant Ratio: Geometric Sequences and Exponential Functions pp. M3-7–M3-22
				2: Using Exponential Equations	1: Uptown and Downtown: Exponential Equations for Growth and Decay pp. M3-81–M3-92 2: Powers and the Horizontal Line: Interpreting Parameters in Context pp. M3-93–M3-102

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.30</b>	For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Note: Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; maximums and minimums; symmetries; and end behavior. Extend from relationships that can be represented by linear functions to quadratic, exponential, absolute value, and linear piecewise functions.	Algebra I Textbook	1: Searching for Patterns	1: Quantities and Relationships	1: A Picture is Worth a Thousand Words: Understanding Quantities and Their Relationships pp. M1-7–M1-20
					2: A Sort of Sorts: Analyzing and Sorting Graphs pp. M1-21–M1-38
					3: F of X: Recognizing Functions and Function Families pp. M1-39–M1-62
					4: Function Families for 200, Alex: Recognizing Functions by Characteristics pp. M1-63–M1-75
			2: Exploring Constant Change	1: Linear Functions	2: Fun with Functions, Linear Ones: Making Sense of Different Representations of a Linear Function pp. M2-23–M2-40
					3: Get Your Move On: Transforming Linear Functions pp. M2-41–M2-57
		3: Investigating Growth and Decay	4: Functions Derived from Linear Relationships	3: I Graph in Pieces: Linear Piecewise Functions pp. M2-261–M2-274	
		5: Maximizing and Minimizing	1: Introduction to Quadratic Functions	3: Now I Know My A, B, C, Ds: Transformations of Exponential Functions pp. M3-45–M3-69	
				1: Up and Down or Down and Up: Exploring Quadratic Functions pp. M5-7–M5-22	
		Algebra I MATHia Software	3: Investigating Growth and Decay	1: Exponential Functions	2: Introduction to Exponential Functions
5: Maximizing and Minimizing	1: Modeling Quadratic Functions				4: Modeling Projectile Motion
					5: Recognizing Key Features of Vertical Motion Graphs

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.31</b>	Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph. Limit to linear, quadratic, exponential, and absolute value functions.	Algebra I Textbook	2: Exploring Constant Change	1: Linear Functions	1: Connecting the Dots: Making Connections Between Arithmetic Sequences and Linear Functions pp. M2-7–M2-22
			3: Investigating Growth and Decay	2: Using Exponential Equations	1: Uptown and Downtown: Exponential Equations for Growth and Decay pp. M3-81–M3-92
			5: Maximizing and Minimizing	1: Introduction to Quadratic Functions	2: Endless Forms Most Beautiful: Key Characteristics of Quadratic Functions pp. M5-23–M5-46
		Algebra I MATHia Software	2: Exploring Constant Change	1: Linear Function Overview	1: Writing Sequences as Linear Functions 2: Understanding Linear Functions
			3: Investigating Growth and Decay	4: Compare Linear and Exponential Models	3: Calculating and Interpreting Average Rate of Change
<b>M.ACC8.32</b>	Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.	Algebra I Textbook	2: Exploring Constant Change	1: Linear Functions	3: Get Your Move On: Transforming Linear Functions pp. M2-41–M2-57
				3: Systems of Equations and Inequalities	1: Double the Fun: Introduction to Systems of Equations pp. M2-139–M2-154
				4: Functions Derived from Linear Relationships	1: Putting the V in Absolute Value: Defining Absolute Value Functions and Transformations pp. M2-229–M2-246 2: Play Ball!: Absolute Value Equations and Inequalities pp. M2-247–M2-260 3: I Graph in Pieces: Linear Piecewise Functions pp. M2-261–M2-274 4: Step by Step: Step Functions pp. M2-275–M2-286
			3: Investigating Growth and Decay	1: Introduction to Exponential Functions	3: Now I Know My A, B, C, Ds: Transformations of Exponential Functions pp. M3-45–M3-69
			5: Maximizing and Minimizing	1: Introduction to Quadratic Functions	1: Up and Down or Down and Up: Exploring Quadratic Functions pp. M5-7–M5-22
					2: Endless Forms Most Beautiful: Key Characteristics of Quadratic Functions pp. M5-23–M5-46

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.32a</b>	Graph linear and quadratic functions and show intercepts, maxima, and minima.	Algebra I Textbook	2: Exploring Constant Change	1: Linear Functions	3: Get Your Move On: Transforming Linear Functions pp. M2-41–M2-57
				3: Systems of Equations and Inequalities	1: Double the Fun: Introduction to Systems of Equations pp. M2-139–M2-154
			5: Maximizing and Minimizing	1: Introduction to Quadratic Functions	1: Up and Down or Down and Up: Exploring Quadratic Functions pp. M5-7–M5-22 2: Endless Forms Most Beautiful: Key Characteristics of Quadratic Functions pp. M5-23–M5-46
		Algebra I MATHia Software	5: Maximizing and Minimizing	3: Properties of Quadratic Functions	2: Sketching Quadratic Functions
<b>M.ACC8.32b</b>	Graph piecewise-defined functions, including step functions and absolute value functions.	Algebra I Textbook	2: Exploring Constant Change	4: Functions Derived from Linear Relationships	1: Putting the V in Absolute Value: Defining Absolute Value Functions and Transformations pp. M2-229–M2-246
					2: Play Ball!: Absolute Value Equations and Inequalities pp. M2-247–M2-260
					3: I Graph in Pieces: Linear Piecewise Functions pp. M2-261–M2-274
					4: Step by Step: Step Functions pp. M2-275–M2-286
		Algebra I MATHia Software	2: Exploring Constant Change	8: Absolute Value Equations	1: Building Absolute Value Functions
				9: Graphs of Piecewise Functions	1: Introduction to Piecewise Functions 2: Graphing Linear Piecewise Functions 3: Interpreting Piecewise Functions 4: Using Linear Piecewise Functions 5: Analyzing Step Functions
<b>M.ACC8.32c</b>	Graph exponential functions, showing intercepts and end behavior.	Algebra I Textbook	3: Investigating Growth and Decay	1: Introduction to Exponential Functions	3: Now I Know My A, B, C, Ds: Transformations of Exponential Functions pp. M3-45–M3-69
<b>M.ACC8.33</b>	Use the mathematical modeling cycle to solve real-world problems involving linear, quadratic, exponential, absolute value, and linear piecewise functions.	Algebra I Textbook	1: Searching for Patterns	2: Sequences	4: 3 Pegs, N Discs: Modeling Using Sequences pp. M1-147–M1-158
			3: Investigating Growth and Decay	2: Using Exponential Equations	4: BAC is BAD News: Choosing a Function to Model BAC pp. M3-115–M3-124

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.34</b>	Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities, describing patterns in terms of positive, negative, or no association, linear and non-linear association, clustering, and outliers.	Course 3 Textbook	2: Developing Function Foundations	4: Patterns in Bivariate Data	1: Pass the Squeeze: Analyzing Patterns in Scatter Plots pp. M2-267–M2-288
		Course 3 MATHia Software	2: Developing Function Foundations	6: Lines of Best Fit	1: Estimating Lines of Best Fit
<b>M.ACC8.35</b>	Given a scatter plot that suggests a linear association, informally draw a line to fit the data, and assess the model fit by judging the closeness of the data points to the line.	Course 3 Textbook	2: Developing Function Foundations	4: Patterns in Bivariate Data	2: Where Do You Buy Your Books?: Drawing Lines of Best Fit pp. M2-289–M2-304
		Course 3 MATHia	2: Developing Function Foundations	6: Lines of Best Fit	3: Mia is Growing Like a Weed: Analyzing Lines of Best Fit pp. M2-305–M2-318
<b>M.ACC8.36</b>	Use a linear model of a real-world situation to solve problems and make predictions	Course 3 Textbook	2: Developing Function Foundations	4: Patterns in Bivariate Data	1: Estimating Lines of Best Fit
		Course 3 MATHia Software	2: Developing Function Foundations	6: Lines of Best Fit	2: Using Lines of Best Fit
<b>M.ACC8.36a</b>	Describe the rate of change and $y$ -intercept in the context of a problem using a linear model of a real-world situation.	Course 3 Textbook	2: Developing Function Foundations	4: Patterns in Bivariate Data	2: Where Do You Buy Your Books?: Drawing Lines of Best Fit pp. M2-289–M2-304
		Course 3 MATHia Software	2: Developing Function Foundations	6: Lines of Best Fit	3: Mia is Growing Like a Weed: Analyzing Lines of Best Fit pp. M2-305–M2-318
<b>M.ACC8.36a</b>	Describe the rate of change and $y$ -intercept in the context of a problem using a linear model of a real-world situation.	Course 3 Textbook	2: Developing Function Foundations	4: Patterns in Bivariate Data	4: The Stroop Test: Comparing Slopes and Intercepts of Data from Experiments pp. M2-319–M2-327
		Course 3 MATHia Software	2: Developing Function Foundations	6: Lines of Best Fit	2: Using Lines of Best Fit

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.37</b>	Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects, using relative frequencies calculated for rows or columns to describe possible associations between the two variables.	Course 3 Textbook	2: Developing Function Foundations	4: Patterns in Bivariate Data	5: Would You Rather ...?: Patterns of Association in Two-Way Tables pp. M2-329-M2-346
		Course 3 MATHia Software	2: Developing Function Foundations	7: Categorical Data	1: Building Marginal Frequency Distributions
					2: Analyzing Marginal Frequency Distributions
					3: Building Marginal Relative Frequency Distributions
4: Analyzing Marginal Relative Frequency Distributions					
<b>M.ACC8.38</b>	Distinguish between quantitative and categorical data and between the techniques that may be used for analyzing data of these two types.	Algebra I Textbook	4: Describing Distributions	2: Two-Variable Categorical Data	1: It Takes Two: Creating and Interpreting Frequency Distributions pp. M4-55-M4-71
<b>M.ACC8.39</b>	Analyze the possible association between two categorical variables.	Algebra I Textbook	4: Describing Distributions	2: Two-Variable Categorical Data	1: It Takes Two: Creating and Interpreting Frequency Distributions pp. M4-55-M4-71
					2: Relatively Speaking: Relative Frequency Distribution pp. M4-73-M4-83
					3: On One Condition . . . or More: Conditional Relative Frequency Distribution pp. M4-85-M4-94
					4: Data Jam: Drawing Conclusions from Data pp. M4-95-M4-104
		Algebra I MATHia Software	4: Describing Distributions	2: Categorical Data	1: Creating Marginal Frequency Distributions
					2: Using Marginal Frequency Distributions
3: Creating Marginal Relative Frequency Distributions					
4: Using Marginal Relative Frequency Distributions					
5: Creating Conditional Relative Frequency Distributions					
6: Using Conditional Relative Frequency Distributions					



Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.39a</b>	Summarize categorical data for two categories in two-way frequency tables and represent using segmented bar graphs.	Algebra I Textbook	4: Describing Distributions	2: Two-Variable Categorical Data	1: It Takes Two: Creating and Interpreting Frequency Distributions pp. M4-55–M4-71
					2: Relatively Speaking: Relative Frequency Distribution pp. M4-73–M4-83
					3: On One Condition . . . or More: Conditional Relative Frequency Distribution pp. M4-85–M4-94
					4: Data Jam: Drawing Conclusions from Data pp. M4-95–M4-104
<b>M.ACC8.39b</b>	Interpret relative frequencies in the context of categorical data (including joint, marginal, and conditional relative frequencies).	Algebra I Textbook	4: Describing Distributions	2: Two-Variable Categorical Data	1: It Takes Two: Creating and Interpreting Frequency Distributions pp. M4-55–M4-71
					2: Relatively Speaking: Relative Frequency Distribution pp. M4-73–M4-83
					3: On One Condition . . . or More: Conditional Relative Frequency Distribution pp. M4-85–M4-94
					4: Data Jam: Drawing Conclusions from Data pp. M4-95–M4-104
		Algebra I MATHia Software	4: Describing Distributions	2: Categorical Data	4: Using Marginal Relative Frequency Distributions
					6: Using Conditional Relative Frequency Distributions
<b>M.ACC8.39c</b>	Identify possible associations and trends in categorical data.	Algebra I Textbook	4: Describing Distributions	2: Two-Variable Categorical Data	1: It Takes Two: Creating and Interpreting Frequency Distributions pp. M4-55–M4-71
					2: Relatively Speaking: Relative Frequency Distribution pp. M4-73–M4-83
					3: On One Condition . . . or More: Conditional Relative Frequency Distribution pp. M4-85–M4-94
					4: Data Jam: Drawing Conclusions from Data pp. M4-95–M4-104
		Algebra I MATHia Software	4: Describing Distributions	2: Categorical Data	2: Using Marginal Frequency Distributions
					4: Using Marginal Relative Frequency Distributions
6: Using Conditional Relative Frequency Distributions					

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.40</b>	Generate a two-way categorical table in order to find and evaluate solutions to real-world problems.	Algebra I Textbook	4: Describing Distributions	2: Two-Variable Categorical Data	1: It Takes Two: Creating and Interpreting Frequency Distributions pp. M4-55–M4-71
					2: Relatively Speaking: Relative Frequency Distribution pp. M4-73–M4-83
					3: On One Condition . . . or More: Conditional Relative Frequency Distribution pp. M4-85–M4-94
					4: Data Jam: Drawing Conclusions from Data pp. M4-95–M4-104
<b>M.ACC8.40a</b>	Aggregate data from several groups to find an overall association between two categorical variables.	Algebra I Textbook	4: Describing Distributions	2: Two-Variable Categorical Data	1: It Takes Two: Creating and Interpreting Frequency Distributions pp. M4-55–M4-71
					2: Relatively Speaking: Relative Frequency Distribution pp. M4-73–M4-83
					3: On One Condition . . . or More: Conditional Relative Frequency Distribution pp. M4-85–M4-94
					4: Data Jam: Drawing Conclusions from Data pp. M4-95–M4-104
<b>M.ACC8.43</b>	Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events (“or,” “and,” “not”).	Geometry Textbook	5: Making Informed Decisions	1: Probability	1: What Are the Chances?: Compound Sample Spaces pp. M5-7–M5-25
					2: And?: Compound Probability with And pp. M5-27–M5-40
					3: Or?: Compound Probability with Or pp. M5-41–M5-55
					4: And, Or, and More!: Calculating Compound Probability pp. M5-57–M5-70
<b>M.ACC8.44</b>	Explain whether two events, A and B, are independent, using two-way tables or tree diagrams.	Geometry Textbook	5: Making Informed Decisions	1: Probability	2: And?: Compound Probability with And pp. M5-27–M5-40
		Geometry MATHia Software	5: Making Informed Decisions	1: Independence and Conditional Probability	1: Independent Events
<b>M.ACC8.45</b>	Compute the conditional probability of event A given event B, using two-way tables or tree diagrams.	Geometry Textbook	5: Making Informed Decisions	2: Computing Probabilities	2: It All Depends: Conditional Probability pp. M5-99–M5-112

Standard ID	Description	Location	Module	Topic (Textbook)/ Unit (MATHia Software)	Lesson (Textbook) / Workspace (MATHia Software)
<b>M.ACC8.46</b>	Recognize and describe the concepts of conditional probability and independence in everyday situations and explain them using everyday language.	Geometry Textbook	5: Making Informed Decisions	2: Computing Probabilities	2: It All Depends: Conditional Probability pp. M5-99–M5-112
		Geometry MATHia Software	5: Making Informed Decisions	2: Computing Probabilities	2: Recognizing Concepts of Conditional Probability
<b>M.ACC8.47</b>	Explain why the conditional probability of A given B is the fraction of B's outcomes that also belong to A, and interpret the answer in context.	Geometry Textbook	5: Making Informed Decisions	2: Computing Probabilities	2: It All Depends: Conditional Probability pp. M5-99–M5-112
					2: It All Depends: Conditional Probability pp. M5-99–M5-112
					2: It All Depends: Conditional Probability pp. M5-99–M5-112
		Geometry MATHia Software	5: Making Informed Decisions	1: Independence and Conditional Probability	2: Conditional Probability
					2: Conditional Probability
					2: Conditional Probability