

Georgia Mathematics 2

Chapter #	Chapter / Section Title	Georgia Mathematics 2 Content Standard
Chapter 0	Functions, Relations and Inverses	
0.1	Moving a Sand Pile Functions and Relations	MM2A5a
0.2	Let's Bowl! Evaluating Functions, Function Notation, Domain, and Range	MM2A5a
0.3	Running in a Marathon Linear Functions	MM2A5a, MM2A5c
0.4	Degrees or Degrees? Inverses of Linear Functions	MM2A5a
		MM2A5c
Chapter 1	Quadratic Functions	
1.1	Lots and Projectiles Introduction to Quadratic Functions	MM2A3c
1.2	Parabolas Properties of the Graphs of Quadratic Functions	MM2A3c
1.3	Extremes Increase, Decrease, and Rates of Change	MM2A3c
1.4	Solving Quadratic Equations Reviewing Roots and Zeros	MM2A4b
1.5	Finding the Middle Determining the Vertex of a Quadratic Function	MM2A3c
1.6	Other Forms of Quadratic Functions Vertex Form of a Quadratic Function	MM2A3a
1.7	Graphing Quadratic Functions Basic Functions and Transformations	MM2A3b
Chapter 2	The Quadratic Formula, the Discriminant, and Solving Quadratic Equations and Inequalities	
2.1	Quadratic Formula Deriving the Quadratic Formula	MM2A3c
2.2	Calculating Roots and Zeros Solving Quadratic Equations and Inequalities	MM2A4b
2.3	The Discriminant The Discriminant and the Nature of Roots/Vertex Form	MM2A3a, MM2A3b, MM2A4c
2.4	The Complete Number System Operations with Complex Numbers	MM2N1c

2.5	Complex Roots and Zeros	MM2N1a, MM2N1b, MM2N1d, MM2A4b
2.6	Cases, Roots, and Graphs Solving Quadratic Inequalities	MM2A4d
2.7	Carl Freidrich Gauss: Child Prodigy Arithmetic Sequences, Series, and Their Partial Sums	MM2A3d
2.8	Mathematics Empowers Us To Do Superhuman Mental Calculations! Modeling Partial Sums of Arithmetic Series with Quadratic Equations	MM2A3e
Chapter 3	Right Triangles	
3.1	Get Radical or (Be)2! Radicals and the Pythagorean Theorem	MM1G1d
3.2	The Pythagorean Theorem Disguised as the Distance Formula! The Distance Formula and Midpoint Formula	MM1G1c, MM1G1d
3.3	Drafting Equipment Properties of 45°-45°-90° Triangles	MM2G1b
3.4	Finishing Concrete Properties of 30°-60°-90° Triangles	MM2G1a
Chapter 4	Trigonometric Ratios	
4.1	Framing a Picture Similar and Congruent Polygons	MM2G2a
4.2	Wheelchair Ramps The Tangent Ratio	MM2G2b
4.3	Golf Club Design The Sine Ratio	MM2G2b
4.4	Attaching a Guy Wire The Cosine Ratio	MM2G2b
4.5	Using a Clinometer Angles of Elevation and Depression	MM2G2c
Chapter 5	Circles	
5.1	Riding a Ferris Wheel Introduction to Circles	MM2G3a, MM2G3b, MM2G3c, MM2G3d

5.2	Holding the Wheel Central Angles, Inscribed Angles, and Intercepted Arcs	MM2G3b
5.3	Manhole Covers Measuring Angles Inside and Outside of Circles	MM2G3b
5.4	Color Theory Chords and Circles	MM2G3a
5.5	Solar Eclipses Tangents and Circles	MM2G3a
5.6	Gears Arc Length	MM2G3b
5.7	Playing Darts Areas of Parts of Circles	MM2G3c
5.8	Crop Circles Circle Measurements and Relationships	MM2G3d
Chapter 6	Spheres	
6.1	As the Crow Flies Properties of Spheres	MM2G4a, MM2G4b
6.2	Archimedes Was Ahead of His Time! Volume of a Sphere	MM2G4a
6.3	Surface Area Related to Our Solar System Surface Area of a Sphere	MM2G4a
6.4	Cookies, Peanut Butter, Basketballs, and More Applications	MM2G4b
Chapter 7	Data Analysis	
7.1	To New Heights! Variance in Subjective and Random Samples	MM2D1a
7.2	Size How Sample Size Affects Results	MM2D1b
7.3	Sampling Comparing Sampling Techniques	MM2D1c
7.4	It's the Ladies' Turn! Designing an Experiment and Bias	MM2D1b
7.5	On Your Own! Designing, Implementing, Analyzing, and Reporting a Data Experiment	MM2D1c

Chapter 8	Exponential functions	
8.1	Obey the Laws (of Exponents)! Properties of Integral Exponents	MM2A2a
8.2	Interest Anyone? Properties of Exponential Functions Part I: Domain and Range, Zeros, and Intercepts	MM2A2b, MM2A2e
8.3	Depreciate! Properties of Exponential Functions Part II: Intervals of Increase and Decrease, Rates of Change, Asymptotes, and End Behavior	MM2A2b, MM2A2e
8.4	Transformers Properties of Exponential Functions Part III: Transformations	MM2A2c
8.5	Appreciate! Solving Exponential Equations	MM2A2d
Chapter 9	Modeling with exponential Functions	
9.1	Growth, Decay, and Interest Exponential Models	MM2A2e
9.2	Too Much Homework! Geometric Sequences, Series, and Partial Sums	MM2A2f
9.3	Sequences, Series, and Exponentials Geometric Sequences and Series as Exponential Functions	MM2A2g
9.4	People, Tea, and Carbon Dioxide Modeling Using Exponential Functions	MM2A2e
Chapter10	Other functions and their Inverses	
10.1	Pieces and Absolute Absolute Value Functions as Piecewise Functions	MM2A1a
10.2	Properties of Absolute Value Functions Domain, Range, Vertex, Axis of Symmetry, Zeros, and Intercepts	MM2A1b
103	Taxes and Taxis Properties of Piecewise Functions	MM2A1b
10.4	Tanks A Lock Solving Absolute Value Equations and Inequalities	MM2A1c

10.5	We've Got the Power Power Functions and Inverses	MM2A5a, MM2A5b, MM2A5c, MM2A5d
10.6	Back and Forth Inverses	MM2A5b, MM2A5c
Chapter 11	Modeling Data with Linear Functions	
11.1	Mia's Growing Like a Weed Drawing the Line of Best Fit	MM2D2a, MM2D2b
11.2	Stroop Test Performing an Experiment	MM2D2b, MM2D2c
11.3	Where Do You Buy Your Music? Median-Median Line	MM2D2b, MM2D2c
11.4	Another Line of Best Fit Least Squares	MM2D2b, MM2D2c
11.5	Human Chain: Wrist Experiment Using Technology to Find a Linear Regression Equation, Part 1	MM2D2b, MM2D2c
11.6	Human Chain: Shoulder Experiment Using Technology to Find a Linear Regression Equation, Part 2	MM2D2b, MM2D2c
11.7	Lies and Statistics Causation versus Correlation	MM2D2d
Chapter 12	Mathematical Modeling	
12.1	Modeling Data Helps Us Make Predictions Using Quadratic Functions to Model Data	MM2D2c
12.2	Modeling Data Part 1 Using Functions to Model Data, Part 1	MM2D2a, MM2D2b, MM2D2c, MM2D2d
12.3	Modeling Data Part 2 Using Functions to Model Data, Part 2	MM2D2a, MM2D2b, MM2D2c, MM2D2d