

GSE Algebra I Curriculum Map

Semester 1			Semester 2		
Unit 6 (2-3 weeks)	Unit 1 (4 – 5 weeks)	Unit 2 (5-6 weeks)	Unit 3 (6 – 7 weeks)	Unit 4 (4-5 weeks)	Unit 5 (4 – 5 weeks)
Describing Data	Relationships Between Quantities and Expressions	Reasoning with Linear Equations and Inequalities	Modeling and Analyzing Quadratic Functions	Modeling and Analyzing Exponential Functions	Comparing and Contrasting Functions
<ul style="list-style-type: none"> • Dot plots • Box plots • Histograms • Measures of Center • Measures of Spread • Outliers • Two way tables 	<ul style="list-style-type: none"> • Unit conversions • Accuracy & precision • Add, subtract, & multiply polynomials • Simplify square root expressions • Properties of rational and irrational numbers • Interpret expressions 	<ul style="list-style-type: none"> • Algebraic properties • Solve for a variable • Create & solve equations & inequalities in one variable • Create equations in two or more variables • Constraints of equations & inequalities • Solve system of equations • Linear functions • Arithmetic sequences • Compare linear functions 	<ul style="list-style-type: none"> • Build functions describing relationships between two quantities • Create quadratic expressions to model situations • Transformations of quadratic transformations • Even/odd Functions • Characteristics of Quadratic Functions • Vertex Form/Standard Form • Compare quadratic functions • Factoring quadratic functions • Solving Quadratics by taking square roots • Completing the square • Connecting solving and graphing 	<ul style="list-style-type: none"> • Create exponential equations • Geometric sequences • Exponential growth • Exponential decay • Transformations of exponential functions • Characteristics of exponential functions • Compare exponential functions 	<ul style="list-style-type: none"> • Compare linear, quadratic, and exponential functions • Interpret functions • Analyze functions • Qualitative vs. Quantitative • Scatter Plots • Line of best fit • Correlation vs. Causation • Interpret linear models
MGSE9-12.S.ID.1 MGSE9-12.S.ID.2 MGSE9-12.S.ID.3 MGSE9-12.S.ID.5	MGSE9-12.N.RN.2 MGSE9-12.N.RN.3 MGSE9-12.N.Q.1 MGSE9-12.N.Q.2 MGSE9-12.N.Q.3 MGSE9-12.A.SSE.1a MGSE9-12.A.SSE.1b MGSE9-12.A.APR.1	MGSE9-12.A.REI.1 MGSE9-12.A.REI.3 MGSE9-12.A.CED.1 MGSE9-12.A.CED.2 MGSE9-12.A.CED.3 MGSE9-12.A.CED.4 MGSE9-12.A.REI.5 MGSE9-12.A.REI.6 MGSE9-12.A.REI.10 MGSE9-12.A.REI.11 MGSE9-12.A.REI.12 MGSE9-12.F.IF.1 MGSE9-12.F.IF.2 MGSE9-12.F.IF.5 MGSE9-12.F.IF.4 MGSE9-12.F.IF.6 MGSE9-12.F.IF.7 MGSE9-12.F.IF.9 MGSE9-12.F.BF.1a MGSE9-12.F.BF.2 MGSE9-12.F.IF.3	MGSE9-12.F.IF.1 MGSE9-12.F.IF.2 MGSE9-12.F.BF.1 MGSE9-12.F.BF.3 MGSE9-12.F.IF.4 MGSE9-12.F.IF.5 MGSE9-12.F.IF.6 MGSE9-12.F.IF.7 MGSE9-12.F.IF.8 MGSE9-12.F.IF.9 MGSE9-12.A.SSE.2 MGSE9-12.A.SSE.3a & b MGSE9-12.A.CED.1 MGSE9-12.A.CED.2 MGSE9-12.A.CED.4 MGSE9-12.A.REI.4a & b MGSE9-12.F.IF.4	MGSE9-12.A.CED.1 MGSE9-12.A.CED.2 MGSE9-12.F.BF.1a MGSE9-12.F.BF.2 MGSE9-12.F.BF.3 MGSE9-12.F.IF.1 MGSE9-12.F.IF.2 MGSE9-12.F.IF.3 MGSE9-12.F.IF.4 MGSE9-12.F.IF.5 MGSE9-12.F.IF.6 MGSE9-12.F.IF.7e MGSE9-12.F.IF.9	MGSE9-12.F.LE.1a MGSE9-12.F.LE.1b MGSE9-12.F.LE.1c MGSE9-12.F.LE.2 MGSE9-12.F.LE.3 MGSE9-12.F.LE.5 MGSE9-12.F.BF.3 MGSE9-12.F.IF.1 MGSE9-12.F.IF.2 MGSE9-12.F.IF.4 MGSE9-12.F.IF.5 MGSE9-12.F.IF.6 MGSE9-12.F.IF.7 MGSE9-12.F.IF.9 MGSE9-12.S.ID.6a MGSE9-12.S.ID.6c MGSE9-12.S.ID.7 MGSE9-12.S.ID.8 MGSE9-12.S.ID.9

These units were written to build upon concepts from prior units, so later units contain tasks that depend upon the concepts addressed in earlier units. All units will include the Mathematical Practices and indicate skills to maintain.

