

Cobb County School District

College Readiness Mathematics Teaching & Learning Framework

1st Semester

2nd Semester

Unit 1 3 weeks	Unit 2 3 weeks	Unit 3 3 weeks	Unit 4 6 weeks	Unit 5 4 weeks	Unit 6 6 weeks	Unit 7 6 weeks	Unit 8 5 weeks
Algebraic Expressions	Equations	Measurement & Proportional Reasoning	Linear Functions	Linear System of Equations	Quadratic Functions	Exponential Functions	Summarizing & Interpreting Statistical Data
<p>MGSE9-12.N.Q.1 Units of Measure</p> <p>MGSE9-12.A.SSE.1 Interpret Expressions</p> <p>MGSE9-12.A.SSE.2 Equivalent Expressions</p> <p>MGSE9-12.A.SSE.3 Properties of Expressions</p> <p>MGSE9-12.F.IF.8 Write Functions</p>	<p>MGSE8.EE.7 Linear Equations</p> <p>MGSE9-12.A.SSE.1 Interpret Expressions</p> <p>MGSE9-12.A.SSE.3 Properties of Expressions</p> <p>MGSE9-12.A.CED.1 Create 1-Variable Equations</p> <p>MGSE9-12.A.CED.2 Create 2-Variable Equations</p> <p>MGSE9-12.A.CED.3 Constraints</p> <p>MGSE9-12.A.CED.4 Literal Equations</p> <p>MGSE9-12.A.REI.1 Justify Solutions</p> <p>MGSE9-12.A.REI.2 Rational & Radical Equations</p> <p>MGSE9-12.A.REI.3 Letter coefficients</p>	<p>MGSE9-12.N.Q.1 Units of Measure</p> <p>MGSE9-12.N.Q.2 Descriptive Modeling</p> <p>MGSE9-12.G.GPE.4 Geometric Theorems</p> <p>MGSE9-12.G.GPE.7 Distance Formula</p> <p>MGSE9-12.G.GMD.1 Geometric Formulas</p> <p>MGSE9-12.G.GMD.3 Volume Formulas</p> <p>MGSE9-12.G.MG.2 Density</p> <p>MGSE9-12.G.MG.3 Design Problems</p>	<p>MGSE8.EE.1 Proportional Relationships</p> <p>MGSE8.EE.2 Similarity & Slope</p> <p>MGSE8.F.1 Understand a function</p> <p>MGSE8.F.2 Compare 2 functions</p> <p>MGSE8.F.3 Linear functions</p> <p>MGSE8.F.4 Construct a function</p> <p>MGSE9-12.A.CED.2 Create 2 Variable Equations</p> <p>MGSE9-12.F.IF.4 Characteristics of Functions</p> <p>MGSE9-12.F.IF.7 Graph Functions</p> <p>MGSE9-12.F.IF.7a Graph Linear & Quadratic</p> <p>MGSE9-12.F.IF.9 Compare function properties</p> <p>MGSE9-12.F.LE.1 Linear vs. exponential</p> <p>MGSE9-12.F.LE.3 Function observations</p> <p>MGSE9-12.S.ID.6 Scatter plots</p> <p>MGSE9-12.S.ID.6c Linear Regression</p> <p>MGSE9-12.S.ID.7 Interpret $y=mx+b$</p>	<p>MGSE9-12.A.CED.2 Create 2 Variable Equations</p> <p>MGSE9-12.A.CED.3 Constraints</p> <p>MGSE9-12.A.REI.5 Elimination method</p> <p>MGSE9-12.A.REI.6 Graphing method</p> <p>MGSE9-12.A.REI.11 Solutions</p> <p>MGSE9-12.A.REI.12 Graph the solution</p> <p>MGSE9-12.F.IF.9 Compare function properties</p>	<p>MGSE9-12.A.SSE.1 Interpret Expressions</p> <p>MGSE9-12.A.SSE.1a Interpret Expression Parts</p> <p>MGSE9-12.A.SSE.2 Equivalent Expressions</p> <p>MGSE9-12.A.SSE.3 Properties of Expressions</p> <p>MGSE9-12.A.SSE.3a Factor Quadratic Expressions</p> <p>MGSE9-12.A.SSE.3b Complete the square</p> <p>MGSE9-12.A.CED.1 Create 1-Variable Equations</p> <p>MGSE9-12.A.REI.4 Solve 1-variable quadratic equations</p> <p>MGSE9-12.A.REI.4a Derive the quadratic formula</p> <p>MGSE9-12.A.REI.4b Solve quadratic equations by inspection</p> <p>MGSE9-12.A.REI.7 Solve system linear/quadratic</p> <p>MGSE9-12.F.IF.4 Characteristics of Functions</p> <p>MGSE9-12.F.IF.7 Graph Functions</p> <p>MGSE9-12.F.IF.7a Graph Linear/Quadratic Functions</p> <p>MGSE9-12.F.IF.8 Write Functions</p> <p>MGSE9-12.F.BF.3 Even/Odd Functions</p> <p>The Value of k</p>	<p>MGSE9-12.A.SSE.1 Interpret Expressions</p> <p>MGSE9-12.A.SSE.1a Interpret Expression Parts</p> <p>MGSE9-12.A.SSE.2 Equivalent Expressions</p> <p>MGSE9-12.A.SSE.3 Properties of Expressions</p> <p>MGSE9-12.A.SSE.3a Factor Quadratic Expressions</p> <p>MGSE9-12.A.SSE.3b Complete the square</p> <p>MGSE9-12.A.CED.2 Create 2 Variable Equations</p> <p>MGSE9-12.A.CED.4 Literal Equations</p> <p>MGSE9-12.F.IF.4 Characteristics of Functions</p> <p>MGSE9-12.F.IF.7 Graph Functions</p> <p>MGSE9-12.F.IF.7e Graph Exp./Log Functions</p> <p>MGSE9-12.F.IF.8 Write Functions</p> <p>MGSE9-12.F.IF.8b Interpret exponential expressions</p> <p>MGSE9-12.F.BF.1 Write a function</p> <p>MGSE9-12.F.BF.1a Explicit/recursive</p> <p>MGSE9-12.F.BF.2 Arithmetic/geometric</p> <p>MGSE9-12.F.LE.1 Linear vs. exponential</p> <p>MGSE9-12.F.LE.1a Growth of Function</p> <p>MGSE9-12.F.LE.1b Constant Rates</p> <p>MGSE9-12.F.LE.1c Growth & decay</p> <p>MGSE9-12.F.LE.2 Construct Linear & exponential</p> <p>MGSE9-12.F.LE.3 Function observations</p> <p>MGSE9-12.F.LE.5 Interpret parameters</p>	<p>MGSE9-12.S.ID.1 Dot & box plots</p> <p>MGSE9-12.S.ID.2 Center & Spread</p> <p>MGSE9-12.S.ID.3 Outliers</p> <p>MGSE9-12.S.ID.5 2-way tables</p> <p>MGSE9-12.S.ID.6 Scatter plots</p> <p>MGSE9-12.S.ID.6a Type of function</p> <p>MGSE9-12.S.ID.6c Linear regression</p> <p>MGSE9-12.S.ID.7 Interpret $y=mx+b$</p> <p>MGSE9-12.S.ID.8 Correlation coefficient</p> <p>MGSE9-12.S.ID.9 Correlation vs. causation</p> <p>MGSE9-12.S.IC.1 Making inferences</p> <p>MGSE9-12.S.IC.3 Randomization</p>

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

NOTE: Mathematical standards are interwoven and should be addressed throughout the year in as many different units and topics as possible in order to stress the natural connections that exist among mathematical topics.

Cobb County School District

Grades 9-12 Key: Algebra Strand: SSE = Seeing Structure in Expressions, APR = Arithmetic with Polynomial and Rational Expressions, CED = Creating Equations, REI = Reasoning with Equations and Inequalities

Functions Strand: IF = Interpreting Functions, LE = Linear and Exponential Models, BF = Building Functions, TF = Trigonometric Functions

Geometry Strand: CO = Congruence, SRT = Similarity, Right Triangles, and Trigonometry, C = Circles, GPE = Expressing Geometric Properties with Equations, GMD = Geometric Measurement and Dimension, MG = Modeling with Geometry

Statistics and Probability Strand: ID = Interpreting Categorical and Quantitative Data, IC = Making Inferences and Justifying Conclusions, CP = Conditional Probability and the Rules of Probability, MD = Using Probability to Make Decisions

Cobb County School District

College Readiness Mathematics Teaching & Learning Framework

Block Schedule

Unit 1 1.5 weeks	Unit 2 1.5 weeks	Unit 3 1.5 weeks	Unit 4 3 weeks	Unit 5 2 weeks	Unit 6 3 weeks	Unit 7 3 weeks	Unit 8 2.5 weeks
Algebraic Expressions	Equations	Measurement & Proportional Reasoning	Linear Functions	Linear System of Equations	Quadratic Functions	Exponential Functions	Summarizing & Interpreting Statistical Data
<p>MGSE9-12.N.Q.1 Units of Measure</p> <p>MGSE9-12.A.SSE.1 Interpret Expressions</p> <p>MGSE9-12.A.SSE.2 Equivalent Expressions</p> <p>MGSE9-12.A.SSE.3 Properties of Expressions</p> <p>MGSE9-12.F.IF.8 Write Functions</p>	<p>MGSE8.EE.7 Linear Equations</p> <p>MGSE9-12.A.SSE.1 Interpret Expressions</p> <p>MGSE9-12.A.SSE.3 Properties of Expressions</p> <p>MGSE9-12.A.CED.1 Create 1-Variable Equations</p> <p>MGSE9-12.A.CED.2 Create 2-Variable Equations</p> <p>MGSE9-12.A.CED.3 Constraints</p> <p>MGSE9-12.A.CED.4 Literal Equations</p> <p>MGSE9-12.A.REI.1 Justify Solutions</p> <p>MGSE9-12.A.REI.2 Rational & Radical Equations</p> <p>MGSE9-12.A.REI.3 Letter coefficients</p>	<p>MGSE9-12.N.Q.1 Units of Measure</p> <p>MGSE9-12.N.Q.2 Descriptive Modeling</p> <p>MGSE9-12.G.GPE.4 Geometric Theorems</p> <p>MGSE9-12.G.GPE.7 Distance Formula</p> <p>MGSE9-12.G.GMD.1 Geometric Formulas</p> <p>MGSE9-12.G.GMD.3 Volume Formulas</p> <p>MGSE9-12.G.MG.2 Density</p> <p>MGSE9-12.G.MG.3 Design Problems</p>	<p>MGSE8.EE.1 Proportional Relationships</p> <p>MGSE8.EE.2 Similarity & Slope</p> <p>MGSE8.F.1 Understand a function</p> <p>MGSE8.F.2 Compare 2 functions</p> <p>MGSE8.F.3 Linear functions</p> <p>MGSE8.F.4 Construct a function</p> <p>MGSE9-12.A.CED.2 Create 2 Variable Equations</p> <p>MGSE9-12.F.IF.4 Characteristics of Functions</p> <p>MGSE9-12.F.IF.7 Graph Functions</p> <p>MGSE9-12.F.IF.7a Graph Linear & Quadratic</p> <p>MGSE9-12.F.IF.9 Compare function properties</p> <p>MGSE9-12.F.LE.1 Linear vs. exponential</p> <p>MGSE9-12.F.LE.3 Function observations</p> <p>MGSE9-12.S.ID.6 Scatter plots</p> <p>MGSE9-12.S.ID.6c Linear Regression</p> <p>MGSE9-12.S.ID.7 Interpret $y=mx+b$</p>	<p>MGSE9-12.A.CED.2 Create 2 Variable Equations</p> <p>MGSE9-12.A.CED.3 Constraints</p> <p>MGSE9-12.A.REI.5 Elimination method</p> <p>MGSE9-12.A.REI.6 Graphing method</p> <p>MGSE9-12.A.REI.11 Solutions</p> <p>MGSE9-12.A.REI.12 Graph the solution</p> <p>MGSE9-12.F.IF.9 Compare function properties</p>	<p>MGSE9-12.A.SSE.1 Interpret Expressions</p> <p>MGSE9-12.A.SSE.1a Interpret Expression Parts</p> <p>MGSE9-12.A.SSE.2 Equivalent Expressions</p> <p>MGSE9-12.A.SSE.3 Properties of Expressions</p> <p>MGSE9-12.A.SSE.3a Factor Quadratic Expressions</p> <p>MGSE9-12.A.SSE.3b Complete the square</p> <p>MGSE9-12.A.CED.1 Create 1-Variable Equations</p> <p>MGSE9-12.A.REI.4 Solve 1-variable quadratic equations</p> <p>MGSE9-12.A.REI.4a Derive the quadratic formula</p> <p>MGSE9-12.A.REI.4b Solve quadratic equations by inspection</p> <p>MGSE9-12.A.REI.7 Solve system linear/quadratic</p> <p>MGSE9-12.F.IF.4 Characteristics of Functions</p> <p>MGSE9-12.F.IF.7 Graph Functions</p> <p>MGSE9-12.F.IF.7a Graph Linear/Quadratic Functions</p> <p>MGSE9-12.F.IF.8 Write Functions</p> <p>MGSE9-12.F.BF.3 Even/Odd Functions</p> <p>The Value of k</p>	<p>MGSE9-12.A.SSE.1 Interpret Expressions</p> <p>MGSE9-12.A.SSE.1a Interpret Expression Parts</p> <p>MGSE9-12.A.SSE.2 Equivalent Expressions</p> <p>MGSE9-12.A.SSE.3 Properties of Expressions</p> <p>MGSE9-12.A.SSE.3a Factor Quadratic Expressions</p> <p>MGSE9-12.A.SSE.3b Complete the square</p> <p>MGSE9-12.A.CED.2 Create 2 Variable Equations</p> <p>MGSE9-12.A.CED.4 Literal Equations</p> <p>MGSE9-12.F.IF.4 Characteristics of Functions</p> <p>MGSE9-12.F.IF.7 Graph Functions</p> <p>MGSE9-12.F.IF.7e Graph Exp./Log Functions</p> <p>MGSE9-12.F.IF.8 Write Functions</p> <p>MGSE9-12.F.IF.8b Interpret exponential expressions</p> <p>MGSE9-12.F.BF.1 Write a function</p> <p>MGSE9-12.F.BF.1a Explicit/recursive</p> <p>MGSE9-12.F.BF.2 Arithmetic/geometric</p> <p>MGSE9-12.F.LE.1 Linear vs. exponential</p> <p>MGSE9-12.F.LE.1a Growth of Function</p> <p>MGSE9-12.F.LE.1b Constant Rates</p> <p>MGSE9-12.F.LE.1c Growth & decay</p> <p>MGSE9-12.F.LE.2 Construct Linear & exponential</p> <p>MGSE9-12.F.LE.3 Function observations</p> <p>MGSE9-12.F.LE.5 Interpret parameters</p>	<p>MGSE9-12.S.ID.1 Dot & box plots</p> <p>MGSE9-12.S.ID.2 Center & Spread</p> <p>MGSE9-12.S.ID.3 Outliers</p> <p>MGSE9-12.S.ID.5 2-way tables</p> <p>MGSE9-12.S.ID.6 Scatter plots</p> <p>MGSE9-12.S.ID.6a Type of function</p> <p>MGSE9-12.S.ID.6c Linear regression</p> <p>MGSE9-12.S.ID.7 Interpret $y=mx+b$</p> <p>MGSE9-12.S.ID.8 Correlation coefficient</p> <p>MGSE9-12.S.ID.9 Correlation vs. causation</p> <p>MGSE9-12.S.IC.1 Making inferences</p> <p>MGSE9-12.S.IC.3 Randomization</p>

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