

CCGPS COORDINATE ALGEBRA CONTENT MAP

Unit 1: Relationships Between Quantities			
Lesson	Sub-lesson number	Title	Standard(s)
Lesson 1	Interpreting Structure in Expressions		
	1.1.1	Identifying Terms, Factors, and Coefficients	MCC9–12.A.SSE.1a★
	1.1.2	Interpreting Complicated Expressions	MCC9–12.A.SSE.1b★
Lesson 2	Creating Equations and Inequalities in One Variable		
	1.2.1	Creating Linear Equations in One Variable	MCC9–12.A.CED.1★ MCC9–12.N.Q.2★ MCC9–12.N.Q.3★
	1.2.2	Creating Linear Inequalities in One Variable	MCC9–12.A.CED.1★
	1.2.3	Creating Exponential Equations	MCC9–12.A.CED.1★
Lesson 3	Creating and Graphing Equations in Two Variables		
	1.3.1	Creating and Graphing Linear Equations in Two Variables	MCC9–12.A.CED.2★ MCC9–12.N.Q.1★
	1.3.2	Creating and Graphing Exponential Equations	MCC9–12.A.CED.2★ MCC9–12.N.Q.1★
Lesson 4	Representing Constraints		
	1.4.1	Representing Constraints	MCC9–12.A.CED.3★
Lesson 5	Rearranging Formulas		
	1.5.1	Rearranging Formulas	MCC9–12.A.CED.4★
Unit 2: Reasoning with Equations and Inequalities			
Lesson	Sub-lesson number	Title	Standard(s)
Lesson 1	Solving Equations and Inequalities		
	2.1.1	Properties of Equality	MCC9–12.A.REI.1
	2.1.2	Solving Linear Equations	MCC9–12.A.REI.3
	2.1.3	Solving Linear Inequalities	MCC9–12.A.REI.3
	2.1.4	Solving Exponential Equations	MCC9–12.A.REI.3
Lesson 2	Solving Systems of Equations		
	2.2.1	Proving Equivalences	MCC9–12.A.REI.5
	2.2.2	Solving Systems of Linear Equations	MCC9–12.A.REI.6
Lesson 3	Solving Linear Inequalities in Two Variables and Systems of Inequalities		
	2.3.1	Solving Linear Inequalities in Two Variables	MCC9–12.A.REI.12
	2.3.2	Solving Systems of Linear Inequalities	MCC9–12.A.REI.12
Unit 3: Linear and Exponential Functions			
Lesson	Sub-lesson number	Title	Standard(s)
Lesson 1	Graphs As Solution Sets and Function Notation		
	3.1.1	Graphing the Set of All Solutions	MCC9–12.A.REI.10
	3.1.2	Intersecting Graphs	MCC9–12.A.REI.11★
	3.1.3	Domain and Range	MCC9–12.F.IF.1
	3.1.4	Function Notation and Evaluating Functions	MCC9–12.F.IF.2
Lesson 2	Sequences As Functions		
	3.2.1	Sequences As Functions	MCC9–12.F.IF.3

Lesson 3	Interpreting Graphs of Functions		
	3.3.1	Identifying Key Features of Linear and Exponential Graphs	MCC9–12.F.IF.4★ MCC9–12.F.IF.5★
	3.3.2	Proving Average Rate of Change	MCC9–12.F.IF.6★ MCC9–12.F.LE.1a★
	3.3.3	Recognizing Average Rate of Change	MCC9–12.F.IF.6★ MCC9–12.F.LE.1b★ MCC9–12.F.LE.1c★
Lesson 4	Analyzing Linear and Exponential Functions		
	3.4.1	Graphing Linear Functions	MCC9–12.F.IF.7a★
	3.4.2	Graphing Exponential Functions	MCC9–12.F.IF.7e★
Lesson 5	Comparing Functions		
	3.5.1	Comparing Linear Functions	MCC9–12.F.IF.9
	3.5.2	Comparing Exponential Functions	MCC9–12.F.IF.9
	3.5.3	Comparing Linear to Exponential Functions	MCC9–12.F.LE.3★
Lesson 6	Building Functions		
	3.6.1	Building Functions from Context	MCC9–12.F.BF.1a★
	3.6.2	Constructing Functions from Graphs and Tables	MCC9–12.F.LE.2★
Lesson 7	Operating on Functions and Transformations		
	3.7.1	Operating on Functions	MCC9–12.F.BF.1b★
	3.7.2	Transformations of Linear and Exponential Functions	MCC9–12.F.BF.3
Lesson 8	Arithmetic and Geometric Sequences		
	3.8.1	Arithmetic Sequences	MCC9–12.F.BF.2★
	3.8.2	Geometric Sequences	MCC9–12.F.BF.2★
Lesson 9	Interpreting Parameters		
	3.9.1	Interpreting Parameters	MCC9–12.F.LE.5★
Unit 4: Describing Data			
Lesson	Sub-lesson number	Title	Standard(s)
Lesson 1	Working with a Single Measurement Variable		
	4.1.1	Summarizing Numerical Data Sets* (Transition Standard)	MCC6.SP.5c* (Transition Standard)
	4.1.2	Representing Data Sets	MCC9–12.S.ID.1★
	4.1.3	Comparing Data Sets	MCC9–12.S.ID.2★
	4.1.4	Interpreting Data Sets	MCC9–12.S.ID.3★
Lesson 2	Working with Two Categorical and Quantitative Variables		
	4.2.1	Summarizing Data Using Two-Way Frequency Tables	MCC9–12.S.ID.5★
	4.2.2	Solving Problems Given Functions Fitted to Data	MCC9–12.S.ID.6a★
	4.2.3	Analyzing Residuals	MCC9–12.S.ID.6b★
	4.2.4	Fitting Linear Functions to Data	MCC9–12.S.ID.6c★
Lesson 3	Interpreting Linear Models		
	4.3.1	Interpreting Slope and y -intercept	MCC9–12.S.ID.7★
	4.3.2	Calculating and Interpreting the Correlation Coefficient	MCC9–12.S.ID.8★
	4.3.3	Distinguishing Between Correlation and Causation	MCC9–12.S.ID.9★

Unit 5: Transformations in the Coordinate Plane			
Lesson	Sub-lesson number	Title	Standard(s)
Lesson 1	Introducing Transformations		
	5.1.1	Defining Terms	MCC9–12.G.CO.1
	5.1.2	Transformations As Functions	MCC9–12.G.CO.2
	5.1.3	Applying Lines of Symmetry	MCC9–12.G.CO.3
Lesson 2	Defining and Applying Rotations, Reflections, and Translations		
	5.2.1	Defining Rotations, Reflections, and Translations	MCC9–12.G.CO.4
	5.2.2	Applying Rotations, Reflections, and Translations	MCC9–12.G.CO.5
Unit 6: Connecting Algebra and Geometry Through Coordinates			
Lesson	Sub-lesson number	Title	Standard(s)
Lesson 1	Slope and Distance		
	6.1.1	Applying the Pythagorean Theorem* (Transition Standard)	MCC8.G.8* (Transition Standard)
	6.1.2	Using Coordinates to Prove Geometric Theorems with Slope and Distance	MCC9–12.G.GPE.4 MCC9–12.G.GPE.5
	6.1.3	Working with Parallel and Perpendicular Lines	MCC9–12.G.GPE.5
Lesson 2	Lines and Segments		
	6.2.1	Midpoints and Other Points on Line Segments	MCC9–12.G.GPE.6
	6.2.2	Calculating Perimeter and Area	MCC9–12.G.GPE.7★