

Topic/Time Frame (days)	Chapter and Sections/Resources	Learning Targets	Vocabulary	CCSSM Standards
Representing Relationships	Chapter 3: Sec 1, 2, 3, 4, 5, 7 (Cover Sec 6 with Sec 3) Incorporate 1.1 2.3, 2.6	<ul style="list-style-type: none"> • Explain how complex expressions and equations are built out of basic operations. • Identify, define, explain and describe the components of a complicated expression (i.e. terms, factors, coefficients, constants). • Create and solve linear equations in one variable, including literal equations and use them to solve problems. • Rearrange formulas to highlight a quantity of interest, using the same reason as in solving equations. 	<ul style="list-style-type: none"> • Expression • Equation • Linear • Constant • Term • Factor • Coefficient • Identity • Inverse operations • Opposite • Solution of an equation • Equivalent equations • Formula • Distributive property 	A-CED.A.1 A-CED.A.4 A-REI.A.1 N-Q.A.1 A-SSE.A.1a
Representing Relationships & Functions and Linear Functions	Chapter 4: Sec 2, 3, 4, 5, 6, 7, 8 Supplement for last 3 standards	<ul style="list-style-type: none"> • Calculate and interpret the rate of change (slope) of a linear relationship using two points (equation, table or graph). • Create linear equations in one variable and use them to solve problems with or without context. • Create equations in two or more variables to represent relationships between quantities with or without context. • Prove that linear functions grow by equal differences over equal intervals. • For a function that models a relationship between two quantities, interpret and 	<ul style="list-style-type: none"> • Domain • Term • Linear equation • Relation • Integer • Function • Slope/Rate of change • y-intercept • Slope-intercept form • Ordered pair 	A-CED.A.2 A-CED.A.3 A-REI.D10 F-IF.A.1 F-IF.A.2 F-IF.B.5 F-IF.B.6 F-IF.C.9 F-BF.A.1a F-LE.A.1a F-LE.A.1b F-LE.A.2

		sketch key features of graphs and tables in terms of the quantities.	<ul style="list-style-type: none">• x-intercept• Direct variation• Function notation• Range• Parallel	
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Topic/Time Frame (days)	Chapter and Sections/Resources	Learning Targets: Know/Understand, Do, Apply	Vocabulary	CCSSM Standards
<p>Functions and Linear Functions</p> <p>Data</p>	Ch 5, Sections: 1, 5, 2, 3, 4, 6, 7	<ul style="list-style-type: none"> • Write and interpret linear equations given data or a graph, slope and an ordered pair, or two ordered pairs. • Use residuals and their graph to determine appropriateness of a linear model and determine a line of best fit. • Translate among representations of linear functions including tables, graphs, equations and real-life situations. 	<ul style="list-style-type: none"> • Slope/Rate of change • Slope-intercept form • Best-fitting line • Correlation • Point-slope form • Standard form • Perpendicular 	<p>A-REI.B.3</p> <p>F-LE.A.1b</p> <p>A-LE.B.5</p> <p>S-ID.6.abc</p> <p>S-ID.7</p> <p>S-ID.8</p> <p>S-ID.9</p>
<p>Linear Equations, Inequalities, and Systems</p> <p>Data</p>	<p>Ch 6: Sections: 1, 2, 5</p> <p>Ch 6: Sections 6, 7</p>	<ul style="list-style-type: none"> • Solve and graph simple linear inequalities in one variable, using written and verbal forms with and without context. • Solve and graph linear inequalities in two variables, using written and verbal forms with and without context. • Create data displays, interpret displays in context, and compare different data sets. 	<ul style="list-style-type: none"> • Graph of a linear inequality • Solution of a linear inequality in one and two variables • Stem-and-leaf plot • Box-and-whisker plot • Measures of central tendency • Mean • Median • Mode 	<p>A-CED.A.1</p> <p>A-REI.D.12</p> <p>S-ID.A.1</p> <p>S-ID.A.2</p> <p>S-ID.A.3</p>

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Linear Equations, Inequalities, & Systems	Chapter 7: Sec 1, 2, 3, 4, 5, 6	<ul style="list-style-type: none"> • Write, solve, and graph a system of linear equations in two variables to model a situation and to determine if an ordered pair is a solution to a system. • Represent constraints by equations and by systems of equations and/or inequalities, and interpret solutions as viable or non-viable options in a modeling context. • 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. • Graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes. 	<ul style="list-style-type: none"> • System of linear equations (linear system) • System of linear inequalities • Solution of a linear system • Solution of a system of inequalities • No solution • Infinite solutions • Region • Constraints • Ordered pair • Substitution • Linear combinations (Elimination) 	<p>A-REI.B.3 A-REI.C.5 A-REI.C.6 A-REI.D.11 A-REI.D.12</p>
Expressions, Functions, and Equations	Chapter 8: Sec 1, 2, 3, 4 (as part of 1 & 3), 5, 6	<ul style="list-style-type: none"> • Use the properties of exponents to transform and interpret expressions for exponential functions. • Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another. • Write, use and graph models for exponential growth and decay. 	<ul style="list-style-type: none"> • Power • Base • Exponential function • Scientific notation • Exponential growth • Growth factor 	<p>A-SSE.B.3c F-IF.C.7e F-BF.A.1a F-IF.C.8b F-IF.C.9 S-ID.B.6a F-LE.A.1a F-LE.A.1c F-LE.B.5 F-LE.A.2</p>

			<ul style="list-style-type: none">• Initial amount• Exponential growth• Decay factor	A.SSE.A.1.b
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Topic/Time Frame (days)	Chapter and Sections/Resources	Learning Targets: Know/Understand, Do, Apply	Vocabulary	CCSSM Standards
Quadratic Functions and Equations	Chapter 9 Sec 1, 3, 4, 5, 8 Chapter 12 Sec 4 (after 9.3)	<ul style="list-style-type: none"> • Solve quadratic equations by inspection, taking square roots, completing the square, the quadratic formula, and factoring. • Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines and use the method of completing the square to derive the quadratic formula. • Graph functions expressed symbolically and show and interpret key features of the graph, with and without technology. 	<ul style="list-style-type: none"> • Square root • Irrational number • Quadratic equation • Quadratic function • Parabola • Roots/zeros/x – intercept • Vertex • Line of symmetry • Completing the square 	A-REI.B.4b F-IF.C.7 A-SSE.B.3b A-REI.B.4a F-IF.C.8a S-ID.B.6a
Quadratic Functions and Equations	Chapter 10 Sec 1, 2, 3, 4, 5 & 6 & 7 as 1	<ul style="list-style-type: none"> • Use the process of factoring in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context. • Understand that polynomials are closed under the operations of addition, subtraction, and multiplication. • Identify zeros of polynomials and use the zeros to construct a graph of the function defined by the polynomial. 	<ul style="list-style-type: none"> • Polynomial • Degree • Leading coefficient • Monomial/Binomial/Trinomial • Factored form 	A-APR.A.1 A-APR.B.3 A-SSE.B.3a A-SSE.A.2 F-IF.C.8a F-BF.A.1b