



Carrizo Springs High School  
2019-2020 Math Lab  
Scope and Sequence



Cycle 1	29 Days Aug.26-Oct.4 , 2019	
UNIT	# Class Periods	<b>Texas Essential Knowledge and Skills/ Student Expectations (TEKS/SEs):</b> The bold face words in the TEKS/SEs indicate concepts addressed specifically in this unit; the unbolded concepts are addressed in other units of this course. <b>The student will:</b>
		<p>The Mathematical Process Standards are integrated throughout the course in all activities and lessons. Teachers should refer to these standards for instructional strategies and depth of rigor. Specific process standards have been highlighted in each unit, but these process standards should not be the only process standards associated with the daily lessons.</p>
		<p><b>Mathematical Process Standards.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p>
		<p>A.1A Apply mathematics to problems arising in everyday life, society, and the workplace.</p>
		<p>A.1B Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.</p>
		<p>A.1C Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.</p>
		<p>A.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate</p>
		<p>A.1E Create and use representations to organize, record, and communicate mathematical ideas. ALGI.1F Analyze mathematical relationships to connect and communicate mathematical ideas.</p>
		<p>A.1F Analyze mathematical relationships to connect and communicate mathematical ideas.</p>

		A.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communications
Unit 0: Basic Calculator Applications	2 class periods	Students use the graphing calculator as a tool for solving problems.
		<b>Mathematical Process Standards.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:
		A.1C Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.
		A.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate
		A.1E Create and use representations to organize, record, and communicate mathematical ideas. ALGI.1F Analyze mathematical relationships to connect and communicate mathematical ideas.
Unit 1: Equations and Inequalities	15 class periods	Students apply algebraic properties to solve multi-step linear equations and inequalities
		<b>Mathematical Process Standards.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:
		A.1C Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.
		A.1F Analyze mathematical relationships to connect and communicate mathematical ideas.
		<b>Linear Functions, Equations, and Inequalities.</b> The student applies mathematical process standards to solve, with and without technology, linear equations and evaluate the reasonableness of their solutions. The student is expected to:
		A.5A Solve linear equations in one variable, including those for which the application of the distributive property is necessary and includes variables on both sides.
		A.5B Solve linear inequalities in one variable, including those for which the application of the distributive property is necessary and for which variables are included on both sides.
		<b>Number and Algebraic Methods.</b> The student applies the mathematical process standards and algebraic methods to rewrite in equivalent forms, and perform operations on polynomial expressions. The student is expected to:
		<b>A.10A Add and subtract polynomials of degree one and two.</b>

		<p><b>A.10D Rewrite polynomial expressions of degree one and degree two in equivalent forms using the distributive property.</b></p> <p><b>Number and Algebraic Methods. The student applies the mathematical process standards and algebraic methods to write, solve, analyze, and evaluate equations, relations, and functions. The student is expected to:</b></p> <p>A.12E Solve mathematical and scientific formulas, and other literal equations, for a specified variable.</p>
Unit 2: <b>Introduction to Functions</b>	10 class periods	<p>Students study and apply attribute of functions</p> <p>Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <p>A.1A Apply mathematics to problems arising in everyday life, society, and the workplace.</p> <p>A.1F Analyze mathematical relationships to connect and communicate mathematical ideas.</p> <p><b>Linear Functions, Equations, and Inequalities.</b> The student applies the mathematical process standards using properties of linear functions to write and represent in multiple ways, with and without technology, linear equations, inequalities, and systems of equations. The student is expected to:</p> <p>A.2A Determine the domain and range of a linear function in mathematical problems, determine reasonable domain and range values for real-world situations, both continuous and discrete, and represent domain and range using inequalities.</p> <p>A.2C Write linear equations in two variables given a table of values, a graph, and a verbal description.</p> <p><b>Number and Algebraic Methods. The student applies the mathematical process standards and algebraic methods to write, solve, analyze, and evaluate equations, relations, and functions. The student is expected to:</b></p> <p>A.12A Describe whether relations represented verbally, tabularly, graphically, and symbolically define a function.</p> <p>A.12B Evaluate functions, expressed in function notation, given one or more elements in their domain.</p>
Cycle 2	25 Days Oct. 7- Nov.8	
UNIT	# Class Periods	Texas Essential Knowledge and Skills/ Student Expectations (TEKS/SEs): The bold face words in the TEKS/SEs indicate concepts addressed specifically in this unit; the unbolded concepts are addressed in other units of this course. <b>The student will:</b>

<p>Unit 3: <b>Linear Functions</b></p>	<p>10 Class Period</p>	<p>Students will calculate the rate of change and slope from multiple representations in mathematical and real-world problems.</p> <p><b>Mathematical Process Standards.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <p>A.1A Apply mathematics to problems arising in everyday life, society, and the workplace.</p> <p>A.1F Analyze mathematical relationships to connect and communicate mathematical ideas.</p> <p>A.1E Create and use representations to organize, record, and communicate mathematical ideas</p> <p><b>Linear Functions, Equations, and Inequalities.</b> The student applies the mathematical process standards when using graphs of linear functions, their key features, and their related transformations to represent in multiple ways and solve, with and without technology, equations, inequalities, and systems of equations. the student is expected to:</p> <p>A.2A Determine the domain and range of a linear function in mathematical problems; determine reasonable domain and range values for real-world situations, both continuous and discrete; and represent domain and range using inequalities.</p> <p>A.2D Write and solve equations involving direct variation.</p> <p>A.3A Determine the slope of a line given a table of values, a graph, two points on the line, and an equation written in various forms, including <math>y = mx + b</math>, <math>Ax + By = C</math>, and <math>y - y_1 = m(x - x_1)</math>.</p> <p>A.3C Graph linear functions on the coordinate plane and identify key features, including x-intercept, y-intercept, zeros, and slope, in mathematical and real-world problems.</p>
<p>Unit 4: <b>Forms of Linear Equations</b></p>	<p>10 Class Periods</p>	<p>Students write various forms of linear equations from multiple representations and connect them to their graphs and to the parent graph of linear function in mathematical and real-world situations, including parallel and perpendicular lines</p> <p><b>Mathematical Process Standards.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <p>A1.D Communicate mathematical ideas and reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.</p> <p>A.1E Create and use representations to organize, record, and communicate mathematical ideas</p> <p>A.1F Analyze mathematical relationships to connect and communicate mathematical ideas.</p>

		<p><b>Linear Functions, Equations, and Inequalities.</b> The student applies the mathematical process standards when using properties of linear functions to write and represent in multiple ways, with and without technology, linear equations, inequalities, and systems of equations. The student is expected to:</p> <p>A.2A Determine the domain and range of a linear function in mathematical problems; determine reasonable domain and range values for real-world situations, both continuous and discrete; and represent domain and range using inequalities.</p> <p>A.2B Write linear equations in two variables in various forms, including <math>y = mx + b</math>, <math>Ax + By = C</math>, and <math>y - y_1 = m(x - x_1)</math>, given one point and the slope and given two points.</p> <p>A.2C Write linear equations in two variables given a table of values, a graph, and a verbal description.</p> <p>A.2D Write and solve equations involving direct variation.</p> <p>A.2E Write the equation of a line that contains a given point and is parallel to a given line.</p> <p>A.2F Write the equation of a line that contains a given point and is perpendicular to a given line.</p> <p>A.2G Write an equation of a line that is parallel or perpendicular to the X and Y axis and determine whether the slope of the line is zero or undefined.</p> <p><b>Linear Functions, Equations, and Inequalities.</b> The student applies the mathematical process standards when using graphs, linear functions, their key features, and their related transformations to represent in multiple ways and solve, with and without technology, equations, inequalities, and systems of equations. The student is expected to:</p> <p>A.3C Graph linear functions on the coordinate plane and identify key features, including x-intercept, y-intercept, zeros, and slope, in mathematical and real-world problems.</p> <p><b>Number and Algebraic Methods.</b> The student applies the mathematical process standards and algebraic methods to write, solve, analyze, and evaluate equations, relations, and functions. The student is expected to:</p> <p>A.12E Solve mathematical and scientific formulas, and other literal equations for a specific variable.</p>
Unit 5: <b>Linear Inequalities</b>	5 Class Periods	<p>Students will write graph and solve linear inequalities in two variables.</p> <p><b>Mathematical Process Standards.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p>

		<p>A.1C Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.</p> <p>A.1E Create and use representations to organize, record, and communicate mathematical ideas</p> <p><b>Linear Functions, Equations, and Inequalities.</b> The student applies the mathematical process standards when using properties of linear functions to write and represent in multiple ways, with and without technology, linear equations, inequalities, and systems of equations. The student is expected to:</p> <p>A.2H Write linear inequalities in two variables given a table of values, a graph, and a verbal description.</p> <p><b>Linear Functions, Equations, and Inequalities.</b> The student applies the mathematical process standards when using graphs of linear functions, their key solve, with and without technology, equations, inequalities, and systems of equations. The student is expected to:</p> <p>A.3D Graph the solution set of linear inequalities in two variables on the coordinate plane.</p>
Cycle 3	25 Days Nov. 11- Dec. 20	
UNIT	# Class Periods	Texas Essential Knowledge and Skills/ Student Expectations (TEKS/SEs): The bold face words in the TEKS/SEs indicate concepts addressed specifically in this unit; the unbolded concepts are addressed in other units of this course. <b>The student will:</b>
Unit 6: <b>Solving Systems of Linear Equations</b>	8 Class Periods	<p>Students write, graph, and solve systems of linear equations using algebraic methods and explore real-world connections. The student is expected to:</p> <p><b>Mathematical Process Standard.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <p>A.1B Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.</p> <p>A1.D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.</p> <p><b>Linear Functions, Equations, and Inequalities.</b> The student applies the mathematical process standards when using properties of linear functions to write and represent in multiple ways, with and without technology, linear equations, inequalities, and systems of equations. The student is expected to:</p>

		<p>A.2I Write systems of two linear equations given a table of values, a graph, and a verbal description.</p> <p><b>Linear Functions, Equations, and Inequalities.</b> The student applies the mathematical process standards when using graphs of linear functions, their key features, and their related transformations to represent in multiple ways and solve, with and without technology, equations, inequalities, and systems of equations. The student is expected to:</p> <p>A.3F Graph systems of two linear equations in two variables on the coordinate plane and determine the solutions if they exist.</p> <p>A.3G Estimate graphically the solutions to systems of two linear equations with two variables in real-world problems.</p> <p><b>Linear Functions, Equations, and Inequalities.</b> The student applies mathematical process standards to solve, with and without technology, linear equations, and evaluate the reasonableness of their solutions. The student is expected to:</p> <p>A.5C Solve systems of two linear equations with two variables for mathematical and real-world problems.</p>
<p>Unit 7: <b>Systems of Linear Inequalities</b></p>	<p>6 Class Periods</p>	<p>Students formulate, graph, and solve systems of linear inequalities using algebraic methods and explore real-world connections.</p> <p><b>Mathematical Process Standard.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <p>A.1E Create and use representations to organize, record, and communicate mathematical ideas.</p> <p>A1.G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.</p> <p><b>Linear Functions, Equation, and Inequalities.</b> The student applies the mathematical process standards when using properties of linear functions to write and represent in multiple ways, with and without technology, linear equations, inequalities, and systems of equations. The student is expected to:</p> <p>A.2H Write linear inequalities in two variables given a table of values, a graph, and a verbal description.</p> <p><b>Linear Functions, Equations, and Inequalities.</b> The student applies the mathematical process standards when using graphs of linear functions, their key features, and their related transformations to represent in multiple ways and solve, with and without technology, equations, inequalities, and systems of equations. The student is expected to:</p> <p>A.3D Graph the solution set of linear inequalities in two variables on the coordinate plane.</p>

		A.3H Graph the solution set of systems of two linear inequalities in two variables on the coordinate plane.
Unit 8: Sequences	6 Class Periods	Students analyze arithmetic and geometric sequences.
		<b>Mathematical Process Standard. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</b>
		A.1C Select tool, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.
		A.1F Analyze mathematical relationships to connect and communicate mathematical ideas.
		<b>Number and Algebraic Methods. The student applies mathematical process standards and algebraic methods to write, solve, analyze, and evaluate equations, relations, and functions. The student is expected to:</b>
		A.12B Evaluate functions, expressed in function notation, given one or more elements in their domains.
		A.12C Identify terms of arithmetic and geometric and geometric sequences when the sequence are given in function form using recursive processes.
		A.12D Write a formula for the nth term of arithmetic and geometric sequences, given the value of several of their terms.
Unit 9: Exponential and Radicals	5 Class Periods	Students simplify algebraic expressions involving exponents and radicals.
		<b>Mathematical Process Standard. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</b>
		A.1B Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.
		A.1C Select tool, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.
		<b>Number and Algebraic Methods. The student applies the mathematical process standards and algebraic methods to rewrite algebraic expressions into equivalent forms. The student is expected to :</b>
		A.11 A Simplify numerical radical expressions involving square root.
		A.11B Simplify numerical and algebraic expressions using the laws of exponents, including integral and rational exponents.
Cycle 4	27 Days Jan.7 - Feb.14	



UNIT	# Class Periods	Texas Essential Knowledge and Skills/ Student Expectations (TEKS/SEs): The bold face words in the TEKS/SEs indicate concepts addressed specifically in this unit; the unbolded concepts are addressed in other units of this course. <b>The student will:</b>
Unit 10: <b>Polynomial Operations</b>	7 Class Periods	Students perform operations on polynomials.
		<b>Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</b>
		A.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.
		A.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
		<b>Number and Algebraic Method. The student applies the mathematical process standards and algebraic methods to rewrite in equivalent forms and perform operations on polynomial expressions. The student is expected to:</b>
		A.10A Adding and subtracting polynomials of degree one and degree two.
		A.10B Multiply polynomials of degree one and degree two. A.10D Rewrite polynomial expressions of degree one and degree two in equivalent forms using the distributive property.
Unit 11: <b>Factors of Polynomials</b>	5 Class Periods	Students factor polynomial expressions.
		<b>Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</b>
		A.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.
		A.1F Analyze mathematical relationships to connect and communicate mathematical ideas.
		<b>Number and Algebraic Method. The student applies the mathematical process standards and algebraic methods to rewrite in equivalent forms and perform operations on polynomial expressions. The student is expected to:</b>
		A.10B Multiply polynomials of degree one and degree two.
		A.10D Rewrite polynomial expressions of degree one and degree two in equivalent forms using the distributive property. A.10E Factor, if possible, trinomials with real factors in the form $ax^2 + bx + c$ , including perfect square trinomials of degree two.

		A.10F Decide if a binomial can be written as the difference of two squares and, if possible, use the structure of a difference of two squares to rewrite the binomial.
Unit 12: <b>Division of Polynomials</b>	4 Class Periods	Students divide polynomial expressions.
		<b>Mathematical Process Standards.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:
		A.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.
		A.1F Analyze mathematical relationships to connect and communicate mathematical ideas.
		<b>Number and Algebraic Method.</b> The student applies the mathematical process standards and algebraic methods to rewrite in equivalent forms and perform operations on polynomial expressions. The student is expected to:
		A.10C Determine the quotient of a polynomial of degree one and polynomial of degree two when divided by a polynomial of degree one and polynomial of degree two when the degree of the divisor does not exceed the degree of the dividend.
		A.10D Rewrite polynomial expressions of degree one and degree two in equivalent forms using the distributive property.
		A.10E Factor, if possible, trinomials with real factors in the form $ax^2 + bx + c$ , including perfect square trinomials of degree two.
		A.10F Decide if a binomial can be written as the difference of two squares and, if possible, use the structure of a difference of two squares to rewrite the binomial.
Unit 13: <b>Quadratic Graphs and Their Properties</b>	10 Class Periods	Students analyze the key attributes of quadratic functions and write equations of quadratic functions using regressions.
		<b>Mathematical Process Standards.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:
		A.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.
		A.1F Analyze mathematical relationships to connect and communicate mathematical ideas.
		<b>Quadratic Functions and Equations.</b> The student applies the mathematical process standards when using graphs of quadratic functions and their related transformations to represent in multiple ways and determine, with and without technology, the solutions to equations. The student is expected to:

		<p>A.7A Graph quadratic functions on the coordinate plane and use the graph to identify key attributes, if possible, including x-intercept, y-intercept, zeros, maximum value, minimum values, vertex, and the equation of the axis of symmetry.</p> <p><b>Quadratic Functions and Equations.</b> The student applies mathematical process standards to solve, with and without technology, quadratic equations and evaluate the reasonableness of their solutions. The student formulates statistical relationships and evaluates their reasonableness based on real-world data. the student is expected to:</p> <p>A.8B Write, using technology, quadratic functions that provide a reasonable fit to data to estimate solutions and make predictions for real-world problems.</p>
Cycle 5	29 Days Feb. 18 - Apr.3	
UNIT	# Class Periods	<b>Texas Essential Knowledge and Skills/ Student Expectations (TEKS/SEs):</b> The bold face words in the TEKS/SEs indicate concepts addressed specifically in this unit; the unbolded concepts are addressed in other units of this course. <b>The student will:</b>
Unit 14: <b>Solutions of Quadratic Equations</b>	8 Class Periods	<p>Students solve quadratic equations using various methods.</p> <p><b>Mathematical Process Standards. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</b></p> <p>A.1B Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.</p> <p>A.1C Select tools, including real objects, manipulatives, paper and pencil, technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.</p> <p><b>Quadratic Functions and Equations.</b> The student applies the mathematical process standards when using graphs of quadratic functions and their related transformations to represent in multiple ways and determine, with and without technology, the solutions to equations. The student is expected to:</p> <p>A.7A Graph quadratic functions on the coordinate plane and use the graph to identify key attributes, if possible, including x-intercept, y-intercept, zeros, maximum value, minimum values, vertex, and the equation of the axis of symmetry.</p> <p>A.7B Describe the relationship between the linear factors of quadratic expressions and the zeros of their associated quadratic functions.</p>

		<p><b>Quadratic Functions and Equations. The student applies the mathematical process to solve, with and without technology, quadratic equations and evaluate the reasonableness of their solutions. The student formulates statistical relationships and evaluates their reasonableness based on real-world data. The student is expected to:</b></p> <p>A.8A Describe the relationship between the linear factors of quadratic expressions and the zeros of their associated quadratic functions.</p>
Unit 15: <b>Transformation of Quadratic Functions</b>	4 Class Periods	<p>Students graph quadratic functions and analyze the effects of transformations on the parent function of the graphs.</p> <p><b>Mathematical Process Standards.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <p>A.1F Analyze mathematical relationships to connect and communicate mathematical ideas.</p> <p>A.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.</p> <p><b>Quadratic Functions and Equations. The student applies the mathematical process standards when using graphs of quadratic functions and their related transformations to represent in multiple ways and determine, with and without technology, the solutions to equations. The student is expected to:</b></p> <p>A.7A Graph quadratic functions on the coordinate plane and use the graph to identify key attributes, if possible, including x-intercept, y-intercept, zeros, maximum value, minimum values, vertex, and the equation of the axis of symmetry.</p> <p>A.7C Determine the effects on the graph of the parent function <math>f(x) = x^2</math> when <math>f(x)</math> is replaced by <math>f(x)</math>, <math>f(x) + d</math>, <math>f(x - c)</math>, <math>f(bx)</math> for specific values of <math>a</math>, <math>b</math>, <math>c</math>, and <math>d</math>.</p>
Unit 16: <b>Exponential Functions</b>	10 Class Periods	<p>Students graph exponential functions and key attributes. They write exponential functions to model real-world situations and make predictions based on those models.</p> <p><b>Mathematical Process Standards.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <p>A.1A Apply mathematics to problems arising in everyday life, society, and the workplace.</p> <p>A.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.</p>

		<p><b>Exponential Functions and Equations. The student applies the mathematical process standards when using properties of exponential functions and their related transformations to write, graph, and represent in multiple ways exponential equations, and evaluate, with and without technology, the reasonableness of their solutions. The student is expected to:</b></p> <p>A.9A Determine the domain and range of exponential functions of the form <math>f(x) = abx</math> and represent the domain and range using inequalities.</p> <p>A.9B Interpret the meaning of the values of <math>a</math> and <math>b</math> in exponential functions of the form <math>f(x) = abx</math> in real-world problems.</p> <p>A.9C Write exponential functions in the form <math>f(x) = abx</math> (where <math>b</math> is a rational number) to describe problems arising from mathematical and real-world situations, including growth and decay.</p> <p>A.9D Graph exponential functions that model growth and decay and identify key features, including <math>y</math>-intercept and asymptote, in mathematical and real-world problems.</p> <p>A.9E Write, using technology, exponential functions that provide a reasonable fit to data and make predictions for real-world problems.</p> <p><b>Number and Algebraic Methods. The student applies the mathematical process standards and algebraic methods to write, solve, analyze, and evaluate equations, relations, and functions. The student is expected to:</b></p> <p>A.12B Evaluate functions, expressed in function notation, given one or more elements in their domain.</p>
Cycle 6	35 Days Apr 6. - May 29	
UNIT	# Class Periods	<p><b>Texas Essential Knowledge and Skills/ Student Expectations (TEKS/SEs):</b> The bold face words in the TEKS/SEs indicate concepts addressed specifically in this unit; the unbolded concepts are addressed in other units of this course. <b>The student will:</b></p>
Unit 17: <b>Readiness and Supporting Standards Review</b>	20 Class Periods	<p>Students review relevant STAAR EOC standards prior to testing using appropriate problem-solving strategies and thinking routines (based on individual student data).</p> <p><b>Mathematical Process Standards.</b> The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:</p> <p>A.1A Apply mathematics to problems arising in everyday life, society, and the workplace.</p> <p>A.1B Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.</p>

		A.1C Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.
		A.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate
		A.1E Create and use representations to organize, record, and communicate mathematical ideas. ALGI.1F Analyze mathematical relationships to connect and communicate mathematical ideas.
		A.1F Analyze mathematical relationships to connect and communicate mathematical ideas.
		A.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communications