

1st Nine weeks				
TAKS Obj.	TEKS: Student Expectation	Teaching and Planning Notes	Glencoe	UCSMP
	Opening Procedures – Review	<ul style="list-style-type: none"> PEMDAS, substitute numbers into a formula Order of Operations and Evaluating Formula 		1-1 p. 7-12
1	2A2A use tools including factoring and properties of exponents to simplify expressions and to transform and solve equations; and	<ul style="list-style-type: none"> Use of the calculator, use rules of algebra to rearrange equation in terms of a particular variable, vocabulary of equations; Solving inequalities 	1-1A p.6 1-4 p. 27-33 1-6 p.43-48	
1, 2	<p>2A1A identify the mathematical domains and ranges of functions and determine reasonable domain and range values for continuous and discrete situations; and</p> <p>2A1B collect and organize data, make and interpret scatterplots, fit the graph of a function to the data, interpret the results, and proceed to model, predict, and make decisions and critical judgments.</p> <p>2A4A identify and sketch graphs of parent functions, including linear ($f(x) = x$), quadratic ($f(x) = x^2$), exponential ($f(x) = a^x$), and logarithmic ($f(x) = \log_a x$) functions, absolute value of x ($f(x) = x$), square root of x ($f(x) = \sqrt{x}$), and reciprocal of x ($f(x) = 1/x$);</p> <p>2A4B extend parent functions with parameters such as a in $f(x) = a/x$ and describe the effects of the parameter changes on the graph of parent functions; and</p>	<ul style="list-style-type: none"> Domain/x/independent variable, Range/y/dependent variable, vertical line test; Relations and functions: domain and range, independent and dependent variables, graphing and organizing data from a table, scale, discrete and continuous graphs Writing equations from data, describing graphs using written sentences; Formal definition of functions and the various notations <i>Euler</i>, <i>mapping</i> Identifying functional relationships from various menus, <i>tables</i>, <i>graphs</i>, <i>equations</i> Evaluating functions to find domain and range Interpreting graphs of functions for various problem situations Linear relations and function: $Ax + By = C$, $y = mx + b$, x/y intercepts, parallel, perpendicular Point slope form in not emphasized in Algebra I and should be introduced here Graphing linear equations, inequalities, and special functions Formulating equations and inequalities 	2-1 p. 64-71 2-2 p. 73-78 2-3 p. 80-87 2-4 p. 88-94 2-5 p. 95-100 2-6 p. 103 -108 2-7 p. 110-114	1-2 p. 12-17

3, 4	<p>2A10A use quotients of polynomials to describe the graphs of rational functions, predict the effects of parameter changes, describe limitations on the domains and ranges, and examine asymptotic behavior;</p> <p>2A10F analyze a situation modeled by a rational function, formulate an equation or inequality composed of a linear or quadratic function, and solve the problem; and</p>	<p>Slope, positive and negative correlation, familiar with $y = x$ and $y = x^2$ and the families of their graphs;</p> <ul style="list-style-type: none"> • Direct and inverse variation 	9-2 p. 556-561	2-1, 2-2; Lesson Masters 2-1A, B, 2-2A, B
2, 3	<p>2A1A identify the mathematical domains and ranges of functions and determine reasonable domain and range values for continuous and discrete situations; and</p> <p>2A10G use functions to model and make predictions in problem situations involving direct and inverse variation.</p>	<ul style="list-style-type: none"> • Graphing with the calculator and table building by hand parameter changes in k; • Graphing $y = kx$ and $y = kx^2$ • Rate of change • 		2-4, 2-5; Lesson Masters 2-4A, B, 2-5A, B
	<p>2A1B collect and organize data, make and interpret scatterplots, fit the graph of a function to the data, interpret the results, and proceed to model, predict, and make decisions and critical judgments.</p> <p>4A identify and sketch graphs of parent functions, including linear ($f(x) = x$), quadratic ($f(x) = x^2$), exponential ($f(x) = a^x$), and logarithmic ($f(x) = \log_a x$) functions, absolute value of x ($f(x) = x$), square root of x ($f(x) = \sqrt{x}$), and reciprocal of x ($f(x) = 1/x$);</p>	<ul style="list-style-type: none"> • Familiarity with calculators, positive and negative correlation, familiar with all families of graphs; Instructional Considerations; Clarifying Activity • Graphing $y = \frac{k}{x}$ and $y = \frac{k}{x^2}$ • Using technology 	9-1A p. 548-549	
1, 2,3,4 10	<p>2A1A identify the mathematical domains and ranges of functions and determine reasonable domain and range values for continuous and discrete situations; and</p> <p>2A1B collect and organize data, make and interpret scatterplots, fit the graph of a function to the data, interpret the results, and proceed to model, predict, and make decisions and critical judgments.</p>	<ul style="list-style-type: none"> • Graphing direct and inverse variation • Fitting Models to Data • Deriving equations of variation given data or a graph 		2-7 Lesson Masters 2-7A, B

2005-2006

Algebra II Scope & Sequence

	<p>2A10A use quotients of polynomials to describe the graphs of rational functions, predict the effects of parameter changes, describe limitations on the domains and ranges, and examine asymptotic behavior;</p> <p>2A10G use functions to model and make predictions in problem situations involving direct and inverse variation.</p>			
2, 3, 4, 7	<p>2A3A analyze situations and formulate systems of equations in two or more unknowns or inequalities in two unknowns to solve problems;</p> <p>2A3B use algebraic methods, graphs, tables, or matrices, to solve systems of equations or inequalities; and</p> <p>2A3C interpret and determine the reasonableness of solutions to systems of equations or inequalities for given contexts.</p>	<ul style="list-style-type: none"> • Pre-requisite skills: Point slope form is not emphasized in Algebra I • Solving linear systems by graphing and from tables • Solving linear systems algebraically • Graphing systems of linear inequalities • Review, unit test, cumulative test 	<p>3-1 p. 126-132</p> <p>3-2 p. 133-140</p> <p>3-4 p. 148-152</p>	
	Review and Assess	<ul style="list-style-type: none"> • 		

* The Process TEKS are integrated in instruction daily