

3rd Nine weeks				
TAKS Obj.	TEKS: Student Expectation	Teaching and Planning Notes	Glencoe	UCSMP
1,2,5	<p>2A6A determine the reasonable domain and range values of quadratic functions, as well as interpret and determine the reasonableness of solutions to quadratic equations and inequalities;</p> <p>2A6B relate representations of quadratic functions, such as algebraic, tabular, graphical, and verbal descriptions; and</p> <p>2A6C determine a quadratic function from its roots or a graph.</p> <p>2A8A analyze situations involving quadratic functions and formulate quadratic equations or inequalities to solve problems;</p> <p>2A8C compare and translate between algebraic and graphical solutions of quadratic equations; and</p> <p>2A8D solve quadratic equations and inequalities using graphs, tables, and algebraic methods.</p>	<ul style="list-style-type: none"> Solving for roots of quadratic equations graphically Graphing quadratic equations from tables using technology to solve for roots Evaluating the reasonableness of solutions 	6-1A p. 332-333 6-1 p.334-340	LM 11-2B
5	<p>2A2A use tools including factoring and properties of exponents to simplify expressions and to transform and solve equations; and</p> <p>2A8B analyze and interpret the solutions of quadratic equations using discriminants and solve quadratic equations using the quadratic formula;</p> <p>2A8C compare and translate between algebraic and graphical solutions of quadratic equations; and</p> <p>2A8D solve quadratic equations and inequalities using graphs, tables, and algebraic methods.</p> <p>2A5E use the method of completing the square.</p>	<p>Here, the quadratic formula will only be discussed with positive discriminants</p> <ul style="list-style-type: none"> Solve quadratic equations by factoring and the quadratic formula Find solutions to real-world problems using the quadratic formula Simplify square root expressions (simple radical form) Discriminant and nature of roots Completing the square 	6-2 p. 341-345 6-3 p. 346-352A2 6-4 p. 353-364	6-7 p. 382-387 p.399 In-Class Activity p. 400 - 407

5	2A6C determine a quadratic function from its roots or a graph.	<ul style="list-style-type: none"> • Writing quadratic equations given the roots or a graph 	6-6 p. 367-375	11-5 p. 699-705
	<p>2A7A use characteristics of the quadratic parent function to sketch the related graphs and connect between the $y = ax^2 + bx + c$ and the $y = a(x - h)^2 + k$ symbolic representations of quadratic functions; and</p> <p>2A7B use the parent function to investigate, describe, and predict the effects of changes in a, h, and k on the graphs of $y = a(x - h)^2 + k$ form of a function in applied and purely mathematical situations.</p> <p>2A6A determine the reasonable domain and range values of quadratic functions, as well as interpret and determine the reasonableness of solutions to quadratic equations and inequalities;</p> <p>2A6C determine a quadratic function from its roots or a graph.</p>	<ul style="list-style-type: none"> • Graphing quadratic inequalities 	6-7 p. 378-383	
1,2,10	<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>2A10B analyze various representations of rational functions with respect to problem situations;</p> <p>2A10C determine the reasonable domain and range values of rational functions, as well as interpret and determine the reasonableness of solutions to rational equations and inequalities;</p> <p>2A10D determine the solutions of rational equations using graphs, tables, and algebraic methods;</p> <p>2A10E determine solutions of rational inequalities using graphs and tables;</p>	<ul style="list-style-type: none"> • Simplifying, multiplying and dividing rational expression • Adding and subtracting rational expressions • Solving rational equations and inequalities 	9-3 p. 562-568 9-4 p. 569-575 9-5 p.576-585	

	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 2A10G use functions to model and make predictions in problem situations involving direct and inverse variation.			
1,9,10	2A4C describe and analyze the relationship between a function and its inverse. 2A9G connect inverses of square root functions with quadratic functions.	<ul style="list-style-type: none"> Evaluating function notation see Glencoe Study Guide/Practice 8-1Composition of functions Inverse functions and relations 	8-7 p. 520-525 8-8 p. 535-538	
1,4,5,10	2A11C determine the reasonable domain and range values of exponential and logarithmic functions, as well as interpret and determine the reasonableness of solutions to exponential and logarithmic equations and inequalities; 2A11D determine solutions of exponential and logarithmic equations using graphs, tables, and algebraic methods; 2A11E determine solutions of exponential and logarithmic inequalities using graphs and tables; and 2A11F analyze a situation modeled by an exponential function, formulate an equation or inequality, and solve the problem.	<ul style="list-style-type: none"> Exponential growth and decay 		9-1 533-538 9-2 p. 539-545
	Review and assess			