New Braunfels ISD Year at a Glance 2021-2022		Algebra I Mathematics				July 2021	
Essential Resources		District Resources to Teach 100% of the TEKS located in the NBISD ECourse Resources, Algebra I Online Textbook Link to TEKS: https://tea.texas.gov/curriculum/teks/					
Timeline		1st Quarter Aug 23 - Oct 15, 2021 38 Instructional Days			2nd Quarter Oct 19 - Dec 17, 2021 40 Days		
Unit		Unit 01 Solving Equations and Inequalities	Unit 02 Introduction to Functions	Unit 03 Rate of Change	Unit 04 Graphing Linear Relationships	Unit 05 Describing Linear Relationships	
Big Idea	Current Grade	Simplify expressions using the properties of real numbers, solve multi-step equations and inequalities, write equations and inequalities to represent real world situations, solve mathematical and scientific formulas for a specified variable	Evaluate functions written in function notation, find the domain and range for linear functions both continuous and discrete, determine whether a given relationship is a function	Calculate the rate of change from a graph, table, or equation. Calculate the slope of a line given a table, graph, two points or an equation written in slope- intercept form, standard form, or point slope form. Use the slope and one point on the line to create a graph of a linear function.	Graph linear functions from a table of values, from an equation in slope intercept form, standard form, or point slope form. Describe the effects of transformations on y = f (x), determine whether two lines are parallel, perpendicular or neither by examining their slope.	Write an equation to describe a linear function given a table, graph, or verbal description.Write an equation in slope intercept form, standard form, or point slope form if given the slope and one point on the line or two points on the line. Write equations for parallel and perpendicular line. Write equations for horizontal and vertical lines and determine whether their slope is zero or undefined.Represent data in a scatterplot and write a linear function which could provide a reasonable fit to the data. Write and solve direct variation equations to represent a real world situation. Identify the terms of an arithmetic sequence and write a formula for the nth term of an	
TEKS	Current Grade	**A.5AB,**12E	**2A,** 12AB	3A**B**	2**ABC**DEG, 3A**B**E	**2A**BCDEFG, 3A**B**CE, 4ABC	

Timeline		3rd Quarter Jan 4 - March 11, 2022 48 Instructional Days			4th Quarter March 21 - May 26, 2022 48 Instructional Days		
Unit		Unit 06 Systems of Equations and Inequalities	Unit 07 Simplifying Polynomial Expressions	Unit 08 Solving Quadratic Equations	Unit 09 Graphing Quadratic Functions	Unit 10 Exponential Functions	Unit 11 Course Review Testing Enrichment
Big Idea	Current Grade	Solve systems of equations by graphing, substitution, and elimination. Write systems of equations to describe real world problems, graph linear inequalities in two variables, graph systems of linear inequalities in two variables	Use the properties of monomials to simplify monomial expressions, add/subtract/multiply/divide polynomials Factor polynomial expressions including gcf, difference of two squares, perfect square trinomials, and polynomials of the form ax^2 + bx + c where a > 1	simplify radical expressions, Solve Quadratic equations using factoring, square root property, quadratic formula, and completing the square	Graph quadratic functions and identify their critical attributes such as domain, range, max, min, vertex, axis of symmetry, explore transformations of quadratic functions, solve real world problems involving the graphs of quadratic functions, model quadratic data and write a quadratic model to fit the data.	Graph exponential functions and identify critical attributes, solve and graph problems involving exponential growth and decay, write exponential functions for real world situations, explore geometric sequences and their relationship to exponential functions, model data and determine whether it is linear, quadratic, or exponential	Released STAAR TESTS
TEKS	Current Grade	2HI,3DFGH,5C	**11B**, 10ABCD**E**	**8A**, 11A	**6A**, 6B, 6C, **7A**, **7C**, 8C, 7B	**9A**, 9B, 9C, 9D, 9E, 4A, 12CD	All TEKS with an emphasis on Readiness and Frequently Tested TEKS