STAAR Alternate 2 Spring 2024
Algebra I Essence Statements

STAAR Reporting Category 1	STAAR Reporting Category 2	STAAR Reporting Category 3	STAAR Reporting Category 4	STAAR Reporting Category 5
Number and Algebraic Methods: The student will demonstrate an understanding of how to use algebraic methods to manipulate numbers, expressions, and equations.	**Describing and Graphing Linear Functions, Equations, and Inequalities:** The student will demonstrate an understanding of how to describe and graph linear functions, equations, and inequalities.	**Writing and Solving Linear Functions, Equations, and Inequalities:** The student will demonstrate an understanding of how to write and solve linear functions, equations, and inequalities.	**Quadratic Functions and Equations:** The student will demonstrate an understanding of how to describe, write, and solve quadratic functions and equations.	**Exponential Functions and Equations:** The student will demonstrate an understanding of how to describe and write exponential functions and equations.
Knowledge and Skills Statement **(A.10) Number and algebraic methods.** The student applies the mathematical process standards and algebraic methods to rewrite in equivalent forms and perform operations on polynomial expressions. (Readiness and Supporting Standard) **Essence Statement** Determines different forms of expressions using operations or properties. **Knowledge and Skills Statement** **(A.11) Number and algebraic methods.** The student applies the mathematical process standards and algebraic methods to rewrite algebraic expressions into equivalent forms. (Readiness and Supporting Standard) **Essence Statement** Simplifies expressions.	**Knowledge and Skills Statement** **(A.3) Linear functions, equations, and inequalities.** The student applies the mathematical process standards when using graphs of linear functions, key features, and related transformations to represent in multiple ways and solve, with and without technology, equations, inequalities, and systems of equations. (Readiness and Supporting Standard) **Essence Statement** Determines key features or graphical solutions for linear functions.	**Knowledge and Skills Statement** **(A.2) Linear functions, equations, and inequalities.** 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. (Readiness and Supporting Standard) **Essence Statement** Determines different forms of linear equations using attributes or representations.	**Knowledge and Skills Statement** **(A.6) Quadratic functions and equations.** The student applies the mathematical process standards when using properties of quadratic functions to write and represent in multiple ways, with and without technology, quadratic equations. (Readiness and Supporting Standard) **Essence Statement** Determines quadratic functions using graphs or attributes.	**Knowledge and Skills Statement** **(A.9) 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 formulates statistical relationships and evaluates their reasonableness based on real-world data. (Readiness and Supporting Standard) **Essence Statement** Uses exponential functions to model or solve real-world problems.

Knowledge and Skills Statement	**Knowledge and Skills Statement**	**Knowledge and Skills Statement**	**Knowledge and Skills Statement**	
(A.12) Number and algebraic methods. The student applies the mathematical process standards and algebraic methods to write, solve, analyze, and evaluate equations, relations, and functions. (Supporting Standard) **Essence Statement** Identifies or solves functions, sequences, or formulas.	**(A.4) Linear functions, equations, and inequalities.** The student applies the mathematical process standards to formulate statistical relationships and evaluate their reasonableness based on real-world data. (Supporting Standard) **Essence Statement** Uses linear equations to model or solve real-world problems.	**(A.5) Linear functions, equations, and inequalities.** The student applies the mathematical process standards to solve, with and without technology, linear equations and evaluate the reasonableness of their solutions. (Readiness and Supporting Standard) **Essence Statement** Solves linear equations and systems.	**(A.8) Quadratic functions and equations.** The student applies the 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. (Readiness and Supporting Standard) **Essence Statement** Uses quadratic equations to model or solve real-world problems.	