STAAR Alternate 2 Spring 2025
Grade 8 Mathematics Essence Statements

STAAR Reporting Category 1	STAAR Reporting Category 2	STAAR Reporting Category 3	STAAR Reporting Category 4
Numerical Representations and Relationships: The student will demonstrate an understanding of how to represent and manipulate numbers and expressions.	**Computations and Algebraic Relationships:** The student will demonstrate an understanding of how to perform operations and represent algebraic relationships.	**Geometry and Measurement:** The student will demonstrate an understanding of how to represent and apply geometry and measurement concepts.	**Data Analysis and Personal Financial Literacy:** The student will demonstrate an understanding of how to represent and analyze data and how to describe and apply personal financial concepts.
Knowledge and Skills Statement (8.2) Number and operations. The student applies mathematical process standards to represent and use real numbers in a variety of forms. (Readiness and Supporting Standard) **Essence Statement** Recognizes or models relationships between different forms or sets of numbers.	**Knowledge and Skills Statement (8.4) Proportionality.** The student applies mathematical process standards to explain proportional and non-proportional relationships involving slope. (Readiness and Supporting Standard) **Essence Statement** Determines the slope of a line or rate of change using a variety of methods. **Knowledge and Skills Statement (8.5) Proportionality.** The student applies mathematical process standards to use proportional and non-proportional relationships to develop foundational concepts of functions. (Readiness and Supporting Standard) **Essence Statement** Models or solves problems involving proportional or non-proportional relationships. **Knowledge and Skills Statement (8.8) Expressions, equations, and relationships.** The student applies mathematical process standards to use one-variable equations or inequalities in problem situations. (Readiness and Supporting Standard) **Essence Statement** Uses equations or inequalities to model and solve problems.	**Knowledge and Skills Statement (8.3) Proportionality.** The student applies mathematical process standards to use proportional relationships to describe dilations. (Readiness and Supporting Standard) **Essence Statement** Uses ratios, expressions, or equations to show relationships between similar geometric figures. **Knowledge and Skills Statement (8.7) Expressions, equations, and relationships.** The student applies mathematical process standards to use geometry to solve problems. (Readiness and Supporting Standard) **Essence Statement** Solve problems involving length, area, or volume, of geometric figures, or involving distance on a coordinate plane. **Knowledge and Skills Statement (8.8) Expressions, equations, and relationships.** The student applies mathematical process standards to use one-variable equations or inequalities in problem situations. (Supporting Standard) **Essence Statement** Recognizes angle relationships in geometric figures.	**Knowledge and Skills Statement (8.5) Proportionality.** The student applies mathematical process standards to use proportional and non-proportional relationships to develop foundational concepts of functions. (Readiness and Supporting Standard) **Essence Statement** Compares or interprets linear and non-linear data. **Knowledge and Skills Statement (8.11) Measurement and data.** The student applies mathematical process standards to use statistical procedures to describe data. (Supporting Standard) **Essence Statement** Determines the association between graphed data. **Knowledge and Skills Statement (8.12) Personal financial literacy.** The student applies mathematical process standards to develop an economic way of thinking and problem solving useful in one's life as a knowledgeable consumer and investor. (Readiness and Supporting Standard) **Essence Statement** Compares the results of borrowing money or investing money.