

STAAR Alternate 2 Spring 2021

Grade 8 Mathematics Essence Statements

STAAR Reporting Category 1	STAAR Reporting Category 2	STAAR Reporting Category 3	STAAR Reporting Category 4
<p>Numerical Representations and Relationships: The student will demonstrate an understanding of how to represent and manipulate numbers and expressions.</p>	<p>Computations and Algebraic Relationships: The student will demonstrate an understanding of how to perform operations and represent algebraic relationships.</p>	<p>Geometry and Measurement: The student will demonstrate an understanding of how to represent and apply geometry and measurement concepts.</p>	<p>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.</p>
<p>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)</p> <p>Essence Statement Recognizes or models relationships between different forms or sets of numbers.</p>	<p>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)</p> <p>Essence Statement Determines the slope of a line or rate of change using a variety of methods.</p> <p>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)</p> <p>Essence Statement Models or solves problems involving proportional or nonproportional relationships.</p> <p>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)</p> <p>Essence Statement Uses equations or inequalities to model and solve problems.</p>	<p>Knowledge and Skills Statement (8.3) Proportionality. The student applies mathematical process standards to use proportional relationships to describe dilations. (Readiness and Supporting Standard)</p> <p>Essence Statement Use ratios, expressions, or equations to show relationships between similar geometric figures.</p> <p>Knowledge and Skills Statement (8.6) Expressions, equations, and relationships. The student applies mathematical process standards to develop mathematical relationships and make connections to geometric formulas. (Supporting Standard)</p> <p>Essence Statement Identifies or models the relationships that are found in geometric formulas.</p> <p>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)</p> <p>Essence Statement Solves problems involving length, area, or volume, of geometric figures, or involving distance on a coordinate plane.</p>	<p>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)</p> <p>Essence Statement Compares or interprets linear and non-linear data.</p> <p>Knowledge and Skills Statement (8.11) Measurement and data. The student applies mathematical process standards to use statistical procedures to describe data. (Supporting Standard)</p> <p>Essence Statement Determines the association between graphed data.</p> <p>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)</p> <p>Essence Statement Compares the results of borrowing or investing money.</p>

	<p>Knowledge and Skills Statement (8.9) Expressions, equations, and relationships. The student applies mathematical process standards to use multiple representations to develop foundational concepts of simultaneous linear equations. (Supporting Standard)</p> <p>Essence Statement Identifies solutions to pairs of linear equations.</p>	<p>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)</p> <p>Essence Statement Recognizes angle relationships in geometric figures.</p> <p>Knowledge and Skills Statement (8.10) Two-dimensional shapes. The student applies mathematical process standards to develop transformational geometry concepts.</p> <p>Essence Statement Identifies or compares transformations.</p>	
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