

# STAAR Alternate 2 Spring 2023

## Grade 8 Mathematics Essence Statements

STAAR Reporting Category 1	STAAR Reporting Category 2	STAAR Reporting Category 3	STAAR Reporting Category 4
<p><b>Numerical Representations and Relationships:</b> The student will demonstrate an understanding of how to represent and manipulate numbers and expressions.</p>	<p><b>Computations and Algebraic Relationships:</b> The student will demonstrate an understanding of how to perform operations and represent algebraic relationships.</p>	<p><b>Geometry and Measurement:</b> The student will demonstrate an understanding of how to represent and apply geometry and measurement concepts.</p>	<p><b>Data Analysis and Personal Financial Literacy:</b> The student will demonstrate an understanding of how to represent and analyze data and how to describe and apply personal financial concepts.</p>
<p><b>Knowledge and Skills Statement (8.2) Number and operations.</b> The student applies mathematical process standards to represent and use real numbers in a variety of forms. (Readiness and Supporting Standard)  <b>Essence Statement</b>            Recognizes or models relationships between different forms or sets of numbers.</p>	<p><b>Knowledge and Skills Statement (8.5) Proportionality.</b> The student applies mathematical process standards to use proportional and non-proportional relationships to develop foundational concepts of functions. (Readiness and Supporting Standard)  <b>Essence Statement</b>            Models or solves problems involving proportional or nonproportional relationships.</p> <p><b>Knowledge and Skills Statement (8.8) Expressions, equations, and relationships.</b> The student applies mathematical process standards to use one-variable equations or inequalities in problem situations. (Readiness and Supporting Standard)  <b>Essence Statement</b>            Uses equations or inequalities to model and solve problems.</p> <p><b>Knowledge and Skills Statement (8.9) Expressions, equations, and relationships.</b> The student applies mathematical process standards to use multiple representations to develop foundational concepts of simultaneous linear equations. (Supporting Standard)  <b>Essence Statement</b>            Identifies solutions to pairs of linear equations.</p>	<p><b>Knowledge and Skills Statement (8.3) Proportionality.</b> The student applies mathematical process standards to use proportional relationships to describe dilations. (Readiness and Supporting Standard)  <b>Essence Statement</b>            Use ratios, expressions, or equations to show relationships between similar geometric figures.</p> <p><b>Knowledge and Skills Statement (8.6) Expressions, equations, and relationships.</b> The student applies mathematical process standards to develop mathematical relationships and make connections to geometric formulas. (Supporting Standard)  <b>Essence Statement</b>            Identifies or models the relationships that are found in geometric formulas.</p> <p><b>Knowledge and Skills Statement (8.7) Expressions, equations, and relationships.</b> The student applies mathematical process standards to use geometry to solve problems. (Readiness and Supporting Standard)  <b>Essence Statement</b>            Solves problems involving length, area, or volume, of geometric figures, or involving distance on a coordinate plane.</p>	<p><b>Knowledge and Skills Statement (8.5) Proportionality.</b> The student applies mathematical process standards to use proportional and non-proportional relationships to develop foundational concepts of functions. (Readiness and Supporting Standard)  <b>Essence Statement</b>            Compares or interprets linear and non-linear data.</p> <p><b>Knowledge and Skills Statement (8.12) Personal financial literacy.</b> 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)  <b>Essence Statement</b>            Compares the results of borrowing money or investing money.</p>

		<p><b>Knowledge and Skills Statement</b> <b>(8.8) Expressions, equations, and relationships.</b> The student applies mathematical process standards to use one-variable equations or inequalities in problem situations. (Readiness and Supporting Standard)</p> <p><b>Essence Statement</b> Recognizes angle relationships in geometric figures.</p> <p><b>Knowledge and Skills Statement</b> <b>(8.10) Two-dimensional shapes.</b> The student applies mathematical process standards to develop transformational geometry concepts. (Readiness and Supporting Standard)</p> <p><b>Essence Statement</b> Identifies or compares transformations.</p>	
--	--	--	--