

TABLE OF STANDARDS

(PG. 1 OF 2)

The activities in **STAAR Prep & Go! Grade 8** address the following standards.

REPORTING CATEGORY		STANDARDS	
1	NUMERICAL REPRESENTATIONS & RELATIONSHIPS	The student will demonstrate an understanding of how to represent and manipulate numbers and expressions.	
		8.2	Number and operations. The student applies mathematical process standards to represent and use real numbers in a variety of forms. The student is expected to:
		8.2D	Order a set of real numbers arising from mathematical and real-world contexts. Readiness Standard
2	COMPUTATIONS & ALGEBRAIC RELATIONSHIPS	The student will demonstrate an understanding of how to perform operations and represent algebraic relationships.	
		8.4	Proportionality. The student applies mathematical process standards to explain proportional and non-proportional relationships involving slope. The student is expected to:
		8.4B	Graph proportional relationships, interpreting the unit rate as the slope of the line that models the relationship; and Readiness Standard
		8.4C	Use data from a table or graph to determine the rate of change or slope and y-intercept in mathematical and real-world problems. Readiness Standard
		8.5	Proportionality. The student applies mathematical process standards to use proportional and non-proportional relationships to develop foundational concepts of functions. The student is expected to:
		8.5G	Identify functions using sets of ordered pairs, tables, mappings, and graphs; Readiness Standard
		8.5I	Write an equation in the form $y = mx + b$ to model a linear relationship between two quantities using verbal, numerical, tabular, and graphical representations. Readiness Standard
		8.8	Expressions, equations, and relationships. The student applies mathematical process standards to use one-variable equations or inequalities in problem situations. The student is expected to:
		8.8C	Model and solve one-variable equations with variables on both sides of the equal sign that represent mathematical and real-world problems using rational number coefficients and constants. Readiness Standard

TABLE OF STANDARDS

(PG. 2 OF 2)

REPORTING CATEGORY		STANDARDS	
3	GEOMETRY & MEASUREMENT	The student will demonstrate an understanding of how to represent and apply geometry and measurement concepts.	
		8.3	Proportionality. The student applies mathematical process standards to use proportional relationships to describe dilations. The student is expected to:
		8.3C	Use an algebraic representation to explain the effect of a given positive rational scale factor applied to two-dimensional figures on a coordinate plane with the origin as the center of dilation. Readiness Standard
		8.7	Expressions, equations, and relationships. The student applies mathematical process standards to use geometry to solve problems. The student is expected to:
		8.7A	Solve problems involving the volume of cylinders, cones, and spheres; Readiness Standard
		8.7B	Use previous knowledge of surface area to make connections to the formulas for lateral and total surface area and determine solutions for problems involving rectangular prisms, triangular prisms, and cylinders; Readiness Standard
		8.7C	Use the Pythagorean theorem and its converse to solve problems; and Readiness Standard
		8.10	Two-dimensional shapes. The student applies mathematical process standards to develop transformational geometry concepts. The student is expected to
		8.10C	Explain the effect of translations, reflections over the x- or y-axis, and rotations limited to 90°, 180°, 270°, and 360° as applied to two-dimensional shapes on a coordinate plane using an algebraic representation; and Readiness Standard
4	DATA ANALYSIS & 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.	
		8.5	Proportionality. The student applies mathematical process standards to use proportional and non-proportional relationships to develop foundational concepts of functions. The student is expected to:
		8.5D	Use a trend line that approximates the linear relationship between bivariate sets of data to make predictions. Readiness Standard
		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. The student is expected to:
		8.12D	Calculate and compare simple interest and compound interest earnings; and Readiness Standard