

Targeted Student Support for Maximizing Results

8th STAAR Math Student Profile

Student Name: _____

Period: _____

	Critical
	Important
	As time permits

Cate.	TEKS	R or S	Student Expectation	Basic	Basic	Interm	Interm	Interm	Adv.	Adv.
1	8.2A	S	Extend previous knowledge of sets and subsets using a visual representation to describe relationships between sets of real numbers							
1	8.2B	S	Approximate the value of an irrational number, including π and square roots of numbers less than 225, and locate that rational number approximation on a number line							
1	8.2C	S	Convert between standard decimal notation and scientific notation							
1	8.2D	R	Order a set of real numbers arising from mathematical and real-world contexts							
2	8.4A	S	Use similar right triangles to develop an understanding that slope, m , given as the rate comparing the change in y -values to the change in x -values, $(y_2 - y_1) / (x_2 - x_1)$, is the same for any two points (x_1, y_1) and (x_2, y_2) on the same line							
2	8.4B	R	Graph proportional relationships, interpreting the unit rate as the slope of the line that models the relationship							
2	8.4C	R	Use data from a table or graph to determine the rate of change or slope and y -intercept in mathematical and real-world problems							
2	8.5A	S	Represent linear proportional situations with tables, graphs, and equations in the form of $y = kx$							
2	8.5B	S	Represent linear non-proportional situations with tables, graphs, and equations in the form of $y = mx + b$, where $b \neq 0$							
2	8.5E	S	Solve problems involving direct variation							

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2	8.5F	S	Distinguish between proportional and non-proportional situations using tables, graphs, and equations in the form $y = kx$ or $y = mx + b$, where $b \neq 0$							
2	8.5G	R	Identify functions using sets of ordered pairs, tables, mappings, and graphs							
2	8.5H	S	Identify examples of proportional and non-proportional functions that arise from mathematical and real-world problems							
2	8.5I	R	Write an equation in the form $y = mx + b$ to model a linear relationship between two quantities using verbal, numerical, tabular, and graphical representations							
2	8.8A	S	Write one-variable equations or inequalities with variables on both sides that represent problems using rational number coefficients and constants							
2	8.8B	S	Write a corresponding real-world problem when given a one-variable equation or inequality with variables on both sides of the equal sign using rational number coefficients and constants							
2	8.8C	R	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							
2	8.9A	S	Identify and verify the values of x and y that simultaneously satisfy two linear equations in the form $y = mx + b$ from the intersections of the graphed equations							
3	8.3A	S	Generalize that the ratio of corresponding sides of similar shapes are proportional, including a shape and its dilation							
3	8.3B	S	Compare and contrast the attributes of a shape and its dilation(s) on a coordinate plane							
3	8.3C	R	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							
3	8.6A	S	Describe the volume formula $V = Bh$ of a cylinder in terms of its base area and its height							

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3	8.6C	S	Use models and diagrams to explain the Pythagorean theorem							
3	8.7A	R	Solve problems involving the volume of cylinders, cones, and spheres							
3	8.7B	R	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							
3	8.7C	R	Use the Pythagorean Theorem and its converse to solve problems							
3	8.7D	S	Determine the distance between two points on a coordinate plane using the Pythagorean Theorem							
3	8.8D	S	Use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles							
3	8.10A	S	Generalize the properties of orientation and congruence of rotations, reflections, translations, and dilations of two-dimensional shapes on a coordinate plane							
3	8.10B	S	Differentiate between transformations that preserve congruence and those that do not							
3	8.10C	R	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							
3	8.10D	S	Model the effect on linear and area measurements of dilated two-dimensional shapes							
4	8.5C	S	Contrast bivariate sets of data that suggest a linear relationship with bivariate sets of data that do not suggest a linear relationship from a graphical representation							
4	8.5D	R	Use a trend line that approximates the linear relationship between bivariate sets of data to make predictions							

