## 8<sup>th</sup> Grade Mathematics Student Friendly TEKS

- 8.1A I can apply math to everyday life.
- 8.1B I can create and use a problem solving plan.

I can check my answer to see if it makes sense.

- 8.1C I can solve problems with different resources (manipulatives, technology, etc.).
- 8.1D I can use multiple ways to communicate math ideas.

I can explain ways to solve math problems.

- 8.1E I can use different representations to keep information organized when solving problems.
- 8.1F I can think and talk about the relationships between math ideas.
- 8.1G I can use math language to explain and defend mathematical ideas in writing or out loud.
- 8.2A I can use a visual to describe numbers and how they relate.
- 8.2B I can approximate the value of irrational numbers.

I can locate irrational number approximations on a number line.

- 8.2C I can convert between standard decimal notation and scientific notation.
- 8.2D I can order a set of real numbers from real world situations.
- 8.3A I know that ratios of corresponding sides of similar shapes are proportional.

I know that dilations produce similar figures.

- 8.3B I can identify the similarities and differences between a shape and its dilation on a coordinate plane.
- 8.3C I can use algebraic representations to represent dilations on a coordinate plane.
- 8.4A I can use right triangles to understand that the slope will be the same for any two points on a line.
- 8.4B I can graph proportional relationships.

I know the unit rate in a proportional situation will be the slope of its line.

8.4C I can use data from a table to determine the rate/slope and y-intercept.

I can use data from a graph to determine the rate/slope and y-intercept.

- 8.5A I can represent proportional situations with tables, graphs and equations.
- 8.5B I can represent linear non-proportional situations with tables, graphs, and equations.
- 8.5C I can describe the differences between data that is linear and non-linear from scatter plots.

- 8.5D I can use a trend line to help make predictions.
- 8.5E I can solve problems involving direct variation.
- 8.5F I can identify the differences between proportional and non-proportional situations using tables, graphs, and equations.
- 8.5G I can identify functions using sets of ordered pairs, tables, mappings, and graphs.
- 8.5H I can identify proportional and non-proportional real-world situations.
- 8.51 I can write an equation to model a linear relationship.
- 8.6A I can describe the parts of the volume formula, V = Bh, for a cylinder.
- 8.6B I know the relationship between the volume of a cylinder and a cone with the same base and height.
- 8.6C I can model and solve problems using the Pythagorean Theorem.
- 8.7A I can solve problems involving the volume of cylinders, cones, and spheres.
- 8.7B I can solve problems involving lateral and total surface area of prisms and cylinders.
- 8.7C I can determine if a triangle is a right triangle using the Pythagorean Theorem.
- 8.7D I can use the Pythagorean Theorem to find the distance between two points.
- 8.8A I can write equations to represent problems.

I can write inequalities to represent problems.

8.8B I can write a real-world problem to represent an equation.

I can write a real-world problem to represent an inequality.

- 8.8C I can model and solve equations.
- 8.8D I can solve problems involving angle relationships in triangles.

I can solve problems involving angle relationships formed by parallel lines cut by a transversal.

- 8.9A I can identify and check the solution for two graphed equations.
- 8.10A I know the properties of transformations.
- 8.10B I know which transformations remain congruent and which do not.
- 8.10C I can represent transformations algebraically for the coordinate plane.
- 8.10D I can model the effect on linear and area measurements of dilated 2-D shapes.
- 8.11A I can construct a scatterplot and describe the data.

- 8.11B I can find and use the mean absolute deviation of a set of data.
- 8.11C I can simulate generating random samples.
- 8.12A I can compare loans with different interest rates and loan lengths.
- 8.12B I can use an online calculator to calculate the total cost of repaying a loan.
- 8.12C I can explain how invested money grows over time.
- 8.12D I can find the similarities and differences between simple and compound interest earnings.
- 8.12E I can identify and explain the advantages and disadvantages of different payment methods.
- 8.12F I can determine if situations represent financially responsible decisions and their benefits.I can determine if situations represent financially irresponsible decisions and their costs.
- 8.12G I can estimate the cost of attending college.