

8th Grade Standards 2017-2018

1st Quarter

- Understand the difference between rational and irrational numbers. (8.NS.1)
- Understand that every number has a decimal expansion and how to convert it. (8.NS.1)
- Compare rational and irrational numbers, by using approximations, and be able to plot them on a number line. (8.NS.2)
- Apply the properties of exponents, when simplifying expressions with common bases. (8.NS.3)
- Understand and apply the square roots of numbers when solving equations. (8.NS.4)
- Use the Pythagorean Theorem to find the unknown length of a triangle. (8.GM.8)

2nd Quarter

- Find the distance between two points using the Pythagorean theorem (8.GM.9)
- Understand and apply scientific notation in a variety of problems including real world situations. (8.C.2)
- Solve multi-step equations and inequalities. These can include distributive property, combining like terms, variables on both sides and real world situations. (8.AF.1)
- Solve equations that have no solutions and infinitely many solutions. (8.AF.2)

3rd Quarter

- Determine whether a table of values or a graph is a function (8.AF.3)
- Determine if an equation is linear or non-linear (8.AF.5)
- Create a table of values and graph linear and non-linear equations (8.AF.5)
- Write an equation from a real world situation and state what the parts of the equation represent in terms of slope and y-intercept(8.AF.6)
- Graph 2 linear equations and understand that the solution is where they cross (8.AF.8)
- Find the volume of cones, spheres, and pyramids as it pertains to real world situations (8.GM.2)
- Find the surface area of spheres as it pertains to real world situations (8.AF.8)
- Understand the differences between independent, dependent, complementary, and mutually exclusive events as it pertains to probability (8.DSP.4)
- Understand and use the multiplication counting principle (8.DSP.6)
- Compare and 2 linear functions

4th Quarter

- Understand that when figures are translated, reflected, and rotated that the parts of the figures remain the same (8.GM.3)
- Understand that congruency (same shape and size) is determined by translating, reflecting, and rotating figure A to figure B (8.GM.4)
- Understand that similarity (same shape but not same size) is determined through dilation, translation, reflection, and rotation of figure A to figure B (8.GM.5)

- Given a figure on a graph, dilate, translate, reflect, or rotate the figure to a new location (8.GM.6)