

# Parent Guide 7<sup>th</sup> Grade Math Summary of Standards

## Quarter 1

1. Find the prime factors of a number using a factor tree and write them using exponents. (7.NS.1)
2. Solve expressions and word problems containing negative numbers by using addition. (7.C.1)
3. Solve expressions and word problems containing negative numbers by using subtraction. (7.C.2)
4. Know the rules of multiplying with negative numbers and know how to multiply using the distributive property. (7.C.3)
5. Know the rules of dividing with negative numbers and know that a negative fraction is equal to a fraction that has a negative numerator and also to a fraction with a negative denominator. (7.C.4)
6. Combine all of the rules of negative numbers along with the order of operations and apply them to problems with integers and fractions. (7.C.7)
7. Write equations for word problems and solve them. (7.C.8)
8. Use the properties of math along with combining like terms to create different expressions that are equal to each other. (7.AF.1)
9. Solve two-step equations and create them to solve word problems. (7.AF.2)
10. Solve two-step inequalities and create them to solve word problems. Graph the value of "x" on a number line. (7.AF.3)

## Quarter 2:

1. Identify variable or non-variable rates of change. (7.AF.4)

2. Draw a line when given one point and the slope and find the slope of a line on a graph. (7.AF.5)
3. Identify proportions using tables, graphs and the slope intercept equation. (7.AF.9)
4. Solve problems with similar shapes. (7.GM.2)
5. Solve problems and decide whether numbers are proportional. (7.AF.6)
6. Identify unit rates. (7.AF.7)
7. Solve problems with unit rates and proportions on a graph. (7.AF.8)
8. Use proportions to solve unit rates in measurements, areas, and other numbers. (7.C.5)

#### Quarter 3:

1. Find the square root of a number. (7.NS.2)
2. Know the difference between rational and irrational numbers and plot them on a number line. (7.NS.3)
3. Use proportions to solve percent problems. (7.C.6)
4. Draw three given angles and determine if it is a triangle. (7.GM.1)
5. Solve problems that involve vertical, adjacent, complementary, and supplementary angles. (7.GM.4)
6. Find the area and circumference of a circle. (7.GM.5)
7. Find the volume of cylinders and prisms. (7.GM.6)

#### Quarter 4:

1. Understand how sample data can represent information. (7.DSP.1)
2. Use data to draw inferences about a population. (7.DSP.2)
3. Find mean, median, mode, and range of numbers. (7.DSP.3)

4. Create line and box and whisker plots. (7.DSP.4)
5. Learn about probability and how likely an event is to occur. (7.DSP.5)
6. Use data to determine probability. (7.DSP.6)
7. Create models that explain probability. (7.DSP.7)
8. Create nets for surface area and solve problems using them. (7.GM.7)