



7th Grade Course Information



Pre - Algebra

Content Area	Learning Focuses
<i>Number & Operations</i>	<ul style="list-style-type: none">• Read, write, represent and compare positive and negative rational numbers, expressed as integers, fractions and decimals.(7.1.1)• Calculate with positive and negative rational numbers, and rational numbers with whole number exponents, to solve real-world and mathematical problems.(7.1.2)
<i>Algebra</i>	<ul style="list-style-type: none">• Understand the concept of proportionality in real-world and mathematical situations, and distinguish between proportional and other relationships.(7.2.1)• Recognize proportional relationships in real-world and mathematical situations represent these and other relationships with tables, verbal descriptions, symbols and graphs; solve problems involving proportional relationships and explain results in the original contexts.(7.2.2)• Apply understanding of order of operations and algebraic properties to generate equivalent numerical and algebraic expressions containing positive and negative rational numbers and grouping symbols; evaluate such expressions.(7.2.3)• Represent real-world and mathematical situations using equations with variables. Solve equations symbolically, using the properties of equality. Also solve equations graphically and numerically. Interpret solutions in the original context.(7.2.4)
<i>Geometry & Measurement</i>	<ul style="list-style-type: none">• Use reasoning with proportions and ratios to determine measurements, justify formulas and solve real-world and mathematical problems involving circles and related geometric figures. (7.3.1)• Analyze the effect of change of scale, translations and reflections on the attributes of two-dimensional figures.(7.3.2)
<i>Data Analysis</i>	<ul style="list-style-type: none">• Use mean, median and range to draw conclusions about data and make predictions.(7.4.1)• Display and interpret data in a variety of ways, including circle graphs and histograms.(7.4.2)• Calculate probabilities and reason about probabilities using proportions to solve real-world and mathematical problems.(7.4.3)