Glen Crest Grade 8 Math Goals



Reporting Topic #1: Number Sense Goal 1: I can evaluate expressions by applying the order of operations including square roots, exponents, and absolute value (w/o calculator). Goal 2: I can convert between common fractions, decimals, and percents (w/o calculator). Goal 3: I can compare and order real numbers using various methods, (e.g. estimation, common denominator, technology) Reporting Topic #2: Estimation & Measurement Goal 4: I can use estimation to judge the reasonableness of a result. Reporting Topic #3: Algebra & Analytical Methods Goal 5: I can solve problems using ratios and proportions. Goal 6: I can solve problems involving unit conversions within the same measurement system for length, weight, mass, and measures expressed as rates. Goal 7: I can solve problems that involve percents, including percent increase/decrease regardless of the piece of information that is missing. Goal 8: I can write and solve one and two-step linear equations from word problems that may include fractions, decimals and integers. Goal 9: I can create and connect multiple representations of data including tables, graphs, data sets and algebraic functions. Goal 10: I can write, evaluate, and simplify algebraic expressions. **Reporting Topic #4: Geometry** Goal 11: I can solve problems involving the volume and surface area of three-dimensional solids. Goal 12: I can solve problems involving the area and circumference of a circle. Goal 13: I can solve problems involving the area and perimeter of regular and irregular polygons. Goal 14: I can apply understanding of angle relationships (vertical, complementary, supplementary angles) to determine the measure of a missing angle. Goal 15: I can use scale drawings and scale factor to solve problems. Goal 16: I can solve problems involving congruent and similar figures. Goal 17: I can determine relationships between the number of vertices, sides, diagonals, and the sum of the angles of a polygon. Reporting Topic #5: Data Analysis & Probability Goal 18: I can represent all possible outcomes and determine probabilities of simple or compound events using grids, tree diagrams, and simple counting techniques. Goal 19: I can recognize, describe, and extend patterns. Goal 20: I can represent, interpret, infer, make predictions, make conclusions, and analyze data and solve problems from a variety of graphs including: scatter plots, stem-and-leaf charts, box-and-whisker plots