Portrait of an Abington Heights Mathematician

By the end of Algebra I, students will:

Operations with Real Numbers and Expressions	Linear Equations	Linear Inequalities	Functions	Coordinate Geometry	Data Analysis
☐ Compare and/or order any real numbers ☐ Simplify square roots ☐ Find the greatest common factor and/or least common multiple for sets of monomials ☐ Simplify/evaluate expressions involving properties/law of exponents, roots, and/or absolute values to solve problems ☐ Use estimation to solve problems ☐ Add, subtract, and/or multiply polynomial expressions ☐ Factor algebraic expressions, including difference of squares and trinomials ☐ Simplify/reduce rational algebraic expressions	☐ Write, solve, and/or apply a linear equation ☐ Use and/or identify an algebraic property to justify any step in an equation-solving process; interpret solutions in context of the problem situation ☐ Write and/or solve a system of linear equations using graphing, substitution, and/or elimination; interpret solutions in context of the problem situation	☐ Write or solve compound inequalities; graph solutions on number line ☐ Identify or graph the solution set to a linear inequality on a number line; interpret solutions in context of the problem situation ☐ Write and/or solve a system of linear inequalities using graphing; interpret solutions in context of the problem situation	☐ Analyze a set of data for the existence of a pattern and represent the pattern algebraically and/or graphically ☐ Determine whether a relation is a function, given a set of points or a graph ☐ Identify the domain and range of a relation ☐ Create, interpret, and/or translate various representations of a linear function (graph, table, equation)	☐ Identify, describe, and/or use constant rates of change ☐ Apply the concept of linear rate of change (slope) to solve problems ☐ Write a linear equation when given the graph of a line, two points on the line, or the slope and a point on the line ☐ Determine the slope and/or y-intercept represented by a linear equation or graph ☐ Draw, identify, find, and/or write an equation for a line of best fit for a scatter plot	☐ Calculate and/or interpret the range, quartiles, and interquartile range of data ☐ Estimate or calculate to make predictions based on circle, line, bar graph, or measure of central tendency ☐ Analyze data, make predictions, and/or answer questions based on data-displays ☐ Make predictions using the equations or graphs of best-fit lines of scatter plots ☐ Find probabilities for compound events and represent as a fraction, decimal, or percent