Portrait of an Abington Heights Mathematician

By the end of Geometry, students will:

Congruence, Similarity, and Proofs	Coordinate Geometry and Right Triangles	Properties of Polygons and Polyhedra	Properties of Circles, Spheres, and Cylinders	Measurements of Two-Dimensional Shapes and Figures	Measurements of Three-Dimensional Shapes and Figures
☐ Identify and use properties of congruent and similar polygons or solids ☐ Identify and use proportional relationships in similar figures ☐ Write, analyze, complete, or identify formal proofs	☐ Use the Pythagorean Theorem to write and/or solve problems involving right triangles ☐ Use trigonometric ratios to write and solve problems involving right triangles ☐ Calculate the distance and midpoint between two points on a number line or on a coordinate plane ☐ Relate slope to perpendicularity and/or parallelism (limited to linear equations) ☐ Use slope, distance, and/or midpoint between two points on a coordinate plane to establish properties of a two-dimensional shape	☐ Identify and use properties of triangles, quadrilaterals, regular polygons, pyramids, and prisms	☐ Identify, determine, and use the radius, diameter, segment, and/or tangent of a circle ☐ Identify, determine, and use the arcs, semicircles, sectors, and/or angles of a circle ☐ Use chords, tangents, and secants to find arc measures or segment measures ☐ Identify and use the properties of a sphere and cylinder	☐ Use properties of angles formed by intersecting lines to find measures of angles ☐ Use properties of angles formed when two parallel lines are cut by a transversal to find measures of angles ☐ Estimate and find area, perimeter, or circumference of regular, irregular , or compound figure ☐ Find the area of a sector of a circle ☐ Determine how a change in a linear dimension of a figure affects its perimeter, circumference, and area ☐ Use area models to find probabilities	☐ Calculate the surface area of prisms, cylinders, cones, pyramids, and spheres ☐ Calculate the volume of prisms, cylinders, cones, pyramids, and spheres ☐ Determine how a change in a linear dimension of a figure affects its surface area or volume