

## **Introduction to Geometry**

Recommended for students in grade 7 and above

3:40pm-5pm

### **Pre-requirements:**

It is ideal for students who have mastered basic algebra, such as solving linear equations, middle school students preparing for MATHCOUNTS, high school students preparing for the AMC, and other students seeking to master the fundamentals of geometry.

### **Teaching Objectives:**

This course is specifically designed for high-performing students and draws material from many programs for top middle and high school students in the country. Our philosophy is that students develop more by learning to solve problems they haven't seen before, as opposed to offering repeated drills that students can memorize their way through. In this way, our classes are structured much more like courses at top-tier colleges.

### **Course Description:**

**Introduction to Geometry** covers a full honors geometry curriculum, plus many advanced problem solving geometric applications not found in a standard geometry class. Topics covered in the class include triangle similarity and congruence, complicated area problems, mastering the triangle, special quadrilaterals, polygons, the art of angle chasing, construction, power of a point, 3-dimensional geometry, transformations, analytic geometry, basic trigonometry, and geometric proofs.

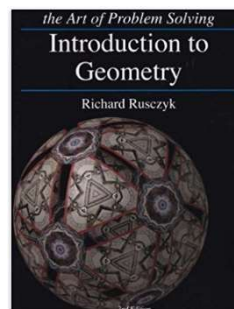
### **Textbook:**

Introduction to Geometry, the Art of Problem Solving, by Richard Rusczyk

Text ISBN: 978-1-934124-08-6

Solutions ISBN: 978-1-934124-09-3

<https://artofproblemsolving.com/store/item/intro-geometry>



### **About Teacher:**

Huaizhong Han, received B.S. from the University of Science and Technology of China and PhD from University of Massachusetts Amherst. He volunteered as the coach of Wayland Middle School's MathCounts Team (2016/2017/2018/2019). In 2018, He received the "Best Coach" award and Wayland Middle School received the "Most Improved" school. Mr. Han also organized two Math clubs. The children discuss and study many interesting math problems every week.