2026 AMC 10 Summer Camp: Advances

Instructor: Dr. Shi WeChat: shike_1983. Email: info@davincimath.com.

Class time: June 26 - July 31, 15 lectures 4:00 - 5:30pm EST (Meeting dates are listed below) via Zoom.

General Information: This summer camp is designed for students who completed all intro courses and part of intermediate algebra recently. We will sharpen basic and advance skills in these subjects to participate in the upcoming AMC 10 competition in November 2026.

Prerequisite courses: AoPS Introduction to Algebra, Intro to Geometry, Intro to Number theory, and Intro to Counting and Probabilities; Recommended: Chapter 1, 2, 4, 6, 7, 8, 9, 10 in AoPS Intermediate Algebra.

Difficulty level: We are targeting medium to hard AMC 10 problems (Questions 10-22) in this camp. Students scored around 85 in the recent AMC 10 will benefit the most from this camp.

June 26	Factoring Tricks
June 29	Ratio and word problems
July 1	Sequences and Series
July 6	Prime Factorization, GCD/LCM
July 8	Modulus Arithmetic, Base Numbers
July 10	Similar Triangles and Ratio with area
July 13	Pythagorean Theorem,Huron's formula
July 15	Tangent lines and Incircles
July 17	3D shapes
July 20	Coordinates Geometry
July 22	Basic Counting tools
July 24	Counstructive Counting
July 27	Geometric prob/Conditional probability
July 29	Vieta's formula, Roots of Polynomials
July 31	Absolute values, Graphs of functions

Table 1: Lecture Schedules

Format of the Camp:

- A detailed study plan is provided for the Spring 2026. Students are highly recommended to follow the study plan to review topics from Intro courses before the camp starts.

- Each lecture will focus on key concepts and tools around one or two topics (listed below) with examples.
- Each lecture comes with a set of assignment problems to give students sufficient practice on the tools. All assignment problems have solutions recordings with detailed explanation.
- Students are encouraged to submit their assignments, Dr Shi will briefly grade their work with necessary comments.
- All lectures are recorded and students have access to the entire course until the end of the year.
- In the case of time conflict, self-paced option is available with $ 200 discount.

Biosketch and track record in Math competition education:

- Dr Shi is an associate professor at a research university (R1) in US. Dr. Shi's passion for mathematics started early in life, when he began participating in math competitions at the age of 10. He was recruited to receive specialized training in mathematics at a top high school in China that has produced nearly 20 international gold and silver medalists in math competitions. His outstanding performance in these competitions earned him numerous awards, including a Silver Medal in the Chinese Mathematics Olympiad (CMO), which is considered analogous to the USAMO, and a Silver Medal in the Bulgarian International Mathematics Olympiad. Dr. Shi was also invited to attend the prestigious Chinese Mathematical Olympiad Program (MOP). Dr. Shi's exceptional talent in mathematics earned him admission waiver to Peking University, a rare achievement that further demonstrates his outstanding math abilities.
- Thanks to his expertise and passion in this field, his AMC 8, AMC 10, and AIME courses are widely recognized and highly regarded by both students and parents. In the 2025-26 cycle, more than 20 students from our AMC 10 camps (Basic and Advanced, with a total of 40+ students) advanced to AIME. Additionally, several of his current students achieved Distinguished Honor Roll (DHR) last year.
- With his deep passion for mathematics and extensive experience in math competitions, Dr. Shi has developed a state-of-the-art training curriculum for AIME to USAJMO preparation. Over the past three years, this curriculum has proven to be both effective and efficient, with several students from our program qualifying for **the USAJMO and National Mathcounts. Notably, a MOPer and a Team USA member of the EGMO were coached by Dr. Shi, benefiting from his expertise in building a strong foundation for advanced math competition.**