



Dr Xia 2021 Online Summer Competition Math Training Program

Date: **June 26, 2021 to September 2, 2021, 20 classes in total** (Every Tuesday and Saturday except July 3 and the last meet on **Thursday** September 2)

When: Challenge Math (5:30-7:30pm EDT) and Advanced Math (6-9pm EDT)

Tuition: \$1,000 (Challenge Math) and \$1,500 (Advanced Math). Due by May 31, 2021

Discount: \$100 OFF full tuition if **registered by May 2, 2021 with deposit paid online.**

We have two levels for this summer program:

- **Challenge Math** is a beginner competition math training program for students without much experience or seeking more rigorous and challenging math trainings. The ages of students generally range from 10 to 14, exceptional students with the age 9 or under is acceptable.

Module I: Arithmetic; Numbers; Rates and Percent; Angles and triangles; Basic Counting;

Module II: Word problems; Exponents; Logics; Perimeters and areas; Principal of inclusion and exclusion;

Module III: Basic Algebra; Modulo; Sequences; Cycles and Quadrilaterals; Symmetry and pattern;

Module IV: Similarity; Analytic Geometry; Polynomials; Probability; Recursion;

- **Advanced Math** is a competition math training program for students with at least some extensive AMC 10/12 experience or seeking better performance in AMC, AIME or equivalent level contests.

Module I: Polynomials; Sequences; Special functions; Advanced number theory;

Module II: Some important geometry configurations; Analytic geometry; Trigonometry and Complex applications in Geometry;

Module III: Ways to count; Techniques in counting; Recursions and state events; Probability and expect values; Graph and colorings;

Module IV: Conic section; Bashing techniques; Inequality and estimates; More serious 3-D Geometry problems;

Register online at yuselite.org/2020-21/#xiasummer