ACES Academic Enrichment Center

2019 Summer Enrichment Course Syllabus

Course Name: Competition Math for Elementary 5th – 7th Graders

Course Description

MATHCOUNTS and AMC is a national math competition for middle school and high school students, but, they are really more than that. It helps students at all levels improve their problem-solving skills. Many experiences have proved that those competitions build math skills, promotes logical thinking and sharpens students' analytical abilities. A well Math competition training could easily help you get a high PSAT,SAT and ACT math score. In our classes, we will cover all concepts/topics that frequently occur on MathCounts/AMC 8 Competition and teach efficient strategies required for contest-based problem solving. We will review questions drawn from previous years' contests as well as a variety of carefully selected resources. Students will think and learn math skills that are different from their school classrooms.

Course Objectives and Student Competencies

1. Introduce the students the world of competition math and the joy of mathematics
2. Teach students efficient strategies required for Contest-based problems solving skills
3. Help improve understanding of basic principles through numerical and word problems, exploration of mathematical knowledge, and improvement of analytical skills.
4. Help students improve their performance in math competitions, as well as their general mathematical skills if math competition is not their main goal.

Class Structure

Unlike traditional math competition club, our camp will not only let students do test problems by themselves. Our classes begin with an overview of the topic for the day. Then, our instructors will categorize problems into different problem types for the topic and work on each type of problem step by step. The class will encourage students to present their ideas to inspire their imagination.

Date	Topics	Homework
6/17	Pre-Algebra	assignment #1
6/18	Algebra	assignment #2
6/19	Geometry	assignment #3
6/20	Number Theory	assignment #4
6/21	Probability	assignment #5