



BERGEN COUNTY ACADEMIES

200 Hackensack Avenue, Hackensack, NJ 07601-6195 - (201) 343-6000 - Fax (201) 996-6952

BCA Math Competition Camp, Summer 2018: page 1 of 2

BCA Math Competition Camp is an opportunity for students to work together with other motivated, creative lovers of math. During BCA Math Competition Camp, students learn the foundational concepts for, and get much experience in practicing, non-routine problem solving and competition math. Non-routine problem solving is great preparation for future engineers, inventors, entrepreneurs and really anyone who will identify and find solutions to the problems that no one has solved before. This is why many elite colleges and universities are impressed by an applicant's success on math competitions.

BCA Math Competition Camp has programs for students entering grades 5-9. Our junior program is specifically for students who have not yet taken pre-algebra (usually those entering grades 5, 6 and sometimes 7 or 8). Our regular program is primarily for students entering grades 7, 8 and 9; although very rare exceptions may be made for younger students (entering grades 5 or 6).

Please note that BCA Math Competition Camp is different from math classes at school. Although there is some overlap in content, we focus on non-routine problem solving. For instance, it is fine if a student has already taken "algebra" or "geometry" at school; they can still take a class with this name or covering this content at math camp. They will learn how to use their knowledge in new, creative ways. Likewise, math camp cannot serve as a review or remedial course and it cannot be used for a student to receive credit at their normal school.

This year, the sessions of math camp will run during the following days:

Session 1: July 9 – July 19

Session 2: July 23-August 2

We meet **Monday through Thursday, 9:30-3pm**, so each session consists of **eight days**.

During the first seven days, students will participate in warm-up activities, instruction, math games and a review of competition material. They will work with instructors, interns and volunteers who are current BCA math team coaches, high school team members and alumni and other experienced teachers. On the eighth day of each session, students will be grouped into teams to participate in individual, team and relay competitions. We will end the day and session with an awards ceremony.

Transportation and lunch is the responsibility of the parents. The cost is listed below:

(does NOT include the cost of the book(s), which the student must obtain)

One Session: \$470

Two Sessions: \$940

*Students are accepted on a first-come, first-served basis: please sign up at your earliest convenience once the registration site is open (approximately April 5th). **Upon registration, 1) payment is required and 2) you can choose and be guaranteed* a spot in the class you want.** *Class placement subject to change based on insufficient enrollment. If your child qualifies for the free/reduced school lunch program, he/she may qualify for a scholarship; for an application email carhei@bergen.org.*



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Option 1: Junior Math Team for Students who have not yet taken pre-algebra:

Almost all students entering grades 5 and 6 and some students entering grade 7 or 8:

Students may elect to come during only session 1, only session 2 or both sessions. Curriculum is independent and non-repeating. This is a great introduction to math competitions and non-routine problem solving.

Option 2: Subject Specific Sessions and The Art of Problem Solving for Students

Entering Grades 7, 8 & 9: Choose 1 or 2 sessions. *Upon registration,*

1) payment is required and 2) you can choose and be guaranteed* a spot in the class you want.

**Class placement subject to change based on insufficient enrollment.*

a) Introduction to Algebra: Algebra skills are necessary for many competition math problems. Take this session to learn how to apply algebra to solve non-routine problems. This session is appropriate for students who have completed pre-algebra, whether or not the student has completed algebra 1.
offered sessions 1 and 2 **Prerequisite: pre-algebra

b) Geometry: Knowledge of geometry and an open mind will often provide an elegant, simpler solution to a non-routine problem. This session is appropriate for students who have completed algebra I, whether or not the student has completed a geometry course. **Prerequisite: algebra I
offered session 2

c) The Art of Problem Solving, level 1: A level up from the junior sessions, but for students without much contest experience. **Prerequisite: pre-algebra
offered session 1

d) The Art of Problem Solving, level 2: These courses are for our more experienced math team students. This is an opportunity to work and bond with extremely talented, like-minded classmates while making tremendous progress in a relatively short time period. Independent classes with nonrepeating content will be offered both sessions; students may take either or both sessions.
All level 2 AoPS classes Prerequisite: 18 on AMC 8 OR 90 on AMC 10
Level 2a offered session 1 **Additional Prerequisite: algebra 1
Level 2b offered session 2 **Additional Prerequisite: pre-algebra

****The "Prerequisite" is the full school year course a student should have already completed.**
Text books for the classes will be decided on shortly; registered students will receive an email.

If you have questions, please contact Carla Heitzman at carhei@bergen.org