

Philosophy of Math club

Middle School:

Some competitions for students to learn and grow (practice being autonomous within the bounds of school and club rules):

CGCC (Individual or team; not both)

East Valley Competition (Individual or team; not both)

Basha Jr. High Competition (Individual)

These are not national competitions; the colleges will be very unlikely to take a student's placement on these competitions in the 7th or 8th grade into consideration. But they provide valuable practice for a student to discover his/her strengths and weaknesses; learn to work as a team and learn good sportsmanship. Decisions regarding these teams will be more informal and based upon students' wishes.

Some competitions that should be taken a LITTLE more seriously (these are still *middle school* competitions) because they are on the state and national level:

AMC 8 (for the very best AMC10)

Math Counts.

AMC 8 all students who care to may take this test. The top AMC 8 students who are in Algebra 2 or above are also encouraged to take the AMC 10. (Individual only)

MathCounts competitors will be chosen based upon results of the school test.

There will be designated team competitors and designated individual competitors with alternates.

If students are among the top in the nation, they may get noticed by colleges and summer math programs. I will watch for these opportunities!

High School:

The informal competitions for students to grow in include:

CGCC

Mandelbrot (though the team and individual may be beneficial to the very top)

Mathleague (the more competitive students can use this to train for the ARML as the competitions and rules are similar)

The more formal competitions that attract college attention:

- 1) AMC 10 and 12: all students are encouraged to take this test. The very top 5-10% in the nation qualify for the AIME. We practice for this extensively. Summer math programs definitely consider this.
 - a. AIME (Some summer math programs use the AIME cut-off as a deciding factor to admittance or denial.)
 - b. USOMO

- 2) State Math Competition
 - a. State colleges will watch this list; others may not. Scholarships are earned through this competition. All students are encouraged to take part in this competition.

Mu Alpha Theta National Mathematics Honor Society:

Colleges take this into consideration.

Earn hours/officer positions/may graduate with an honors cord if obligations fulfilled.

Log1 competitions: these are useful and may qualify one for the Mu Alpha Theta scholarships and admittance into Summer Math Programs.

Students may earn grants to attend summer math programs through volunteering, service and scores on the AMC/AIME and LOG1 contests.

Nationals of Mu Alpha Theta: By sponsor recommendation: based upon scores and participation in Mu Alpha Theta. At this point sportsmanship is a valid consideration when taking students across the country for a week of non-stop competition.