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## So You've Decided to Sponsor the Math Team... Now What?

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So, you've decided to sponsor the Math Team. Or maybe your principal asked you to Sponsor the Math Team. Or possibly some students approached you about a Math Team, and you agreed. Regardless how it happened, you are now the Math Team Sponsor! Now What?

### 1 What's Available

The first thing you need to know is that the Math Team "season" is as long as you wish it to be. The first contest is in September, with the last tournament in April. This can be a year-round job, if you so choose. You may sign-up for as many contests and tournaments as you and your students can handle; the more you do, the better your team will become.

There are two types of competitions: contests (done at your school—you send in the results) and tournaments (not done at your school—you travel to another site).

Contests are a good way to involve many students at relatively little cost and effort, and provide a good introduction to many types of problem-solving. Recommended contests for your Math Team include the following.

**Math League** A series of six six-question timed tests given at four-week interval throughout the year, this contest gives students a challenge and keeps them coming back! [www.mathleague.com](http://www.mathleague.com)

**Mandelbrot** A challenging series of four seven-question timed tests, with a times team-round component of proof-based questions, this provides an excellent way to build mathematical problem-solving in a team environment. [www.mandelbrot.org](http://www.mandelbrot.org)

**AMC** The American Mathematics Competition is the premier one-time event for Math Teams across the country. This 25-question timed test is offered in three levels, one for middle school (AMC8), one for 9th and 10th graders

(AMC10), and one for 11th and 12th (AMC12). The AMC is the first step to the American Invitational Mathematics Exam, and from there on to the United States Mathematics Olympiad. [www.unl.edu/amc](http://www.unl.edu/amc)

Tournaments, although more expensive due to travel, are much more fun! At tournaments, your students get to meet hundreds of other teenagers that are also interested in mathematics. If your school has an student environment such that liking math is not “cool,” a tournament can be a great place for students to realize that they are not alone in liking math, and that even math can be “cool.”

Tournaments usually consist of two rounds: a timed written test and a speed round called *ciphering*. The tests range anywhere from an hour to two hours in length and from 25 to 50 questions—usually multiple-choice. The ciphering round usually consists of series of questions, given one-at-a-time, that each student must solve in under two minutes (the number of questions and the time limits vary). Some tournaments also offer a team ciphering round, where groups of four students must work quickly to solve a problem. Recommended tournaments for your Math Team include the following.

**UGA** This tournament, held in October in Athens, offers a 90-minute, 25-question multiple-choice test, and both an individual and team ciphering round. [www.math.uga.edu/mathmeet.html](http://www.math.uga.edu/mathmeet.html)

**Mercer** Held in November on the Macon campus, this tournament offers a 90-minute, 45-question multiple-choice test and an individual ciphering round. [www.mercer.edu/math/math\\\_contest/contest.htm](http://www.mercer.edu/math/math\_contest/contest.htm)

**Georgia Southwestern** This is the first tournament established in the state (31 years ago), and still one of the best! Held in Americus in February, GSW gives students a 90-minute, 40-question multiple-choice test and a ciphering round in which students work in pairs. [www.gsw.edu/~math/mathtourn.html](http://www.gsw.edu/~math/mathtourn.html)

**Armstrong Atlantic** Students work a 40-question, 60-minute multiple-choice test at the Savannah campus in February, along with a team ciphering round. [www.math.armstrong.edu/tournaments](http://www.math.armstrong.edu/tournaments)

Other universities and high schools throughout the state hold tournaments. This includes the Junior Varsity State Mathematics Tournament, for 10th graders and younger, hosted by Woodward Academy. The GCTM sponsors the Middle School State Mathematics Tournament and the invitation-only Varsity State Mathematics Tournament. Check the GCTM website for more details.

## 2 Getting Students Involved

How do you attract students to a Math Team? Many people suggest bulletin board displays, announcements over the school's P.A. system, or a newsletter. Those are all great suggestions, and may work for your school, but what I found works for

me is a short 5-minute presentation in each math class at my school. Although time-consuming, this approach has advantages: the students know who I am, they can ask me questions, and I can show them a quick problem-solving strategy to give them a idea of what Math Team is like.

Okay—How do you keep them once you've got them? Start with the basic staple of life: food! Offer cookies, cokes, chips, fruit, water, and other goodies to attract them to the meetings. I gradually phase-out food offerings over the year so that the ones who only attend meetings for food eventually drop off.

Offer incentives to keep the students coming back. Tophies and books are common prizes for high scoring students, but there are more options: Math Team t-shirts, Math Team pencils, and a recognition ceremony at the end of the year are excellent options. Offer the chance for someone to earn the leadership title of "Math Team Captain." My school allows the students to earn a Math Team letter for their letter jackets, and we have Math Team recognition included as part of our school's end-of-the-year awards ceremony.

But the best way to keep students coming back is to make it fun! Challenge them, teach them, and laugh with them. If the students see that you are interested in this as much as they are, and that *you* find it fun, they will respond positively to that. (That's pretty good advice for the classroom, too!)