## Dear Mathematics Director,

The Stanford University Mathematical Organization is pleased to invite your school to the 2008 Stanford Mathematics Tournament, to be held on Saturday, February 23, 2008. This contest brings together students from the greater Bay Area for a day of challenging problems and mathematical fellowship. The tournament is run by Stanford students in collaboration with the Rice Math Tournament. The tournament is composed of four subject area tests (algebra, geometry, advanced topics, and calculus), a general test, and two team tests. We also plan to have a member of the Stanford faculty give a talk in the afternoon.

- The Subject Area Tests are 50-minute individual exams consisting of 10 short answer questions. Students may take one of algebra and advanced topics and one of geometry and calculus. Each subject test is worth 50 points ( 5 per question). The advanced topics test covers areas such as probability, number theory, and pre-calculus.
- The General Test is a 110-minute test that is designed for students with less mathematical background; it is held at the same time as the subject area tests. The general test will have around 25 short answer questions and be worth 75 points.
- The Team Round is a 50-minute, 8-person exam, testing material from all areas of high school mathematics. It consists of 15 questions worth 20 points each, for a total of 300 points.
- The Power Contest, taken in the same teams as the team round, is a 50-minute, multi-part, proof-oriented question. It is worth 200 points.
- The Super Relay is based on a similar event at the American Regions Math League competition. It is a just-for-fun event that we are trying out this year; the winning teams will receive bags of candy or a similar fabulous prize. Detailed rules will be available on the SUMO website, and will also be explained on the day of the competition.
- The Tiebreaker Rounds are used to break ties within the top three students on each individual event. Top students are invited to the front of the room and given a single question. Each student has one chance to answer the question, and the first student to answer correctly wins the tiebreaker. Students must be present to participate in the tiebreaker.

You are welcome to bring as many students as you like, but you will need to group them into teams of 8 people. Even if you do not have enough students for a full team, any number of students are welcome to participate; they can be grouped together with students from other schools to form a team. A team's overall score will be determined by adding its score on the team test to the sum of the individual scores of each of its students (up to 100 points for taking two subject area tests, 75 points for the general test). Thus, the maximum team score is 1300 points.

Here is the schedule for this year's contest:

| 8:30-9:30 | Registration / Check-In |
| :--- | :--- |
| $9: 40-10: 30$ | Power Contest |
| $10: 40-11: 30$ | Team Round |
| $11: 45-12: 45$ | Lunch |
| $1: 00-1: 50$ | Algebra |
|  | Advanced Topics |
|  | General Test (ends at 2:50) |
| $2: 00-2: 50$ | Geometry |
|  | Calculus |
| 3:00-4:00 | Speaker |
| $4: 00-5: 30$ | Super Relay, Tiebreakers, and Awards Ceremony |

We would like to have all participants present at the awards this year. Please do not leave after the individual events if at all possible. In particular, please note that students who are not present will be disqualified from the tiebreakers.

Like last year, lunch will be provided to ensure that all students are on time for the afternoon tests. The cost of lunch is reflected in the registration fees.

The enclosed map shows the math building (Building 380) and Hewlett Teaching Center, where the contest will be held.

The early registration deadline is February 13,2008 . You may still register after this date, up to the morning of the contest, but we strongly encourage you to register early if possible. There will be a late fee for entries postmarked or completed online after this date (please see registration form) and an additional fee for registrations completed upon arrival at the tournament. Early registrations will also help us make sure the contest runs smoothly.

You may register either online or by mail. The online registration form can be found at sumo.stanford.edu/smt. Online registrations will not be charged the late fee as long as the form is completed by February 13 th. You will still need to mail in a check if registering online.

If registering by mail, send the enclosed form with payment to:

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Silas Johnson
Stanford University Mathematical Organization
P.O. Box 11415
Stanford, CA }9430
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Please remember to allow sufficient time for late registrations to arrive by mail, as the Stanford Post Office is generally a couple days slower than other area post offices. Note that if we have not received your form by February 23, registration should be done on the morning of the tournament.

Other information about the contest (including rules for a tiebreaking round) is also available on our website: http://sumo.stanford.edu. Please feel free to contact Silas Johnson at (650)906-0581 or preferably at silasj@stanford.edu with any questions. Even if you are unsure which students will be attending, we would still very much appreciate an approximate number of teams and students to expect.

Sincerely,

Silas Johnson
President, Stanford University Mathematical Organization

