

Mu Alpha Theta Contests

Log1 Contest

The Log1 Contest provides an excellent opportunity for a school to participate in a competition similar to our national convention contests and compete against schools from across the country and the world, while staying right at their home school.

The 2014-2015 Mu Alpha Theta Log1 Contest was run by Paul Kustos and the Hoover High School Math Team. Schools registered for the competition at: <http://log1.wamath.net>. Registration began in October.

All rounds of the competition are now complete. If you have questions about the contest, please contact [Paul Kustos](#).

Final award recipient information should be available by March 25, 2015.

The 2014-2015 contest consisted of three testing rounds. The first round included two topic tests. Students chose either the "Circles & Polygons" or the "Applications" Test. The second round included a second set of topic tests. Students chose to take either the "Logarithms" or the "Probability" Test. The third round was an individual test of general mathematics on level appropriate topics. All tests were 15 open answer questions to be completed in 30 minutes *without the use of a calculator*.

We try to write each test so that there are enough easy problems that students new to competition are not discouraged and enough hard problems that experienced competitors are challenged and can be distinguished from one another by score for the purposes of awards.

Materials are only available for download electronically (pdf formatted) to participants, requiring them to do their own photocopying.

Each student test score was scaled to account for varying test difficulty. The test score was divided by the maximum test score for each test and math division and multiplied by 100. A student's overall score was the sum of their scaled scores on the three tests and thus was a whole number between zero and three hundred.

Hoover High School Math Team will provide awards for high-scoring individuals and schools. Please see their website at <http://log1.wamath.net> for further information on how awards will be determined.

Mu Alpha Theta will award $100 e = \$271.82$ to each of the top ten schools in each region, for a total of \$10,872.80 in prize money. If there is a tie for 10th place, the award money will be split. The National Office will also provide some TI graphing calculators and copies of the DVD "Hard Problems", as prizes to be given at random to participants that take all three tests.

The Log 1 contest is FREE, but participation is restricted to schools with active Mu Alpha Theta chapters. All students at the school may participate in the contest, but only members and associates of Mu Alpha Theta are eligible for prizes or for scores to be counted towards the top awards. Each year, sponsors are responsible for entering the names of their eligible members and associates by Feb 15, 2015, if they want students to win prizes.

Divisions: Students compete only against other students with similar math course background. Mu division is for students who are taking a Calculus course. Mu students are responsible for knowing topics in all divisions.

Alpha division is for students who are in math courses above Algebra 2 but who have not taken calculus. No calculus is to be included at this level.

Theta division is for students who are in Algebra 2. There will be no trigonometry questions other than right triangle trigonometry or law of sines and law of cosines. These students will have completed Algebra 1 and Geometry.

Questions? Email Paul Kustos at PKustos@hoover.k12.al.us

Rocket City Math League

The Rocket City Math League is a free, international, math contest that is open to all middle, high school, and two-year college students enrolled in Pre-Algebra through Precalculus and above math courses.

This competition is completely FREE due to a generous grant from Mu Alpha Theta.

General information about the Rocket City Math League:

- There are three 45-minute tests for each division, each consisting of 10 questions.
- Back by popular demand was the Interschool Test in October. Teams of students worked on a 15 question test for 30 minutes using a single answer sheet. Teams compete at 2 levels. Any team with any member in 10th grade or above competes in Division A. Everyone else competes in Division B. No school can compete in both divisions.

To compete on the Discovery level, students may be currently enrolled in any mathematics course. For all other levels, students must be currently enrolled in or have completed the mathematics course at that level and cannot be enrolled in or have completed a higher level mathematics course. In order to be eligible for awards, students may compete in only one level:

- Explorer Division - Pre-Algebra students (or any student who has not yet entered Algebra I. Test content, however, will be at an advanced Pre-Algebra level)
- Mercury Division - Algebra I students
- Gemini Division - Geometry students
- Apollo Division - Algebra II students

- Discovery Division - All students who are currently enrolled in Pre-Calculus or who have completed Pre-Calculus, including all Calculus students

Two-year college students wishing to compete in the Rocket City Math League would compete in the following levels:

- Explorer Division - Pre-Algebra students (or any student who has not yet entered Beginning Algebra)
- Mercury Division - Beginning Algebra students
- Gemini Division - Geometry students
- Apollo Division - Intermediate Algebra students
- Discovery Division - College Algebra/Trig students, students in Calculus and above

Two-year college students may compete in the level they fall in during the fall semester for the whole year, but may also start in the higher level if they feel confident in their abilities. Once a student has started a level, they must stay at that level for the whole contest. If enough two-year colleges compete, there will be separate prizes for college students. If there are not enough two-year teams in the Interschool Test, two-year teams will be in Division A.

Testing dates for the 2014-2015 competition were:

Interschool Test: Oct 20–31, 2014

Round One: Jan 12–23, 2015

Round Two: Feb 9–20, 2015

Round Three: March 9–20, 2015

Tests are allowed to be administered on any one day during the testing period, as determined by the sponsor.

Team scores are calculated by adding the top five scores of all students in the same division and enrolled in the same school.

The top 25 students in each level will win a trophy and the top 10 schools in each level will win a plaque. Mu Alpha Theta will provide other prizes, as well, including copies of Mathematica Software and TI Graphing Calculators.

All materials related to the Rocket City Math League, including test, solutions, and RCML guidelines, are emailed to each school or made available online, where the team sponsor can make copies and administer the tests during the periods designated above.

How can I register for the 2014-2015 RCML contest?

Registration for the Rocket City Math League can be done through its website www.rocketcitymath.org. All teams or individuals who participate in the Rocket City Math League will need a sponsor, such as a math team coach or a math teacher, who will register for the contest, proctor the tests, and input the scores online.

Copies of last year's tests and sample tests can also be found on the [RCML](#) website.

REMEMBER! THE CONTEST IS ABSOLUTELY FREE!!!

If you have any questions, comments, or concerns, feel free to contact RCML at rcmlstaff@gmail.com

Mathematical Minutes Video Contest

The Mathematical Minutes Video Contest asks members to create educational and entertaining videos. Get together with a few friends from your chapter, pick a math topic, and create a fun, informative, two to five minute video!

The contest is run by Doral Academy Charter High School under the direction of Sam Koski. **Entries for 2014-2015 were due March 6, 2015 at midnight EST.**

Schools were allowed no more than three submissions. Only the top submission per school is eligible for prize awards. Award money can be requested to either go to the chapter by check or to the students by gift card.

Eight videos will be chosen by March 31, 2015 for the final round of judging. Chapters will vote to rank the top eight videos. Up to \$3,000 will be available to be split amongst the entries by quality. Final award amounts will be determined by these votes, along with input from the Governing Council.

The Salt Lake City National Convention plans to award INTERSCHOOL points for any qualified videos submitted.

Please email any questions to [Sam Koski](#).