

# 2011 Rocket City Junior Math Mania Competition Details

## **Competitors will take five tests:**

**Individual Test:** 30 problems to be solved in one hour by an individual.

**Team Tests:** There are four team tests in the topics of Algebra, Geometry, Probability, and Potpourri. Each test consists of ten problems to be solved by a team of four students in fifteen minutes.

All problems on all tests are free-response, and all tests are designed to be taken without a calculator.

There is a different version of each test for each grade, 4-8. For the individual test, students will take the test appropriate to the grade they are currently in. For the Team Tests, students will take the test appropriate to their team's grade level, which is the highest grade of a member of the team.

## **Scoring and Awards:**

Each problem on the Individual Test will be worth one point, while those on the four Team Tests will be worth two points each.

**Individual awards** will be given based upon the Individual Test. Ties will be broken in favor of the student with the highest score on the second half of the test; if this method does not break the tie, the tie will be broken based on the highest-numbered question to which one student has the correct answer and the other does not, in favor of the student with the correct answer. For example, if two students have scores of 28, their scores on just the latter 15 problems of the test are examined. If one of them got all 15, while the other got just 14, the student who got 15 would win. However, if both of them had got 14 of the last 15 questions, their answers to problem 30 would be examined. If one of them had got it right and the other had got it wrong, the student who got it right would win. If both students had got 30 correct, or both had got 30 incorrect, then problem 29 would be examined, then 28 if necessary, and so on.

**Team awards** will be given based upon the sum of the team's scores on the four Team Tests (a total of 80 possible points). Ties will be broken in favor of the team with the highest score on the latest test (Potpourri), then the previous test (Probability), etc. If this process cannot break the tie, ties will be broken in favor of the team with a correct answer for the latest problem on the latest test, as in the process for the individual awards.