# Outline of Rules

28th Annual Junior High Math Contest, March 14, 2018

# Basic Guidelines

The Junior High Mathematics Contest (JHMC) is an IMSA-sponsored math contest that consists of three formal rounds, the Individual Contest, the Team Contest, and Creative Thinking Contest, along with a Speed Round held before the Awards Ceremony. Each of these contests is described in more detail below. The JHMC hosts two divisions, A and AA, and schools will be placed in either division based on historical performance. Each school may bring a maximum of 20 students to compete in the JHMC. Each student is allowed to use a calculator that is acceptable for use on the SAT. Students should bring a calculator and writing utensils; all other materials will be provided.

# Eligibility

Students may participate at either their own grade level or one above it. For example, a 7th grader may participate in the 8th grade events, but an 8th grader may not participate in the 7th grade events. Students may participate at different levels in different events. Students below 7th grade may participate in any event.

# Individual Contest

The Individual Contest is held at both the 7th and 8th grade levels and consists of 20 questions to be answered in 40 minutes. Each school may enter up to 8 contestants and 2 alternates at each grade level; students may not compete at more than one level. The 7th grade individual contest includes arithmetic, simple introductory algebra and very basic geometry. The 8th grade individual contest covers these topics along with more complex algebra and additional introductory geometry. Each correct answer on the individual contest is worth 3 points, for a total of 60 points. A school’s total for this event is the sum of the top four contestants’ scores. Awards will be given to the top 3 individuals and top 3 schools at each grade level in each division for the individual contest. Alternates are eligible for individual awards.

# Team Contest

The Team Contest is held at the 7th and 8th grade levels and consists of 20 questions to be answered by four-person teams in 40 minutes. Each school may enter up to 2 four-person teams at each grade level and 1 four-person alternate team that will compete at the 8th grade level; students may not compete at more than one level. Each team will work collaboratively to answer the questions and may submit a single answer sheet for the team contest. Content covered at each level on the team contest is the same as the individual. Each correct answer on the team contest is worth 3 points, for a maximum possible score of 60 points. A school’s total for this event is the sum of the two team scores. Awards will be given to the top 3 teams and top 3 schools at each grade level in each division for the team contest.

# Creative Thinking Contest

The Creative Thinking Contest consists of 5 staggered questions to be answered in 25 minutes. Each school may enter up to 8 two-person teams; there will be no alternate teams (students not taking the contest will go to lunch). Each team must have at least one 7th grader. Creative Thinking Contest questions are based on an extension of a normal curriculum, and include logic puzzles, tangrams, constructions, magic squares, patterns, or manipulation of numbers.

Students receive five questions, one at a time. Timing will begin when teams receive their first question. They will have a maximum of 5 minutes to complete the first question. After 5 minutes, the first question will be collected and the second will be distributed; after 10 minutes the second will be collected and the third distributed; and so on. Teams may, if they finish a question before the 5 minutes are up, move on and use their extra time on the subsequent questions. Each correct answer on the creative thinking contest is worth 12 points, for a maximum possible score of 60 points. Partial credit may be given. Ties will be broken by total time taken. A school’s total for this event is the sum of the top four pairs’ scores. Awards will be given to the top 3 pairs and top 3 schools in each division for the individual contest. Alternate pairs are eligible for team awards.

# Appeals

If, during a contest, a question seems ambiguous, the student should use his or her best judgment to answer the question. After each contest ends, the answer sheets will be collected, and the correct answers will be posted. Coaches will be given 30 minutes after each contest to submit formal, written protests to the grading room. All decisions by the judges and graders are final.

# Speed Round

A fast-paced, buzzer lock-out style contest will be held after lunch and before the awards ceremony. Schools will elect one participant to compete; results will not be included in a school’s total score.

# Awards

In addition to those detailed above, awards will be given to the 3 schools with the highest cumulative score. A school’s cumulative score is the sum of the scores of the top four 7th grade individuals (240 pts max), top four 8th grade individuals (240 pts max), both 7th grade teams (120 pts max), both 8th grade teams (120 pts max), and top four creative thinking pairs (240 pts max), for a maximum of 960 points. In the event of ties, duplicate awards will be given.