Outline of Rules

32nd Annual Junior High Math Contest, March 12, 2022

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. Each of these contests is described in more detail below. Teams will consist of 8 students and a maximum of 4 8th graders will be a part of each team. Schools are allowed to enter multiple teams with a maximum of 3 teams, but final placements will be team-dependent, not school. Each student is allowed to use a calculator that is acceptable for use on the SAT. Students should have a calculator and writing utensils at their disposal. Any form of cheating, including looking up questions or sharing test questions, will not be tolerated and doing such will disqualify the student from the JHMC.

Team Formation

Students participate at either their own grade level or one above it. For example, a 7^{th} grader may participate in the 8^{th} grade events, but an 8^{th} grader may not participate in the 7^{th} grade events. Students may participate at different levels in different events. Students below 7^{th} grade may participate in any event. It is highly recommended that every team has 8 people so that they fill all the contest spots, but it is not required.

Ad hoc Team Formation

If a student's school is not planning on participating in JHMC, but the student is still interested in competing, they can rally up a few other friends to sign up to be on an ad hoc team. Ad hoc teams will consist of 8 members and still follow the same rules as school teams. However, they will not be eligible to win cumulative awards the same way school teams are. They can still win awards in the individual, team, and creative thinking rounds, but nothing in the overall category.

Individual Contest

The Individual Contest is held at both the 7^{th} and 8^{th} grade levels and consists of 20 questions to be answered in 40 minutes. All students may compete in the individual contest; students may not compete at more than one level. The 7th grade contest includes arithmetic and early theory of numbers (primes and divisibility only), introductory algebra, basic geometry, and simple probability. The 8^{th} 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 team's total for this event is the sum of the top two contestants' scores in each grade.

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 team can enter two teams, one per 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 team's total for this event is the sum of the two team scores.

Creative Thinking Contest

The Creative Thinking Contest consists of 5 staggered questions to be answered in 25 minutes. Each team may enter up to 4 two-person teams. Each team will have a maximum of one 8th grader. Creative Thinking Contest questions are based on an extension of a normal curriculum and require students to be creative and think "outside of the box". 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 two pairs' scores.

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, students' answers will automatically be submitted. Coaches will be given the ability to submit formal and

written protests through the website. All decisions by the judges and graders are final.

Prizes

Teams will be ranked against each other based on their cumulative score, whose calculation is outlined throughout this document. The schools with the highest cumulative scores will received prizes. Individual scores will also be recorded, so anybody who scored perfect on any contest will also receive some sort of prize. Prize recipients will be given trophies, plaques, t-shirts, and other paraphernalia. Exact prizes and number of prize recipients will be determined once there is a more concrete comprehension of how many participants there are.