2014 IMSA Junior High Math Contest

Outline of Rules

**Basic Guidelines:** The exams given at this contest are designed for two levels — seventh grade, which will include **arithmetic, simple introductory algebra** and very **basic geometry**, and eighth grade, which will include the **same materials** in addition to more **complex algebra** and **additional introductory geometry**. Each student is allowed to use a calculator that is acceptable for use on the **SAT**. (This includes all hand-held, non-printing calculators that do not have a QWERTY-keyboard.) At the start of each competition, all desks must be cleared of everything except for the calculator and writing utensils. **All other materials will be distributed by a proctor**. In the Individual Competition, no materials should be passed from student to student. All questions will be answered in an exact and simplified form unless otherwise specified. If a question seems ambiguous, the student should use his or her best judgment. After each competition 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**.

**Eligibility:** Students may participate at either their **own grade level or one above it**. For example, a seventh grader may participate in the eighth grade events, but an eighth grader may **not** participate in the seventh grade events. Students may participate at different levels in different events. Students below seventh grade may participate in any event.

**Alternates:** Each school may bring up to **four (4)** students from each grade level to compete in the contest as alternates. Alternates will be eligible for individual awards and alternate team awards, but their scores will **not** contribute to the school’s total score. **Please do not bring more than four (4) alternates. Space is limited.**

**Individual Competition:** There will be two levels of individual written competition, seventh and eighth grade. Students may only participate in **one** of the two exams. The student will be given 40 minutes to answer 20 questions. Each school may have up to **eight (8)** participants at each level.

**Team Competition:** Each school may enter **two (2)** four-person teams at each of the seventh and eighth grade levels. Each team may work cooperatively to answer 20 questions in 40 minutes. Each team will turn in a **single** answer sheet.

**Creative Thinking Competition:** Each school may enter up to **eight (8)** teams consisting of two people. Each team must have at least **one (1)** seventh grader. Students will then receive five questions, one at a time, which are based on an extension of a normal curriculum. Examples of this would be **logic puzzles, tangrams, constructions, magic squares, pattern recognition, or manipulation of numbers**. Timing will begin when teams receive their first question. They will have a maximum of **five (5)** minutes to complete the first question. After five minutes, the first question will be collected and the second will be distributed; after **ten (10)** minutes the second will be collected and the third distributed; and so on. Teams may, if they finish a question before the **five (5)** minutes are up, move on and use their extra time on the subsequent questions. Team score will be based upon the number of correct answers. Ties will be **broken** by the amount of time taken to answer all five questions.

**Scoring:** The Individual Competition will have **twenty (20)** questions, each of which is worth **3** points. The total possible individual score is therefore **60** points. The school score will be the sum of the top four scores at each grade level, with a possible total of **480** points. The Team Competition will have **twenty** questions, each of which is worth **6** points. The total possible team score is then **120** points. The school score will be the sum of the four teams' scores, with a possible total of **480** points. The Creative Thinking Competition will have five questions, each of which is worth **12** points, with **partial credit** possibly given. The total possible team score is therefore **60** points. The school score will be the sum of the top four partnerships with a total possible score of **240** points. The highest score a school can accumulate in the entire contest is **1200** points.

**Two Divisions:** This year we will again host **TWO** divisions, **A** and **AA**. The division of the schools is based upon **performance** in past contests. Duplicate awards will be given in each division.

**Speed Round:** The Speed Round will be held in the Auditorium for division AA and in the Lecture hall for division A. The score for this round does not affect the team score. Every student may compete (including alternates), and each student will be given three notecards, on which they are to write their name, grade, and school. A problem will be displayed on the projector, and the student may write down their answer, circle it, and raise it in the air. The first three notecards in the air will be checked by proctors for correctness, and out of the three, the student whose correct notecard was raised first will be invited up to the stage. If an answer is incorrect, the notecard will be taken away. This will repeat until ten students are on the stage. These ten students will participate in a buzzer lock-out style competition with the problem displayed on the projector once again, and the first student to answer a question correctly automatically passes to the next round until five people are selected. Each student may only buzz in once per question. During the next round, the first three pass to the next round, and from there, two are chosen. The two finalists will compete head-to-head for first place in the Speed Round.

**Awards for each Division:** Awards will be given in the Individual Competition to the top **four** individuals in each grade level and the top **two** schools at each grade level. In the Team Competitions, awards will be given to the top **four** teams at each grade level and the top **two** schools. Awards will be given in the Creative Thinking Competition to the top **four** teams and the top **two** schools. Overall awards will be given to the top **three** schools. In the event of ties, **duplicate** awards will be given.