

# **Full Contest Rules**

# Membership

Any team that agrees to abide by these rules will be admitted during any semester, before the first contest, upon application to join the league. Only teams from schools in NYC proper are eligible for awards. Non-NYC teams are encouraged to register and participate unofficially.

#### **Fee Waiver for New Schools**

A school will be considered a new school if it has not competed in the NYCIML within five years of the current competing year. Any new school that decides to join the NYCIML is eligible for a fee waiver. In order to redeem this waiver, please indicate you are a new school on the registration form.

#### Division structure and problem difficulty

Click here to see past contest samples.

There are five divisions of the NYCIML: the Soph-Frosh, Junior A, Junior B, Senior A, and Senior B divisions. Each semester, there will be five Senior A and Senior B meets, and three Junior A, Junior B, and Soph-Frosh meets.

- Senior division problems may involve any topic up to Precalculus mathematics. Questions in the Senior B division will be less difficult than those in the Senior A division. No school may compete in both Senior divisions in the same semester. Specialized High Schools may not compete in the Senior B Division.
- Junior division problems will involve no mathematics beyond that taught in the Algebra I, Geometry, and/or Algebra II New York State Regents syllabus. Questions in the Junior B division will be less difficult than those in the Junior A division. No school may compete in both Junior divisions in the same semester. Specialized High Schools may not compete in the Junior B Division.
- Soph-Frosh division problems will involve no mathematics beyond that taught in the Algebra I and/or Geometry New York State Regents syllabus.

Note that the contests in all divisions will require problem-solving skills and creativity beyond what is typically required to answer textbook-style problems.

### Meet structure, tie-breaking and dropped problems

Each meet will consist of six problems, given in three sets of two problems each. There will be no tie-breaking contests. If a problem must be dropped for any reason (as decided by NYCIML) then a substitute MAY be proposed for a later contest. If this is not feasible, no replacement will be made, and no credit will be given for ANY answer to the discarded problem.

## Team composition and number of teams per school

Teams will consist of five active students, who must be chosen prior to the start of the contest. Once a student is assigned to a team, they may not represent any other team for the rest of the semester. If one of the five team members is absent, a substitute may be chosen prior to the start of the contest.

Schools may field up to three teams in each division at no extra charge. If a team wishes to field more than three teams in one division, there is a charge for each additional team beyond the first three.

For further instruction about score submitting, please visit the <u>NYCIML website</u>. If you have any questions or special situations, feel free to contact us at <u>exec@nyciml.org</u> and we will try our best to help.

#### **Eligibility of Students and Number of Awards**

- Students must be currently enrolled in a member high school (Grade 9-12).
- Any student enrolled in a member school is eligible to participate in any contest in the Senior divisions.
- Students in their Senior year enrolled in a member school that does not field a Senior team may participate in any contest in the Junior division, as long as a majority of the members of the Junior team are in their Junior year of high school. Schools that field a Senior team may not allow a student in their Senior year to participate on a Junior team. Any student not yet in their Senior year may participate on a Junior team.
- Only students taking Algebra I, Geometry, and/or Algebra II in the fall of the school year may participate in the Soph-Frosh division during both the fall and spring semesters.
- A student may compete officially for at most one team each semester. Thus, a student who has competed
  as a member of one team may not also compete as a member of another team in the same semester.
  However, a student who has officially competed for a team may be placed on a different team during the
  following semester.
- A team must participate in all rounds of a given division to qualify for awards for that division.
- A school may win awards in the Senior, Junior, and Soph-Frosh divisions, but no school may win more than one award in any one division, regardless of the number of teams entered by that school.
- In the Soph-Frosh division, Specialized high schools are awarded separately from Regular schools. For any Specialized high school team to be awarded in these divisions, the team must score higher than the highest score from a Regular school team in the respective division. (e.g. if Regular team A has the highest score in the Soph-Frosh division with a semester score of 60 and Specialized teams A, B, and C have semester scores of 56, 70, and 75 respectively, then only Specialized teams B and C are awarded in the Specialized Soph-Frosh division)

## **Contest Procedures**

- 1. PLACE OF ADMINISTRATION: All contests are administered at the team's school on the announced day of the contest.
- 2. PROCTORING: Each contest must be actively proctored in-person at all times by a math teacher. Neither the proctor, nor anyone else, may interpret or explain any problem to any student during the competition.
- 3. CONTESTANT SUBSTITUTIONS: Students officially designated as competing shall be the only ones whose scores are counted towards the team score. These designations must be made PRIOR to the distribution of each meet. These five students are the only ones from the team who have their answers recorded on the official results sheet for that particular meet. These five students must be told BEFORE each meet that their scores will count.
- 4. However, coaches are allowed to have unregistered students take the contest with the registered teams, and we encourage *all* students of the school's math team/club to unofficially take the contest. Most coaches choose to have the registered students sit in one section of the room, so that it is easier to retrieve their answers to the contest questions.
- 5. MATERIALS ALLOWED: Only plain unlined paper, to be supplied by the school, and pencil or pen, may be used by the contestants. No graph paper, compasses, straight edges, rulers, mathematical tables, calculators, or other devices are allowed.
- 6. STARTING TIME: Meets may be held at any time during the scheduled day.

- 7. CONTEST DATES: All meets must be held on the scheduled dates, unless an entire meet is rescheduled or a specific exemption is made by the NYCIML Executive Board due to extraordinary circumstances. If your team needs a meet rescheduled, please don't hesitate to contact us at <a href="mailto:executive-ex
- 8. START OF CONTEST: First, the proctor distributes the first pair of problems, face down, and each contestant writes their name and the date at the top of the sheet. Each contestant must also write the numbers of the two problems being attempted. Answers submitted must appear next to or near the appropriate problem number. Answers written next to the incorrect number or elsewhere receive no credit. The proctor will then ask the students to turn the paper face-up and the proctor will read the two questions aloud one time each in succession. Students cannot be holding any writing utensils while the proctor is reading the questions. Any student caught with a writing utensil is automatically disqualified. The proctor will then signal the start of the contest and record the time. The same procedures shall be followed for succeeding problems. The proctor shall not explain any question to any contestant during the competition.
- 9. WARNINGS: Warnings that "five minutes remain", that "one minute remains", and that "fifteen seconds remain" should be made to all contestants at the appropriate times. No other warnings or announcements (relative to the contest) should be made to any contestant under any circumstances.
- 10. MARKING THE ANSWERS: Any student who continues to write after time has been called will have both their answers disqualified. The answer papers are to be collected, immediately, by the proctor or by a student who will then give them to a proctor. The proctor will then, privately, look at the official answers, read them aloud, and write them on the board. The proctor will then mark each paper and write the scored results for each officially competing team member on the score report form and (if so desired) on the board. Any disagreement as to scoring should be resolved immediately by the proctor. Answers mathematically exactly equivalent to the official answer shall be given credit, except when a specific answer form has been asked for. In that case, that answer form must have been adhered to for the student to receive credit. Answers incomplete in any way receive no credit. No partial credit is allowed. An appealed answer should be scored as an "A" on the report form submitted to the NYCIML. The word "compute" will always call for an answer in the simplest form. Thus final answers like  $\frac{6}{4}$ , 5 + 2,  $2^5$ ,  $\sqrt{25}$ , or  $2 \sin 30^\circ$  would not be satisfactory and should be marked incorrect. In cases where there is a question as to what is 'most simplified,' alternate answers may be accepted (example:  $\frac{3}{2}$ ,  $1\frac{1}{2}$ , and 1.5 are all acceptable). Answers containing radicals should be in the 'simplest' radical form. (No radicands with perfect square factors, no fractional radicands, no irrational denominators).
- 11. RESULTS: Results will be submitted online through the form linked in the contest email. As of September 2014, we no longer require electronic faxing. Email us at <a href="mailto:exec@nyciml.org">exec@nyciml.org</a> if you run into any problems.
- 12. APPEALS PROCEDURES: Appeals may be awarded only on the basis of a disallowed exactly equivalent answer or on the basis of an alternative interpretation of the problem and a correct answer to that interpretation. Alternative interpretations should be mailed to the division coordinator with written substantiation as the acceptability of the interpretation. If there is no answer possible for a question, only the answer "no answer possible", or its equivalent, will be accepted, even though the official answer lists a possible answer. Appeals which cannot be readily handled by the executive board will be forwarded to an appeals judge for review. In the case of a successful appeal, coaches MAY be asked to resubmit scores or the question MAY be thrown out.

#### **Contest Administration**

Questions should be printed and copied and pairs of questions should be cut apart (e.g. 1&2, 3&4, 5&6) into separate sheets.

1. The proctor distributes the slip with the first pair of questions. Students should write their name on the back as well as the numbers of the questions to be answered (e.g. 1. and 2.). Their answers should be recorded next to these numbers. It is helpful to draw a line down the middle as well. The back of the slip should appear like this:

Student's Name

1. (answer to be written here)

2. (answer to be written here)

- 2. Proctor asks students to turn over their slips, but they may not write yet. The proctor proceeds to read both questions out loud.
- 3. As soon as they are done reading, the proctor starts a 10-minute timer and students may begin working.
- 4. Verbal warnings are given at 5 minutes, 1 minute, and 15 seconds. All answers must be recorded before time is called.
- 5. The answer slips are collected. Answers may be given to students at the end of each round, or after all three rounds have been completed.
- 6. Repeat 1-5 for rounds 2 and 3 of the contest.