SMO/SJMO Instructions

Summer Mathematics Competitions

July 27 to August 24

§1 On Test Taking

The problems on the SMO and SJMO are in fact disjoint, so you may submit for both. The following instructions apply to both of them.

1. There are six equally weighted problems, for which you will be allowed a total of nine hours split into two 4.5 hour intervals between July 27 and August 17. You will be allowed 4.5 hours for Problems 1, 2, and 3, and 4.5 hours for Problems 4, 5, and 6. During each session, carefully look over all the problems. Pay attention to the total time you allocate to each problem.

2. You will be scored on your method of approach, clarity of reasoning, evidence of ingenuity, inventiveness, and general insight. To obtain full credit, all the claims in your solution must be PROVED. When in doubt, you should include details rather than leave them out. If you feel that a problem is not stated clearly, note this on your answer sheet and try to make a non-trivial restatement of the problem. Then try to solve the restated problem. An unusually elegant proof or a carefully stated nontrivial extension with proof contributes to your style score, which may break an eventual tie.

3. Your papers should be CLEAR, CONCISE, COMPLETE. This includes MATHEMATICAL CLARITY, GOOD ENGLISH, and LEGIBILITY. Points will be deducted for inadequate or poorly written explanations, as well as for incorrect mathematics. Therefore, use scratch paper before writing the solutions you submit, and submit ONLY the final work you wish to have graded. Solutions written in languages other than English will most likely not be graded.

4. Note that for any geometry problems marked with an asterisk ($*$), the first page of the solution must be a large, to-scale, clearly labeled diagram. Failure to meet this requirement will result in an automatic 1 point deduction.

5. NO notes, headphones, books, graph paper, protractors, slide rules, mathematical tables, or calculating devices are allowed during the exam. In particular, computer assistance such as using GeoGebra, WolframAlpha, or Desmos is strictly prohibited. The only instruments permitted are writing (pen, pencil, eraser) and drawing instruments (ruler and compass)

6. The SMO and SJMO are graded more strictly than most school examinations, so it is typical for students to overestimate the scores they will receive. The decisions of the graders are final and may not be appealed.

§2   On Submission

After completing one day's problems, you should submit your solutions via AoPS private message. If you submit for more than one day or one test, please use the same private message.

At the top of every submitted page, write your AoPS username, the test name and problem number, and the page number of the current answer sheet out of the total number of pages for its problem. For example, "example_username, SJMO 4, Page 2 of 3" is the correct label for the second page of example_username's three-page solution to problem four on the SJMO.

Send your scanned copies via AoPS private message to cosmicgenius, jj_ca888, and willwin4sure. If your scanned copies exceed the 500-megabyte limit, you may upload them to a file-sharing site and share with us the link.

These are the formats in which you may submit your solutions:

1. **On Paper (Recommended)** You may write up your solutions on paper and scan/take a photo of them. Make sure your writing is LEGIBLE and written DARKLY, keeping in mind it is a scanned copy being graded, not the original. It is advised that you leave a sizeable margin (about 1 inch). After scanning, ensure that your writing is readable. A sharp #2 pencil or black ink pen works best for scanning.

2. **On a LaTeX Document** If it is really hard for you to scan or take photos of your solutions, you may compile your solution in a LaTeX document. Solutions must be written out on paper **during** the testing window, and then directly transcribed (with no changes) to LaTeX **after** the time is up. Required geometry diagrams can be created using software such as Asymptote or GeoGebra, but only **after** the time limit is up, during transcription.

Good luck!