

CAMO/CJMO Instructions

The CMC Committee

January 10 to February 3, 2020

§1 Test instructions

1. There are six equally weighted problems, for which you will be allowed a total of nine hours, to be taken in two contiguous intervals from Friday, January 10, 2020 to Monday, February 3, 2020. You will be allowed 4.5 hours for Problems 1, 2, and 3, and 4.5 hours for Problems 4, 5, and 6. Each problem should be started on a new answer sheet. You may write only on one side of each answer sheet. During each session, carefully look over all the problems. Pay attention to the total time you allocate to each problem.
2. Be sure that you are working on problems for the correct competition. If you submit solutions for both the CAMO and the CJMO, you will not receive credit for both. The problems on the CAMO and CJMO intersect, so you may not take both exams.
3. You will be scored on your method of approach, clarity of reasoning, evidence of ingenuity, inventiveness, and general insight. In order to obtain full credit, all the claims in your solution must be proven. When in doubt, you should include details rather than omit them. Examination of special cases or generalizations may lead to fruitful ideas on how to begin a problem, and partial credit may be given for constructive progress toward a solution. An unusually elegant proof or a carefully stated non-trivial extension with proof may play a role in breaking an eventual tie.
4. Your solutions should be CLEAR, CONCISE, and COMPLETE. This includes MATHEMATICAL CLARITY, GOOD ENGLISH, and LEGIBILITY. Points will be deducted for inadequate or poorly written explanations, as well as 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.
5. No notes, headphones, cell phones, tablet computers, books, graph paper, protractors, slide rules, mathematical tables, calculators, calculator watches, Wolfram Alpha, or any other external resources are allowed during the exam. The only instruments permitted are writing and drawing instruments (ruler and compass).
6. The CAMO and CJMO are graded more strictly than most school examinations, so it is typical for students to overestimate the scores they will receive. Unlike the USAMO/USAJMO, the decisions of the graders are NOT final and may be appealed within two days of your scores being returned. Appeals will only be considered in cases where a student believes his or her solution is essentially correct but received a low score. Before appealing, please review the comments on your solution the grader left. After a successful appeal, the graders may adjust the score for that problem, either higher or lower, and that score cannot be further contested. All problem scores will be publicly released.

§2 Submission instructions

After completing one of the two days, you should submit your solutions. If possible, use the same private message for both submissions. You may submit your solutions in one of two ways.

§2.1 On Paper (Recommended)

1. You may write up your solutions on paper and scan them. Allocate a space in the upper right-hand corner of your answer sheets for your AoPS username, the CAMO/CJMO problem number (for example, CAMO 2 and CJMO 4 are valid problem numbers), the page number of the current answer sheet with respect to its problem, and the total number of pages you are submitting for said problem.
2. Make sure your writing is LEGIBLE and written DARKLY, keeping in mind it is a scanned copy being graded, not the original. After scanning, ensure that your writing is readable. A sharp #2 pencil or black ink pen works best for scanning.
3. The scanned copies of your solutions must be converted into a PDF file format. Use an AoPS private message to send your scanned copies to TheUltimate123, who will share your solutions with the rest of the graders. If your scanned copies exceed the 500 megabyte limit, you may upload them to a file-sharing site and share with us the link. Note that in this scenario, we will download your solutions as soon as we get the chance, so you will be unable to edit your solutions after submitting.
4. For any diagram-based geometry problems, the first page of the solution must be a large, in-scale, clearly labeled diagram made using geometry tools such as straightedges and compasses. Failure to meet this requirement will result in an automatic 1-point deduction.

§2.2 L^AT_EX Document

1. You may compile your solution in a LaTeX document. Make sure that in your document is your AoPS username, and ensure that it is clear what you are submitting for each problem.
2. Your solutions must be converted into a PDF file format. Use an AoPS private message to send your compiled solution to TheUltimate123, who will share your solutions with the rest of the graders. If your compiled copies exceed the 500 megabyte limit, you may upload them to a file-sharing site and share with us the link. Note that in this scenario, we will download your solutions as soon as we get the chance, so you will be unable to edit your solutions after submitting.
3. For any diagram-based geometry problem, on the first page of the solution must be a large, in-scale, clearly labeled diagram, made in one of the following ways.
 - A diagram compiled by Asymptote or TiKZ,
 - A screenshot of a diagram created by an external program, such as Geogebra or AsyPad.
 - A scanned image (use `\includegraphics`) of the diagram you used during the testing window.

Note that if any of the first two options are used, the diagram **must be compiled after the testing window**. During the testing window, you are not permitted to use any programs to generate diagrams. The included diagram should be as similar as possible to diagram you would submit if you were scanning your diagram. Failure to meet this requirement will result in an automatic 1-point deduction.

Good luck!