



Instructions to be Read by USAMO/USAJMO Participants

- 1** At the top of each page, you must write your Student ID number (found on the cover sheets your teacher gave you), the problem number, and the page number in the format from 1 to 'n', where 'n' is the number of pages for the solution to that problem. For example:
Student ID 123456 Problem 1 Page 1 of 2
Do NOT write your name or school anywhere on the answer sheets; all your papers must be anonymous at the time of the grading.
- 2** There are six equally weighted problems, for which you will be allowed a total of nine hours. You will be allowed 4.5 hours on Tuesday, March 21, 2023 (between 1:30 pm–7:00 pm ET) for Problems 1, 2 and 3, and 4.5 hours on Wednesday, March 22, 2023 (between 1:30 pm–7:00 pm ET) for Problems 4, 5 and 6. Each problem should be started on the answer sheet that corresponds to that problem number. You may write only on the front of the sheet. During each session, carefully look over all the problems. Pay attention to the total time you allocate to each problem.
- 3** Be sure that you are working on problems for the correct competition. If you are registered for the USAJMO, you will not receive credit for answering questions on the USAMO and if you are registered for the USAMO, you will not receive credit for answering questions on the USAJMO.
- 4** 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 **PROVED**. When in doubt, you should include details rather than leave them out. 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.
- 5** Your papers should be **CLEAR, CONCISE, COMPLETE**, and written **DARKLY**, keeping in mind it is a scanned copy being graded, not the original. 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 not be graded. Please leave a 1 inch margin on all sides of the Answer Sheet and on any additional pages and write **DARKLY** and **LEGIBLY**, so your scanned copy can be easily read. A sharp #2 pencil or black ink pen best works for scanning.
- 6** NO notes, headphones, cell phones, tablet computers, books, graph paper, protractors, slide rules, mathematical tables, calculators, or calculator watches are allowed during the exam. The only instruments permitted are writing and drawing instruments (ruler and compass). Students learning English as a second language, who are taking the USAMO or USAJMO for the first time, are permitted to use a non-technical translation dictionary during the exam. However, the proctor must examine and keep the dictionary in their possession for the 24 hours preceding the USAMO and USAJMO competitions. Your Competition Manager must scan and upload your ordered solutions and cover sheets to the competition administration portal.
- 7** The USAMO and USAJMO will be administered in two sessions. Students should come prepared with lunch and/or snacks because there is no lunch break during the exam (exceptions will be made for restroom breaks). Your competition proctor is required to be present during the entire course of the exam for your papers to be valid, but is not permitted to answer any questions about the test. You are not allowed to talk to any other student while the exam is in progress. 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.
- 8** You will start the competition when your proctor gives the signal. When the 4.5 hours are up, immediately cease writing. Double-check that your ID Number on your solution sheets is correct. Next, immediately place a problem cover sheet in front of each solution (e.g., the cover sheet for Problem 1 will be on top of the solution pages for Problem 1) and hand your ordered submissions to your competition manager.
- 9** You may keep the problem sheets. Solutions and your total score will be in your competition manager's portal after the competition.
- 10** The USAMO and USAJMO 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.