

**INSTRUCTIONS AND INFORMATION FOR THE ADMINISTRATION OF the
LXVII MATHEMATICAL OLYMPIAD**

Updated: 17th February 2016

Instruction for a person responsible for administering the 2nd round of the 67th
MATHEMATICAL OLYMPIAD

I. The administrator should provide the following information before handing out problem sets.

1. The participant's questionnaire should be filled in online (it is recommended to do it on the day of the contest shortly after coming home, or in case of non-residents at the contest venue). It is important to make sure that everybody is aware that not complying with the above requirement may enable the participants to have access to their grades, or appeal against the results.

2. Make sure that the participants have the required number of sheets for making fair copies, and enough sheets of scrap paper to make rough drafts.

3. Each fair copy should include the following information (use capital letters):

- a) participant's starting number,
- b) name and surname,
- c) two-letter district code.

Make sure that the participants' starting numbers comply with the list that will be sent to you.

4. All sheets have to be signed.

5. The number of the Olympiad and numbers of particular problems should be provided in the right place (on the second day of the contest draw attention to the fact the numbers of problems are 4,5 and 6).

6. The solutions should be provided:

- a) only on the second and third side of the fair copy (the fourth side should remain blank),
- b) only on one side of additional sheets.

7. The following information should be provided on additional sheets: 'fair copy of the problem...' or 'rough draft of the problem...'.

8. All the rough drafts (together with the solutions) should be returned (make sure that the drafts correspond to the appropriate solutions).

9. The pages should be numbered: 'problem...page...'.

10. Pencils and red colour are not allowed on fair copies (a pencil can be used only to make drawings).

11. Calculators and other electronic devices are not allowed.
 12. The cell phones have to be turned off.
 13. Inform the participants that they may not talk to each other, no questions can be asked loud during the contest and no one can walk around without permission. If anyone wants to ask about something he/she should raise a hand and wait.
 14. The students can use math tables officially allowed at the Matura exam.
 15. Inform the students where and when they can get back the money spent on travel.
 16. Students should be present when the contest problems and the solutions are discussed.
 17. Other information regarding the contest.
- II. The proctor has to inform the students that they are not allowed to leave the room during the first two hours of the of the contest, and during the last quarter.
- III. Make sure that steps 4,5 and 6 are carried out.
- IV. Inform the participants that they can appeal against the results and provide them with the appropriate regulation ('Information for the participants...'). Make sure that everybody knows that he/she can appeal only via the internet using a special form (the form will be available in the system servicing the participants).
- V. Hand out the problem sets.
- VI. Announce that the contest will last 300 minutes. Write ending time on the board.
- VII. Make sure that the rough drafts are attached to the appropriate solutions.
- VIII. On the first day of the contest (or it is even advisable to do it one day before the contest) confirm that all the internet questionnaires have been filled in in accordance with the instructions. Ensure that no parts of the questionnaires are missing.
- IX. In case the questionnaires have not been filled in properly, or some information is missing ensure that the necessary corrections are made after the first day or before the second day of the contest. Make sure that students have access to a reliable computer and the internet.

Awards in second round contests

The Head Committee will decide about the grades that will entitle the students to automatically receive an award for solving the problems in the second round of the contest (the grades have to be standardized). Then, the appropriate district committees will make decisions about awards in the second round contests.

If appeals are accepted you will receive a list of participants with the right grades, and you will be informed about the threshold entitling students to get an award. You will then be responsible for:

- giving additional awards to those students who did not reach the required threshold,
- inform the students from your district that they have received awards,
- send the final list of all students who have received awards to wwwom@mimuw.edu.pl until the 15th April at the latest.

Instructions for the secretaries of district committees regarding the procedure of evaluating the solutions in the second round problems (LXVII Mathematical Olympiad)

- I. The following should be done before the contest:
 - a) provide the missing information about the students on the list that will be sent to you (this regards mainly their schools grades),
 - b) if the list of students who were admitted has changed since the meeting, the secretaries of district committees are obliged to inform me about the changes immediately. The updated list will be send back to you via e-mail.
 - c) arrange for the files and stick the labels that you will receive by e-mail on each file (two labels should be stuck on each, one on the cover and the other on the edge).
1. The following should be done during the contest:
 - a) provide the participants with a copy of ‘Instructions for the participant’ (in fact, these are the rules regarding the procedure of appealing against the results).
2. The following should be done after the contest:
 - a) the solutions should be sorted by the problems they refer to; then they should be arranged in accordance with the starting numbers and put in the appropriate files,
 - b) ensure that the persons responsible for grading the solutions put the remarks concerning mistakes made by students on their works,
 - c) the students’ grades should be entered into Excel spreadsheet (students’ list). If the two grades of a given students’ work are different* they should be slashed e.g. 2/5 where the lower grade should be provided on the left (5/2 is incorrect). **[Each paper is graded by two independent members of the district committee]**. Remember not to print any spreadsheet.
 - d) It is of utmost importance that you carefully check that the grades that were entered into the spreadsheet are in compliance with the grades on students’ works. It happened in the past that the wrong grades were entered into spreadsheet. Such mistakes may affect the participants’ chances to be qualified for the final round.
 - e) Send a list with grades to the following address: wwwom@mimuw.edu.pl on February 29th in the evening at the latest (one day before the solutions are sent to the Head Committee).
 - f) Use a courier firm to deliver the files containing the students’ works that have been graded to the Head Committee. Make sure they are delivered on the 1st of March at the latest.
 - g) If you have any queries please do not hesitate to contact me as soon as possible at the following e-mail address: wwwom@edu.pl (recommended address), or my private e-mail address: matusiak.aleksander@gmail.com in case you have problems with the recommended address.

Thank you

Aleksander Matusiak

LXVII Mathematical Olympiad
Information for the participants of the second round

1. Solutions to the problems are graded on the scale 0,2,5,6.
2. The sum of all grades is the only criterion taken into account while qualifying students for the final round.
3. The students that have been qualified to take part in the final round will be informed via post delivered to their home address.
4. Students will have access to the results (learn about their grades) on the internet at www.om.edu.pl from March 18th using the account used while filling in the questionnaire.
5. Appeals against the results must be submitted only using an appeal submission form until March 21st (the form will be available on the internet one day after the final results have been announced at the latest). Each appeal should contain factual information concerning the protest. In situations when the information concerning the appeal cannot be provided in the required form (it may, for example, contain drawings) please send it by e-mail (you can scan it or enclose a good quality photo of the handwritten remarks or illustrations) to: wwwom@mimuw.edu.pl with a heading 'Appeal-additional explanation' (also indicate this in the appropriate part of the form). Appeals sent only via e-mail, without filling in the form available on the internet, will be dismissed.
6. Appeals made by students who have not been qualified to take part in the final round will be considered only if the students' sum of grades might meet the qualification criteria.
7. The final results that will be announced on the internet on March 29th.

Grading system in Mathematical Olympiad – second round

The following grades are used in Mathematical Olympiad:

6 – Student gives a correct and complete solution with a clear, coherent and elegant explanation. He/she shows understanding of the mathematical ideas and processes. The work may include minor errors.

5 – Student completes the problem, but the explanation may be muddled or argumentation may be incomplete. However, the solution shows that the student understands the underlying mathematical ideas and despite some more serious flaws his/her work can be accepted.

2 – Student completes only half of the problem. Errors and/or serious flaws (major fault) disqualify the solution, which is an important part of the problem.

0 – Answer is incorrect and/or contains serious errors e.g. explanation is not understandable. The student shows no understanding of the problem situation or fails to indicate which information is appropriate to the problem etc., which disqualifies the attempt to solve the problem.

The above descriptions do not precisely define the criteria used to evaluate the solutions. However, they may be used to calculate the grades.

Beware that the above scale does not include the following grades: 1,3,4. The participants should be listed according to the grades they received.