

# REGULATIONS

## OF THE 16th JUNIOR BALKAN MATHEMATICAL OLYMPIAD (37 articles)

1. The aims of the Junior Balkan Mathematical Olympiad (JBMO) include:
  - a. The challenging, encouragement and development of mathematically gifted school students in all participating member countries;
  - b. The fostering of friendly relations among the students and teachers of the member countries;
  - c. The creation of opportunities for the exchange of information of school syllabuses and practices within the member countries.
2. The official language of the JBMO is English.
3. The JBMO is organized once every year within the period of June 23 to June 30. The member countries are: Albania, Bosnia & Herzegovina, Bulgaria, Cyprus, Hellas, Former Yugoslav Republic of Macedonia, Republic of Moldova, Montenegro, Romania, Serbia and Turkey. Care should be taken so that no country will be hindered from participating in the JBMO because of major religious holidays.
4. The JBMO can only be organized in one of the member countries and only member countries can officially participate in the contest.
5. New member countries have to be accepted unanimously by the Jury at least one year before participation.
6. If a member country is absent from a JBMO contest for reasons beyond its control, the member country can veto the approval of a new country within three months after the last JBMO meeting.
7. The country organizing a JBMO may invite guest teams to participate, either from its own country or from another country, provided that the guest team is participating unofficially and outside the JBMO competition. In order to invite such guest teams the organizing country has to ask all the members for a "no objection" reply at least two months before the competition takes place and the member countries have to reply within a week. In case a member country objects to the invitation of a guest team then such a team cannot be invited.
8. Each year there will be a JBMO Committee consisting of three members, representatives of the country organizing the current, the coming JBMO (Chair), the country that organized the JBMO the year before, and the country planned to organize the JBMO the following year. The new JBMO Committee becomes effective immediately after the end of the closing ceremony of the last JBMO.
9. The JBMO Jury consists of all leaders of the member countries and its Chairman (Chairperson), appointed by the host country.
10. Each member country has one vote in the Jury.
11. All decisions by the Jury are based on simply majority unless it is otherwise specified. The Chairman votes when a tiebreak is needed.
12. If a member country cannot send a team of contestants to certain JBMO, it may send a representative, which could participate in the Jury with the right to vote.
13. Deputy leaders may participate in the Jury without right to vote (and they may also replace their leader in his/her absence).
14. The Jury may consider and decide on any matter raised, which is not covered by any other regulation item.
15. New regulations may be added by a recommendation of the Jury in which case at least two-thirds majority is needed. New regulations become effective from the beginning of the next JBMO.
16. The Chairman of the Jury may call as many Jury meetings as he/she seems necessary during a JBMO or when at least one third of the member countries request an additional Jury meeting.

17. The minutes of the Jury meetings are approved at the last meeting of the Jury and before the closing of the JBMO. The chairperson of the JBMO Jury is obliged to submit the minutes of the Jury meeting to the next chairperson within three months after the closing of the JBMO.
18. Every member country should try to organize a JBMO every  $n$  years, where  $n$  is the number of member countries.
19. Proposals to organize JBMO are made during a Jury meeting and approved by the Jury. The Jury shall always approve the host countries of the next two JBMO's. A member country is eligible to organize a JBMO provided that it has participated at least three times at a JBMO. The proposal shall be submitted by the team leader of member country and it should be accompanied by a written proof of financial support for the event by pertinent organization(s) from this country.
20. Invitation should be sent by the host country with the responsibility of Chairman of the JBMO Committee at least three months before the contest day and it should include:
  - a. An invitation for up to six students from each country. Students must be under the age of 15.5 at the day of the contest.
  - b. An invitation for up to two teachers (leader and deputy-leader).
  - c. A call for up to five proposals with a deadline of one month before the contest date.
  - d. The Chairman of the following JBMO may be invited in addition to the above mentioned.
21. The schedule of the JBMO should not exceed 6 nights and it should be sent at least one month before the JBMO.
22. Each organizing country must ensure food and accommodation for all invited participants.
23. The JBMO contest shall take place during one day and should have duration of 4 1/2 hours continuously. The contest shall consist of four problems, each scoring 10 points for a total of 40 points maximum.
24. Each country, except the host country, can propose up to five problems and they should be mailed to the Chairman of the Jury at least one month before the day of the event. The proposed problems should include their solutions and the field of mathematics covered.
25. The problems of the contest should be chosen from the following topics: Algebra, Geometry, Number Theory, Combinatorics, at an elementary level.
26. The proposed problems are given to the Problem Selection Committee appointed by the Chairman. of the Jury. The Problem Selection Committee should prepare a short list of at least 16 problems proposed and submit it to the Jury for the final problem selection. The rest of the proposed problems are kept confidential and returned to the team leader of the country which has proposed them.
27. The days before the contest, the leaders, the Chairman of the Jury and the members of the Problem Selection Committee shall meet and accommodate at a place different and at distance from the place where the students stay. During this meeting the final contest paper will be decided and approved, translated into different languages and approved and multiplied for the contest. No member of this Committee may communicate by any means with any person other than the members of this meeting and no telephone calls will be allowed until the contest begins. If it is found absolutely necessary for someone to make a phone call, this will have to be done at the presence of at least two leaders from different countries other than the one organizing the JBMO.
28. Each student contestant may submit solutions in the language of his/her choice. Solutions may be written only on paper provided by the Organizing Committee.
29. Each student contestant must work independently. Violation of this provision will result in disqualification of the student from the JBMO. The organizing country should make provisions for preventing the use of any dishonest means during the contest.
30. Student contestants are not permitted to bring any books or papers or calculators into the examination rooms. The only instruments permitted in the contest are writing and mechanical drawing instruments. Any student contestant making use of any prohibited item may be disqualified from the JBMO.

31. Only during the first half-hour of the examination period, each student contestant may submit, on special notepaper provided, written questions for consideration by the Jury. Each paper with such questions shall be given, first to the Chairman of the Jury, and then to the team leader of the country from which the student comes. The leader will translate the question into English and will propose an answer. If the Jury approves the answer, the leader will write the answer on the paper with the student contestant question. This paper shall be given to the Chairman of the Jury for verification before it is returned to the student contestant who submitted the question.
32. The student contestant's solutions will be assessed first by the leader and deputy leader. The official scores are decided by the coordinators appointed by the host country. For each problem the leader and the head of the problem coordinator team shall agree on the score for each problem for each contestant. This score shall be recorded on an official score sheet and signed by the leader and the head of the problem coordination team.
33. A leader may appeal an assigned score for a specific problem to the Chief Coordinator. If the two cannot agree, the appeal and the reason for rejecting the appeal will be forwarded to the Jury for final decision.
34. For each problem, the coordination of the solutions by the contestants from the organizing country shall be verified in the presence of the leader from the country which submitted the problem.
35. The types of prizes to be awarded are: first prizes, second prizes and third prizes. Special prizes may be awarded to particularly meritorious and elegant solutions. A certificate of Honorable mention shall be awarded to each student contestant who does not receive a prize and who has gained full marks on at least one question. The total number of prizes should be approximately two thirds of the total number of the contestants participating, and the first, second and third prizes will be distributed in a ratio closely approximating 1:2:3. The contestants from guest teams shall be awarded with Prize Certificates in addition to the above mentioned and according to the official award ranks.
36. A certificate of participation shall be given to all student contestants, leaders, deputy leaders and coordinators.
37. No country can violate or modify a regulation without the agreement of all member countries.