

## **Open Croatian Competition in Mathematics 2011.**

Mathematical Contest for Highschool Students of  
South Eastern Europe

*Nobody is stronger than a man who knows!*

Japanese proverb

### **1. Background**

Gifted individuals are the future propeller of society. Encouraging their curiosity, enabling progress and awakening passion guarantees a long-term development of the community.

Gifted young mathematicians develop their skills through a system of education which relies mainly on work with their teachers (during the academic year) and various organizations dedicated to the same goal. The results of all the students' hard work and motivation are shown in local, regional, national and international competitions. It is our wish to spark cooperation and friendship between the students of the region, as well as the competitive spirit necessary for a good competition. Friendship, exchanging of ideas and mutual inspiration of students with common interests are invaluable aspects of education we would like to offer them.

These goals give rise to the concept of **Open Croatian Competition in Mathematics**. We would like the competition to eventually become a traditional gathering of gifted individuals from across the region and, as such, an inspiration to many like initiatives.

### **2. Open Croatian Competition in Mathematics**

#### **2.1. The Idea**

The goal of OCCM is to establish an international cooperation concerning work with gifted students and to gather the best competitors of each participating country,



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giving them an opportunity to cooperate and solve demanding problems in a motivating surrounding. It would also be a good preparation for other official competitions, as it replicates the conditions under which students usually compete.

## **2.2. Competition**

OCCM will be held in two rounds. The first round will take place in the weeks from March 10th to March 24th in every participating school, which would organize the event and send the results to our organization.

The second, final round, will be held in August 12. - 14. as a part of Young mathematicians' summer camp 2011. in Pazin. The best student from each of the participating countries will be invited to compete in the final round.

## **2.3. Implementation**

The competitors will be divided among three categories: first grade, second grade and third and fourth grade in one common category.

Each participant will face a set of four demanding problems, with the level of difficulty depending on the category. In order to fully imitate the conditions from well-known competitions, problems will be chosen from the four commonly occurring fields: algebra, number theory, geometry and combinatorics.

Allowed solving time is four hours.

## **3. Additional content**

### **3.1. Field trip**

After the competition, which will be held in the morning, the participants will have a chance to go on a fun and relaxing field trip. With its rich cultural heritage and beautiful landscapes, Istria gives a great many possibilities for this.



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### **3.2. Popular-scientific lecture**

The goal of the lecture is to give the students an insight to some aspects of modern science and to welcome respected scientists who will, with their lectures, additionally motivate the students to enjoy science.

On August 12th, a lecture will be given by professor Jakša Cvitanić, currently a financial mathematics professor at Caltech, and one of the leading experts in the field.

### **3.3. Prizes**

All participants of the final round will be given awards depending on the score they achieve solving assignments. Apart from written recognitions of their score, the best students will be awarded books which will help them in future education.

## **4. Participants**

All students from the region of Southeastern Europe are eligible for the competition. This includes Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Greece, Macedonia, Moldavia, Montenegro, Romania, Slovenia, Serbia and Turkey.

Judging by experience we had in the previous years, we expect about a hundred students will participate in the first round. As only the best students from each country compete in the final round, the expected number of competitors is twelve.



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## **5. Competition Promoters**

### **5.1. Organizers**

Open Croatian Competition in Math is organized by non-governmental organization **Young Gifted Mathematicians “Marin Getaldić”** members of which are former competitors – young, yet experienced and enthusiastic people. Their ultimate goal is to provide opportunity for young people to broaden their knowledge and to bring awareness of the importance of mathematics to a wider audience. Organization’s mission is to introduce new approach to the education of with young gifted mathematicians based on innovative ideas, young people and friendship. Organization’s activities and ideas were recognized by many including Education and Teacher Training Agency of Croatia, IBM, Ericsson Nikola Tesla along with Croatian Informatics Organization. Further information is available on the following webpage: <http://www.getaldic.org>.

Organization’s main objectives are:

- promotions of mathematics science
- education of young mathematicians and preparation for mathematical competitions
- promotion and acknowledgement of organization members’ achievements
- distinguishing of gifted students and raising awareness for mathematics of students in general

### **5.2. Host School**

Host school, **Pazin college – classic gymnasium**, provides accommodation for students in a facility which is – during the school year – used as student’s dormitory, and is – over the summer – free. The students’ rooms are four-bed whereas the teachers are accommodated in single rooms. Host school provides students and teachers with 4 meals daily. Furthermore, on organization’s disposal are well equipped classrooms with computer and projector, computer rooms and gym.

Further details can be found on the following webpage: <http://www.pazinski-kolegij.hr/>



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## **7. Application Process**

Please fill in the form available under the following link:

<https://spreadsheets.google.com/viewform?>

[formkey=dG92M0lSUU45Nnl1ZmJ4SUhCRkNrRXc6MQ](https://spreadsheets.google.com/viewform?formkey=dG92M0lSUU45Nnl1ZmJ4SUhCRkNrRXc6MQ)

Please fill in all the required fields. Further instructions as well as details on the organizational part will be sent via e-mail. In case of any problems or confusion feel free to reach us at one of the e-mails listed below.

## **8. Contact**

For further information or any questions feel free to contact us:

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