

Contest 1 results

For the full five hours of proceedings, team leaders, friends, trainers and parents all over the world could watch the live results from Contest 1 on the competition website. The online version showed how contestants' placings changed depending on their points scored. Contest 1 began at 9.00 am Moscow Time, and from 10.00 am students anywhere in the world could test their abilities by trying to solve the tasks from IOI 2016.

| ✓ Rank | First Name | Last Name | Team | 1 | 2 | 3 | Day 1 | Global | ✓ Rank | First Name | Last Name | Team | 1 | 2 | 3 | Day 1 | Global |
|--------|----------------|---------------------------|------|-----|-----|-----|-------|--------|--------|------------------|----------------------------------|------|-----|----|----|-------|--------|
| 1 | Zuofan | Wu | | 100 | 100 | 100 | 300 | 300 | 49 | Nenad | Bauk | | 100 | 34 | 31 | 165 | 165 |
| 2 | Ce | Jin | | 100 | 100 | 97 | 297 | 297 | 49 | Marcel | Bezdrighin | | 100 | 34 | 31 | 165 | 165 |
| 2 | Vladislav | Makeev | | 100 | 100 | 97 | 297 | 297 | 49 | Sanzhar | Bidaibek | | 100 | 34 | 31 | 165 | 165 |
| 4 | Mikhail | Putlin | | 100 | 100 | 71 | 271 | 271 | 49 | Joakim | Blikstad | | 100 | 34 | 31 | 165 | 165 |
| 5 | Takuya | Inoue | | 100 | 34 | 97 | 231 | 231 | 49 | Phirasit | Charoenchitseriwong | | 100 | 34 | 31 | 165 | 165 |
| 5 | Zhizhou | Ren | | 100 | 34 | 97 | 231 | 231 | 49 | Clarence Xuan Da | Chew | | 100 | 34 | 31 | 165 | 165 |
| 7 | Yikuan | Li | | 100 | 34 | 93 | 227 | 227 | 49 | Andrea | Ciprietti | | 100 | 34 | 31 | 165 | 165 |
| 8 | Ta-Jui | Ho | | 100 | 34 | 71 | 205 | 205 | 49 | Rajat | De | | 100 | 34 | 31 | 165 | 165 |
| 8 | Jaroslav | Kwieceń | | 100 | 34 | 71 | 205 | 205 | 49 | Kefan | Dong | | 100 | 34 | 31 | 165 | 165 |
| 8 | Encho | Mishnev | | 100 | 34 | 71 | 205 | 205 | 49 | Alexandra | Drozдова | | 100 | 34 | 31 | 165 | 165 |
| 8 | Nguyen | Pham Cao | | 100 | 34 | 71 | 205 | 205 | 49 | Man Hou | Hong | | 100 | 34 | 31 | 165 | 165 |
| 8 | Mateusz | Radecki | | 100 | 34 | 71 | 205 | 205 | 49 | Liran | Markin | | 100 | 34 | 31 | 165 | 165 |
| 8 | Hristo | Venev | | 100 | 34 | 71 | 205 | 205 | 49 | M Beshar | Massri | | 100 | 34 | 31 | 165 | 165 |
| 14 | Ali | Behjati | | 100 | 64 | 38 | 202 | 202 | 49 | Péter | Memyei | | 100 | 34 | 31 | 165 | 165 |
| 14 | Hyunsoo | Kim | | 100 | 64 | 38 | 202 | 202 | 49 | Lucca | Moraes de Arruda Slaudzonis Pang | | 100 | 34 | 31 | 165 | 165 |
| 14 | Nurbakyt | Madibek | | 100 | 64 | 38 | 202 | 202 | 49 | Wen Yuen | Pang | | 100 | 34 | 31 | 165 | 165 |
| 14 | Jacob Por Loo | Teo | | 100 | 64 | 38 | 202 | 202 | 49 | Artur | Pelukhouski | | 100 | 34 | 31 | 165 | 165 |
| 18 | Denis | Solonkov | | 100 | 64 | 31 | 195 | 195 | 49 | Andrei | Popa | | 100 | 34 | 31 | 165 | 165 |
| 19 | AmirMohamm | Dehghan | | 100 | 64 | 23 | 187 | 187 | 49 | Seungwon | Shin | | 100 | 34 | 31 | 165 | 165 |
| 19 | Malvika Raj | Joshi | | 100 | 64 | 23 | 187 | 187 | 49 | Georgy | Skhirtladze | | 100 | 34 | 31 | 165 | 165 |
| 19 | Jonathan | Khoo | | 100 | 64 | 23 | 187 | 187 | 49 | Théophane | Vallaëys | | 100 | 34 | 31 | 165 | 165 |
| 19 | Arash | Mahmoudian Bidgoli | | 100 | 64 | 23 | 187 | 187 | 49 | Jeffrey | Xiao | | 100 | 34 | 31 | 165 | 165 |
| 19 | Declan | McDonnell | | 100 | 64 | 23 | 187 | 187 | 74 | Tomer | Adar | | 100 | 34 | 23 | 157 | 157 |
| 19 | Askhat | Sakhabiev | | 100 | 64 | 23 | 187 | 187 | 74 | Mikhail | Anoprenko | | 100 | 34 | 23 | 157 | 157 |
| 25 | Domagoj | Bradac | | 100 | 64 | 9 | 173 | 173 | 74 | Filip | Bialas | | 100 | 34 | 23 | 157 | 157 |
| 26 | Adrian | Beker | | 100 | 34 | 38 | 172 | 172 | 74 | Hou Tin | Chau | | 100 | 34 | 23 | 157 | 157 |
| 26 | Daniel | Chiu | | 100 | 34 | 38 | 172 | 172 | 74 | Chuanye | Chen | | 100 | 34 | 23 | 157 | 157 |
| 26 | Andrei-Costin | Constantinescu | | 100 | 34 | 38 | 172 | 172 | 74 | Gabriel | Cojocar | | 100 | 34 | 23 | 157 | 157 |
| 26 | Richard | Gong | | 100 | 34 | 38 | 172 | 172 | 74 | Nodir | Daminov | | 100 | 34 | 23 | 157 | 157 |
| 26 | Fedar | Karabeinikau | | 100 | 34 | 38 | 172 | 172 | 74 | Carl | Dybdahl | | 100 | 34 | 23 | 157 | 157 |
| 26 | Jaehyun | Koo | | 100 | 34 | 38 | 172 | 172 | 74 | Ahmed | EIBatanony | | 100 | 34 | 23 | 157 | 157 |
| 26 | Aleksandar | Kraslev | | 100 | 34 | 38 | 172 | 172 | 74 | Márton | Erdős | | 100 | 34 | 23 | 157 | 157 |
| 26 | Vladimir | Maksimovski | | 100 | 34 | 38 | 172 | 172 | 74 | Carlos | Galeana Hernández | | 100 | 34 | 23 | 157 | 157 |
| 26 | Jerry | Mao | | 100 | 34 | 38 | 172 | 172 | 74 | Mahmoud | Hassan | | 100 | 34 | 23 | 157 | 157 |
| 26 | Seyed Parsa | Mirtahteri | | 100 | 34 | 38 | 172 | 172 | 74 | Hannes | Ihalainen | | 100 | 34 | 23 | 157 | 157 |
| 26 | Mikhail | Natalevich | | 100 | 34 | 38 | 172 | 172 | 74 | Stacia Edina | Johanna | | 100 | 34 | 23 | 157 | 157 |
| 26 | Stanislav | Naumov | | 100 | 34 | 38 | 172 | 172 | 74 | Azret | Kenzhaliev | | 100 | 34 | 23 | 157 | 157 |
| 26 | Costin-Andrei | Oncescu | | 100 | 34 | 38 | 172 | 172 | 74 | Florian | Leimgruber | | 100 | 34 | 23 | 157 | 157 |
| 26 | Juliusz | Pham | | 100 | 34 | 38 | 172 | 172 | 74 | Lawrence | Li | | 100 | 34 | 23 | 157 | 157 |
| 26 | Minh | Phan Duc Nhat | | 100 | 34 | 38 | 172 | 172 | 74 | Kalle | Luopajarvi | | 100 | 34 | 23 | 157 | 157 |
| 26 | Grigoriy | Reznikov | | 100 | 34 | 38 | 172 | 172 | 74 | Ilya | Medyanikov | | 100 | 34 | 23 | 157 | 157 |
| 26 | Daniel Peter | Rutschmann | | 100 | 34 | 38 | 172 | 172 | 74 | Zoltán Gábor | Molnár-Sáska | | 100 | 34 | 23 | 157 | 157 |
| 26 | Mushegh | Shahinyan | | 100 | 34 | 38 | 172 | 172 | 74 | Levon | Muradyan | | 100 | 34 | 23 | 157 | 157 |
| 26 | Yuta | Takaya | | 100 | 34 | 38 | 172 | 172 | 74 | Angelos | Pelecanos | | 100 | 34 | 23 | 157 | 157 |
| 26 | Toomas | Tennisberg | | 100 | 41 | 31 | 172 | 172 | 74 | Aleksejs | Popovs | | 100 | 34 | 23 | 157 | 157 |
| 26 | Phat | Tran Tan | | 100 | 34 | 38 | 172 | 172 | 74 | Ingus | Pretkalniņš | | 100 | 34 | 23 | 157 | 157 |
| 26 | Václav | Völhejn | | 100 | 34 | 38 | 172 | 172 | 74 | Dhruv | Rohatgi | | 100 | 34 | 23 | 157 | 157 |
| 26 | Bo-Syu | Yu | | 100 | 34 | 38 | 172 | 172 | 74 | Aristofanis | Rontogiannis | | 100 | 34 | 23 | 157 | 157 |
| 49 | Nazarbek | Altybay | | 100 | 34 | 31 | 165 | 165 | 74 | Samuel | Sládek | | 100 | 34 | 23 | 157 | 157 |
| 49 | Rogério | Aristida Guimarães Junior | | 100 | 34 | 31 | 165 | 165 | 74 | Yik Chun | Wong | | 100 | 34 | 23 | 157 | 157 |
| 49 | Filippo Gianni | Baroni | | 100 | 34 | 31 | 165 | 165 | 74 | Farbod | Yadegarian | | 100 | 34 | 23 | 157 | 157 |
| | | | | | | | | | 74 | Hao-Cheng | Yang | | 100 | 34 | 23 | 157 | 157 |
| | | | | | | | | | 74 | Zi Song | Yeoh | | 100 | 34 | 23 | 157 | 157 |
| | | | | | | | | | 74 | Tsz Fung | Yu | | 100 | 34 | 23 | 157 | 157 |

One down, one to go

We heard from some of the participants about how they found Contest 1 of IOI 2016.

Israel: We liked the first question best – we all did well on it. Basically, you were given a number sequence and had to find the interval value between them.

Canadian team leader Troy Vasiga: Training for the Olympiad was very tough, but worth it. Our team are ready



Romania: The first task was quite easy but the second two were hard, which is why right now we're in a stressful situation: many contestants are on the same number of points in the table after the first round. When I read the third task I thought "Ouch!" - if I managed to cope with the first task, then for the third I had absolutely no idea. For the second one you needed a moment of brilliance to help you. I don't think anyone got 300 points today!



to solve any problem. It's a shame we'll have a different team next year. What issues have I had in my work? We had some trouble yesterday translating the text, but fortunately everything was resolved.



10 years of the IOI Conference

IOI 2016 falls on a significant date, as it marks the 10th anniversary of the IOI Conference. In 2007 the IOI society made the decision to hold a conference for team leaders and deputy team leaders of IOI participating countries. The conference was created as a platform for sharing different countries' experiences in developing gifted schoolchildren in the field of IT and holding national olympiads in informatics. The journal *Olympiads in Informatics* also came about as a result of the conference, and contains articles on olympiad informatics, methods of teaching IT in schools and innovative models of IT education.

It could be said that over these 10 years the conference and journal have formed a scientific and pedagogical IOI society, one which actively develops unique methodological experience in the field of school and olympiad informatics and which is open to all countries. On the website www.ioinformatics.org there is an electronic archive of journal articles presented at IOI Conferences for all 10 years.

There are two editions of the journal at IOI 2016 – a tenth-anniversary edition and a special edition detailing Russia's experience of school

informatics. The special edition was initiated and edited by Marina Tsvetkova (Moscow, Academy for Improved Qualifications, www.apkpro.ru), who is also team leader of the Russian team. Much work is done in Russia to improve the quality of IT teaching in schools, but unfortunately abroad we know little about the work of Russian academics and Russian teaching methods for informatics. The IOI Conference, which features team leaders from the 86 countries participating in the International Olympiad, is an excellent opportunity to learn first-hand how Russia is training its future specialists in IT. Russia's experience is also valuable as the Russian team is consistently one of the top performers at the International Olympiad in Informatics.



*Valentina Dagiene, Head of the IOI Conference, editor-in-chief of the journal *Olympiads in Informatics*, professor at Vilnius University (Lithuania)*





IOI 2016 Contest 1 complete

On 14 August, around 9.00 am, the murmur of voices and careful shuffling of papers filled the competition hall. A few moments later and you could have heard a pin drop. Volunteer invigilators fanned out throughout the hall, so cheating was out of the question. 310 contestants from all over the world together under one roof. Above them soared the flags of 86 countries, all linked together into one in a symbol of unity and cohesion.

Tradition

The staples of Russian cuisine

No picture of Russia can be complete without experiencing some of its cuisine. Our culinary cheat-sheet will help you make sense of the most traditional dishes:

Bliny - round flour pancakes made from a batter. Bliny can be enjoyed with or without a filling, but the best are with red caviar.



Smetana - a dairy product made of sour cream.

Okroshka - a cold soup (usually with kvass) with meat, egg, herbs, cucumber, potato and radishes.



Kulebyaka - a closed, usually oval-shaped pie with meat, fish, rice, cabbage or mushrooms.



Schi - a soup made with fresh or boiled cabbage in either meat, fish or mushroom stock or water. Potato, onion and carrot are added, and it is served with smetana.



Varenye - a dessert made from boiling fruits or berries with sugar to make a preserve. Varenye is boiled in such a way that the ingredients retain their shape.



Kvass - a slightly bitter drink made from rye bread and water.

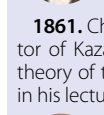
Some useful phrases

| ENGLISH | RUSSIAN | TATAR | ENGLISH | RUSSIAN | TATAR |
|---------|------------------|---------------------------|---------|-------------------|-----------------|
| WEATHER | погода [pogoda] | һава торышы [hava torıſı] | HEAT | тепло [teplo] | жылы [zilı] |
| RAIN | дождь [dozhd'] | яңгыр [jəŋgır] | HOT | жарко [zharko] | кызу [kızı] |
| WIND | ветер [veter] | җил [zil] | COLD | холодно [holodno] | салкын [salkın] |
| SUN | солнце [solntse] | кояш [kojaſh] | SNOW | снег [sneg] | кар [kar] |
| CLOUD | облако [oblako] | болыт [bolıt] | FROST | мороз [moroz] | суык [suık] |
| | | | STREET | улица [ulitsa] | урам [uram] |

Kazan University: our greatest discoveries



1856. Astronomer **Marian Kowalski** (1821-1884) proves that stars make up a single system without a single massive body in the centre determining their movement. He developed a more accurate model of Neptune's orbit and catalogued over 4200 stars.



1861. Chemist **Alexander Butlerov** (1828-1886), rector of Kazan University from 1860-1863, sets forth his theory of the chemical structure of organic substances in his lecture "On the chemical structure of substances".



1869. Chemist **Vladimir Markovnikov** (1837-1904) develops Butlerov's theory, discovering patterns of mutual influence between atoms in organic compounds. Earlier, in 1865, he discovered the isomerism of fatty acids.

WEATHER FORECAST

15 August, Monday

Day ☀️ +34 C / 93.2 F Night 🌙 +25 C / 77 F