

In my opinion, mathematics is closer to art than to other sciences. I am interested in the lives and philosophy of some famous mathematicians, and I particularly like the views of Hardy. One of my favourite quotes from him is: 'Beauty is the first test: there is no permanent place in the world for ugly mathematics.' He also said that he doesn't care about the applications of his work, and there would not be any. On the contrary, he did lay down the foundations of cryptography. That is another thing I find very interesting: no matter how 'useless' a mathematical topic seems, it might be very applicable in the future.

For the last six years, I have been attending the special mathematics class of Fazekas Mihály Secondary School, often considered the strongest of its kind in the country. Since then, I have always had amazing and enthusiastic teachers, and it is also a very motivating atmosphere, where I am surrounded by like-minded and kind students. My star started rising when I got 2nd place in the KöMaL (Mathematical Journal for High Schoolers) B contest in 9th grade, in which I have participated every year ever since. This year I finished 2nd in the National Olympiad, and I also participated in two international competitions: at the Romanian Masters in Mathematics I won a bronze medal, and at the IMO I won a gold medal, which has been a dream of mine for a really long time.

I think one of the best parts of being good at maths is participating in maths camps, where one can make lifelong friendships with people of similar interests, and learn about new mathematical topics. I started attending the weekend camps of Lajos Pósa in 10th grade, which take place twice a year. There we mainly learn about combinatorics, such as infinite sets or strategy-stealing. Last year I also went to Maths Beyond Limits camps in Poland and Bosnia and Herzegovina, where I had the chance to think together with clever people from all over the world, which I enjoyed a lot. In MBLs, I learnt a lot about higher-level maths like the Prime number theorem and Continuous functions, which I enjoyed a lot.

I think that mathematical research is very different from competitions, but I have tried some things similar to research as well and I found it similarly (or even more) entertaining. With one of my friends, we found a new proof for a hard Euclidean Geometry statement, Fontené's second theorem. The whole project took us 3 months, on the way I had some doubts we could solve the problem, but I enjoyed the process all the way. It was also really nice to work as a team, alone neither he nor I would have had the chance to figure out the proof. For one year we learnt about Hyperbolic Geometry. It was an interesting and very enjoyable new experience when it comes to maths, because it was quite a bit different than anything else I had ever seen before. A couple of weeks ago, I managed to find a cool proof of the fact that the sum of square roots of some prime numbers is always irrational.

Apart from participating in competitions, I also like creating new contest problems. I have proposed five problems to KöMaL A and B contests so far, and three of them have already been accepted and published in the competition.

In my free time, besides doing maths, I also enjoy teaching it. For one year, I prepared students for their admission test to my school, and I also love explaining intriguing maths problems to my younger brothers. I like hanging out with friends. We go climbing every week and play chess in the afternoon twice a week. Sometimes we participate in challenging hikes: last year we completed the 'Kinizsi 100as', where we walked 100 kilometres in less than 24 hours. Although I like a lot of sports, table tennis is by far my favourite, I have been playing it competitively for six years.

I would love to study in the UK because I would like to explore a new country and be part of a community where the brightest minds from all over the world get together.