

Report on the Nineteenth Annual UNB-CMS Math Camp

The nineteenth edition of the UNB-CMS Math Camp at the University of New Brunswick, Fredericton, took place May 3-5 2018. The residential camp is an exercise in enrichment and an opportunity to recruit young people into mathematics and related fields. The Camp seems not to be a significant recruitment tool for UNB; however campers consistently state on exit surveys that the Camp increases their interest in mathematics and that they intend to study math, science, or engineering after high school.

This year we had 7 female students and 19 male students from across the province. Students from grades 10 and 11 are selected for the most part based on past success in the NB Mathematics Competition (grades 7-9) or in the Canadian Open Mathematics Competition (COMC). The female-to-male ratio seems to be stubbornly resistant to change in spite of our efforts. Accommodation and meals are our greatest expenses. We cover all weekend expenses, although students' families are responsible for transportation to and from Fredericton.

Revenue	
CMS	3000
NB Dept. of Education	2500
Total	5500
Expenses	
Chaperones	1003.86
Accommodation	1204.50
Meals	2279.20
Snacks	324.40
Gym rental	55
Guest speaker travel	91.55
Total	4958.51

During the 52 or so hours that students were on site we had several engaging problem-solving sessions which saw students working in small groups (and meeting peers from other schools in other parts of the province) and presenting their solutions to the group. We had several guest speakers visit the camp, including a visiting speaker from UNBSJ, giving talks on topics such as game theory, geometry, and symmetry. On Friday evening we played an energetic round of "Basketball math" at the gym, which was an excellent ice-breaker and encourages group participation in solving problems that get progressively more challenging. We also had a panel discussion with three UNB undergraduate students, discussing what it's like to study math at university.

At the end of the Camp we ask students to fill out surveys; these provide us with helpful suggestions for improvements to the camp, but also are very rewarding to read, as students consistently state that they are more interested in mathematics as a result of attending the Camp. Here are some particularly encouraging quotes:

“The camp is so fun, it helps students to develop interest in math and gives students who are interested in math an opportunity to communicate with each other and to improve together. I love this camping experience, I’m sure others like it too. Please keep it going!”

“I think [the camp should be continued] because usually at school a lot of people do not really like math so if you ever want to talk to someone about an interesting problem that you found, it is very hard to find the right person. I think camps like this one are a unique opportunity to meet people of similar mind set and I wish that there were more of them.”

“I believe that this program sparks interest and introduce[s] different fields that needs math. We began to realize how important math is in our future studies. . . It is also a chance for us to meet new people and develop new friendships.”

We will be continuing this valuable outreach project in 2019, and beyond. A little more information is available at <http://www.math.unb.ca/camp/>.

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