



Canadian Mathematical Society
Société mathématique du Canada



RAPPORT DES CAMPS MATHÉMATIQUES

2020

MATH CAMPS REPORT

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ABOUT CMS MATH CAMPS

À PROPOS CAMPS MATHÉMATIQUES DE LA SMC

Since its inception in 2000, the CMS Math Camps program continues to capture the spirit of mathematics from coast to coast and to inspire young minds across the land. The program offers a unique opportunity for young Canadian students to explore a side of mathematics that is not accessible in a classical classroom setting. Although the CMS gives local organizers the freedom to choose the topics and activities of their camps, the main goal of a typical camp is to engage students in an authentic learning environment in mathematics and its broad applications to Science, Technology and Engineering. This is achieved through stimulating presentations, hands-on activities, building projects and competitions. Students who attend the camps leave with new friends who share the same passion for the subject, new ideas to explore, and a fresh outlook on mathematics and the role it plays in our lives.

Due to the COVID-19 pandemic, many camps had to cancel in 2020, a total of 10 camps were held

across Canada 3 of which were carried out online. Organizers are encouraged to engage students from visible minority communities and to have as many gender balanced camps as possible. Like in previous years, CMS Camps were a combination of weekend camps, day camps and week-long overnight camps. Some specialty camps such as Yukon Calculate This! camp for Northern and Indigenous students were able to continue their program with some adjustments to conform to public health protocols. There were two firsts this year, despite the crisis: the CMS was able to sponsor a specialty math camp for children on the spectrum this year; an all-girls national camp was organised online with the help of CMS volunteers to train Olympiad hopefuls and encourage participation of female students in international mathematical competitions. Two national training camps were held in person prior to COVID shut down: EGMO participants were trained at the Fields Institute in Toronto and IMO and EGMO hopeful participated in the national camp held in winter 2020 at York University.

Depuis sa création en 2000, le programme de camps mathématiques de la SMC continue de diffuser l'esprit des mathématiques d'un océan à l'autre et d'inspirer les jeunes esprits de tout le pays. Le programme offre une occasion unique aux jeunes canadiens d'explorer un aspect des mathématiques auquel ils n'ont pas accès dans une salle de classe ordinaire. Bien que la SMC laisse les organisateurs locaux choisir les sujets et les activités de leurs camps, l'objectif principal d'un camp typique est de faire participer les élèves à un milieu d'apprentissage authentique en mathématiques et à ses vastes applications en science, en génie et dans les technologies. Cet objectif est atteint grâce à des présentations stimulantes, des activités pratiques, des projets de construction et des concours. Les élèves qui participent aux camps se font de nouveaux amis animés d'une passion commune pour le sujet, ils ont de nouvelles idées à explorer ainsi qu'une nouvelle perspective des mathématiques et de leur rôle dans nos vies.

Plusieurs camps ont dû annuler en 2020 en raison de la pandémie de COVID-19. Au total, 10 camps

ont été organisés un peu partout au Canada. Les organisateurs sont encouragés à inciter la participation des élèves de minorités visibles et à offrir le plus possible des camps auxquels participent autant de garçons que de filles. Comme les années précédentes, les camps de la SMC étaient des camps de fin de semaine, des camps de jour ou des camps d'une semaine. Certains camps spécialisés, comme Calculate This!, le camp de mathématiques de Yukon, avec quelques modifications pour respecter les protocoles de la santé publique. Malgré la pandémie mondiale, il y avait deux nouveautés cette année : Pour la première fois, la SMC a parrainé un camps spécialisé pour les élèves atteint de troubles du spectre autistique; grâce à l'aide des bénévoles de la SMC, la Société a aussi organisé un camps d'entraînement pour les filles afin d'encourager leur participation à des concours internationaux. Deux camps nationaux ont été organisés avant le confinement en 2020, le camps d'entraînement pour les olympiennes participant à l'OEMF qui a eu lieu l'Institut Fields à Toronto et un camps national pour les espoirs Olympiades à l'Université York.

140 Campers

140 Campeurs.euses

44% Girls

56% Boys

44% Filles

56% Garçons



1 Regional Camp

5 Specialty Camps

4 National Camp

1 Camp régional

5 Camps spécialisés

4 Camps nationaux

2020 REGIONAL CAMP

UNIVERSITY OF REGINA MATH CAMP

LOCATION: UNIVERSITY OF REGINA, REGINA, SK

DATE: FEBRUARY 29, 2020

PARTICIPANTS: 44 GIRLS AND 57 BOYS

GRADES: 1-10

CAMP LEADER: PATRICK MAIDORN



University
of Regina



TOPICS: GEOMETRIC CONSTRUCTIONS AND SPIROLATERALS; MATHEMATICAL TREASURE HUNT; PUZZLES; NETWORK THEORY; DICE PROBABILITY; INSURANCE MODELS; HYPERBOLIC GEOMETRIES AND BINARY COMPUTING



2020 SPECIALTY CAMPS

CALCULATE THIS! (GROUP A)



LOCATION: YUKON UNIVERSITY, WHITEHORSE, YK

DATE: AUGUST 3-7, 2020

PARTICIPANTS: 4 GIRLS AND 12 BOYS

GRADES: 3-4

CAMP LEADER: YUKON YOUTH MOVING MOUNTAINS

TOPICS: BOARD GAMES, PROBLEM SOLVING, PROGRAMMING, BUSINESS IDEAS.



CALCULATE THIS! (GROUP B)

LOCATION: YUKON UNIVERSITY, WHITEHORSE, YK

DATE: AUGUST 10-14, 2020

PARTICIPANTS: 8 GIRLS AND 8 BOYS

GRADES: 6-7

CAMP LEADER: YUKON YOUTH MOVING MOUNTAINS

TOPICS: BOARD GAMES, PROBLEM SOLVING, PROGRAMMING, BUSINESS IDEAS.



2020 SPECIALTY CAMPS

IAMSS_MATH CAMP

LOCATION: I AM SMART S-COOL!, THORNHILL, ON

DATE: JULY 13-17, 2020

PARTICIPANTS: 1 GIRL AND 7 BOYS

GRADES: 1-4

CAMP LEADER: OLESSIA KOTKO

TOPICS: SHAPE SCAVENGER HUNT, CANDY CONSTRUCTION, SCIENCE PROJECTS



2020 NATIONAL CAMPS

CANADA MATH CAMP

LOCATION: UNIVERSITY OF TORONTO, TORONTO, ON (ONLINE)

DATE: JULY 6-10, 2020

PARTICIPANTS: 6 GIRLS AND 19 BOYS

GRADES: 8-10

CAMP LEADER: TERESA GONG

TOPICS: THE CAMP IS FOCUSED ON PREPARING STUDENTS FOR THE CANADIAN MATHEMATICAL OLYMPIAD (CMO) AND THE INTERNATIONAL MATHEMATICAL OLYMPIAD (IMO), SO MOST OF THE LEARNING TIME WAS DEDICATED TO HIGHER LEVEL CONCEPTS IN MATHEMATICS RELEVANT TO THE CONTESTS.



UNIVERSITY OF
TORONTO



2020 NATIONAL CAMPS



CANADA MATH CAMP

LOCATION: YORK UNIVERSITY, TORONTO, ON

DATE: JANUARY 7 - 12, 2020

PARTICIPANTS: 5 GIRLS AND 11 BOYS

GRADES: 10-12

CAMP LEADERS: DR. DORETTE PRONK, ALEX SONG, BYUNG CHUN

TOPICS: THE CAMP IS FOCUSED ON TRAINING OLYMPIAD HOPEFULS SO MOST OF THE LEARNING TIME WAS DEDICATED TO HIGHER LEVEL CONCEPTS IN MATHEMATICS RELEVANT TO THE CONTESTS.



2020 NATIONAL CAMPS

EGMO TRAINING CAMP

LOCATION: FIELDS INSTITUTE, TORONTO, ON

DATE: JANUARY 7 - 12, 2020

PARTICIPANTS: 6 GIRLS

GRADES: 10-12

CAMP LEADERS: DR. DORETTE PRONK, DIANA CASTAÑEDA SANTOS

TOPICS: THE CAMP IS FOCUSED ON TRAINING THE EUROPEAN GIRLS' MATHEMATICAL OLYMPIAD TEAM SO MOST OF THE LEARNING TIME WAS DEDICATED TO HIGHER LEVEL CONCEPTS IN MATHEMATICS RELEVANT TO THE CONTESTS.



FIELDS INSTITUTE
FOR RESEARCH IN MATHEMATICAL SCIENCES



2020 NATIONAL CAMPS



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EGMO SUMMER TRAINING CAMP

LOCATION: VIRTUAL

DATE: JANUARY 7 - 12, 2020

PARTICIPANTS: 17 GIRLS

GRADES: 10-12

CAMP LEADERS: DR. DORETTE PRONK, ALEX SONG

TOPICS: THE ALL-GIRLS CAMP IS FOCUSED ON TRAINING EGMO AND IMO HOPEFULS SO MOST OF THE LEARNING TIME WAS DEDICATED TO HIGHER LEVEL CONCEPTS IN MATHEMATICS RELEVANT TO THE CONTESTS.

The screenshot shows a Zoom meeting interface. At the top, there is a header bar with "Zoom Meeting" on the left and "Speaker View" on the right. Below this is a grid of 17 video thumbnails, each showing a different participant. The participants are mostly young women, some with their hands raised. At the bottom of the screen, there is a control bar with buttons for "Mute", "Stop Video", "Security", "Participants" (19), "Chat" (4), "Share Screen", "Record", "Breakout Rooms", and "Reactions". Below the control bar is a Windows taskbar with a search bar and various application icons. In the bottom right corner, there is a notification that says "Screenshot saved" and "The screenshot was added to your OneDrive." with the date and time "2020-07-15 5:15 PM".

2020 MATH CAMPS SPONSORS

The CMS gratefully acknowledges the support of our sponsors, who help make the CMS Math Camps program possible.

