

Carrefour des sciences / Université du Québec à Rimouski Dalhousie University
Simon Fraser University (Burnaby)
Simon Fraser University (Surrey)
Sir Wilfred Grenfell College University of Alberta
University of Manitoba
University of New Brunswick
Université d'Ottawa / University of Ottawa
University of Prince Edward Island
University of Regina
University of Western Ontario
York University

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# CMS 2008 National Math Camp 

John Abbot College<br>Ste. Anne de Bellevue, QC

July 6-12, 2008

# Math Camp Report - 2008 CMS National Math Camp 

Organizer's Name: Daniel Gatien
Email: daniel.gatien@johnabbott.qc.ca
Phone: 514-457-6610 ext. 5840

Name of Camp: 2008 CMS National Math Camp
Camp Location: John Abbott College, Ste-Anne-de-Bellevue, QC
Date of Camp: July 6-12, 2008

Type of Camp: Residential Camp (RC)
Camp Length: 6
Number of Female Students: 3
Number of Male Students: 14
Number of Teachers:
Number of Aboriginals:
Number of participants from within 50 km :
Number of participants from within the province:
Number of participants from outside the province: 17
Grade Level(s) of Students: 9, 10
Camp Website URL (if available):
Materials Description:
Handouts consisting of mainly of problem sets for the various sessions (eventually supplemented with solutions) and, for some sessions, brief notes.

## Selection Process:

Most of the campers were selected from among the highest scores (for grades 9 and 10) on the COMC. Some flexibility was used in the selection process to bring the number of female campers to an acceptable level.

Organizer's Comments:
On the survey given on the last day, students rated the various aspects of the camp very favourably. After last year's camp, it was felt that a more stringent selection process (and therefore fewer campers) would be more consistent with the camp's goal of finding and helping to train future olympians. This decision largely paid off this year, although a larger than usual number of very promising students were unable to accept our invitation to attend. One new feature of the camp appears to have contributed to maintaining the motivation of the campers: about halfway through the camp, each camper was convened for a short meeting with staff to discuss various academic aspects of the camp.

Number Indicating Increased Interest in Math science or engineering:

Number considering math, science or engineering careers:

Total Income: 5950 (registration fees)
Total Income from CMS: 0

Total Expenses: 9895
Accommodation Expenses: 4520
Meal Expenses: 3203
Honoraria: 0
Prizes and Office Supplies: 0
Student Assistance: 1000

Other Expenses: 1000 (staff travel expenses) +172 (misc.)
Will you hold a camp next year: No
Submitted: November 7, 2008

| National Math Camp Schedule |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Monday July 7 | Tuesday July 8 | Wednesday July 9 | Thursday July 10 | Friday July 11 |
| 8:15-8:45 | Breakfast | Breakfast | Breakfast | Breakfast | Breakfast |
| Morning session 9:00-12:00 <br> Pause: 10:15-10:30 <br> Fun talk: 11:30-12:00, Mon. to Thurs. | The Pigeonhole Principle and other tricks (Daniel Gatien) | Number theory: <br> Diophantine equations <br> (Taotao Liu) | Circle geometry (Sarah Sun) | Triangle geometry (Keigo Kawaji) | Problem-solving seminar (Keigo Kawaji) |
| 12:00-12:30 | Lunch | Lunch | Lunch | Lunch | Lunch |
| 12:30-1:00 | Free | Free | Montreal visit12:30-9:00 | Free | Free |
| $\begin{gathered} \text { Afternoon session } \\ \text { 1:00-4:00 } \\ \text { Pause: } 2: 15-2: 30 \\ \text { Fun talk: 3:30-4:00, } \\ \text { Tues. and Thurs. } \end{gathered}$ | Number theory: Modular arithmetic (Taotao Liu) | Parity and symmetry (Sarah Sun) |  | Combinatorics <br> (Robert Bilinski) | Mock olympiad |
| 4:00-5:30 | Sports | Sports |  | Sports | Talent show |
| 5:30-6:00 | Free | Free |  | Free |  |
| 6:00-6:30 | Dinner | Dinner |  | Dinner |  |
| 6:30-7:30 | Math videos | Math videos |  | Math videos | Dinner |
| 7:30-10:00 | Free (reading, problems or sports) | Free (reading, problems or sports) |  | Free (reading, problems or sports) | Closing event |
| 10:00-11:00 | Back in your rooms | Back in your rooms | Back in your rooms | Back in your rooms | Back in your rooms |
| 11:00 | Lights out | Lights out | Lights out | Lights out | Lights out |

# CMS 2008 Regional Math Camps 

Newfoundland and Labrador Sir Wilfred Grenfell College<br>Corner Brook

April 28-30, 2008

## CMS Mathcamp Report - SWGC Math Camp 2008

Organizer's Name: Aleksandrs Aleksejevs
Email: aaleksejevs@swgc.mun.ca
Phone: 709-660-0568
Name of Camp: SWGC Math Camp 2008
Camp Location: Corner Brook, NL
Date of Camp: April 28-30, 2008

Type of Camp: Residential Camp (RC)
Camp Length: 2
Number of Female Students: 13
Number of Male Students: 17
Number of Teachers: 0
Number of Aboriginals: 0
Number of participants from within $50 \mathrm{~km}: 12$
Number of participants from within the province: 18
Number of participants from outside the province: 0
Grade Level(s) of Students: Level 1
Camp Website URL (if available):
Materials Description:
Camp program and guidlines, puzzle book, Memorial University Viewbook, SWGC Viewbook, Grenfell Connects Vol, Issue 1.

Selection Process:
Selection process was determined by the nominations coming from the teachers of local schools. All participants where Level 1 students.

Camp Program Upload: C:\Organization\Math_Camp_2008\mathcamp_program.pdf [attached to report as campprog.pdf]

Organizer's Comments:
SWGC Math Camp 2008 was in general very successful. Students were actively involved in various mathematical challenges. Some participants expressed a high interest in mathematics. Math Camp also generated number of mathematics related discussions among High School Students, SWGC Math faculty and senior students. To improve future Math Camps at SWGC we would like to host a Math Camp website with online registration. This way, communication with future participants will be more dynamic.

Number Indicating Increased Interest in Math science or engineering: 23
Number considering math, science or engineering careers: 18

Other Students' Comments:
"Overall, I had a really great time. The professors were very kind and helpfull. Also I met many other wonderfullmath students."
"I really enjoes this camp. There were many interesting math questions provided and I learned many new math skills. It was very nicely organized."
" I think Math Camp is amazing, the way it is done and all the teachers they had make learning new things more interesting."

Total Income: 3278.81

Total Income from CMS: 1000
Other Income Details:
SWGC Principal Office financed all the expenses above the income from CMS (2278.81 CAD).
Total Expenses: 3278.81
Accommodation Expenses: 1220.00

Meal Expenses: 1839.40
Honoraria: 0.0

Prizes and Office Supplies: 219.41
Student Assistance: 0.0
Other Expenses: 0.0

Will you hold a camp next year: Yes
Expected Date: End of April 2008
Next Year's Contact’s Name: Aleksandrs Aleksejevs
Next Year’s Contact’s Email: aaleksejevs@swgc.mun.ca
Next Year's Contact's Phone Number: 709-660-0568
Submitted: September 23, 2008

## Sir Wilfred Grenfell College Math Camp 2008 Program

| Date | Time | Event |
| :---: | :---: | :---: |
| Monday, April $28^{\text {th }}$ | 5:30 pm | Registration |
|  | 6:15 pm | Welcome/Introduction |
|  | 6:30 pm | Math Relay - Rick MacLeod (Gymnasium) |
|  | 8:00 pm | Nutrition Break |
|  | 8:30 pm | Sudoku Challenge - Amar Sodhi (AS328) |
|  | 9:30 pm | Pizza Party - Residence Lounge |
| Tuesday, April $29^{\text {th }}$ | 8:00 am | Breakfast at Treat's - Food Court |
|  | 9:00 am | Georg Gunther (AS328) |
|  | 10:00 am | The Fibonacci Sequence - Ron Richards |
|  | 11:00 am | Nutrition Break |
|  | 11:15 am | Math Competition - (AS328) |
|  | 1:15 pm | Lunch - Food Court |
|  | 2:15 pm | Are some infinities more infinite than others? - Yevgeniy Vasilyev (AS328) |
|  | 3:15 pm | Kevin Hamilton - (TBA) |
|  | 3:45 pm | Nutrition Break |
|  | 4:00 pm | A Journey to Flatland, Lineland, and Other Mind-Bending Dimensions: The Math I Wish I Learned in High School - <br> Thomas Cochrane (AS328) |
|  | 4:30 pm | Computer Tools for Mathematics - Rob Gallant (Comp. Lab) |
|  | 5:30 pm | Tour of Campus |
|  | 6:15 pm | Internet Time (Comp. Lab) |
|  | 6:30 pm | Dinner at Treat's - Food Court |
|  | 7:30 pm | Treasure Hunt - Rob Gallant |
|  | 10:00 pm | Swimming - the pool |


| Wednesday, April $30^{\text {th }}$ | 8:00 am | Breakfast at Treat's - Food Court |
| :---: | :---: | :---: |
|  | 9:00 am | Doug Forbes -(TBA) |
|  | 10:00 am | What can you make with your birth year? - Ian Payne (AS328) |
|  | 10:30 am | Solution to Selected Problems - Amar Sodhi (AS328) |
|  | 11:00 am | Nutrition Break |
|  | 11:15 am | Problems in Graph Theory: Maps \& Bridges - <br> Rebeca Keeping (AS328) |
|  | 11:45 am | Math Jeopardy with quiz-master - Rick MacLeod (AS325) |
|  | 1:00 pm | Lunch, Awards and Farewell - Food Court |

# CMS 2008 Regional Math Camps 

Prince Edward Island<br>University of PEI<br>Charlottetown

May 2-4, 2008

# CMS Mathcamp Report - University of Prince Edward Island 

Organizer's Name: Shafiqul Islam \& George Morrison
Email: sislam@upei.ca
Phone: 9025666499

Name of Camp: CMS Math Camp 2008
Camp Location: Department of Mathematics and Stats., UPEI, Charlottetown, PE, canada
Date of Camp: May 2 -- May 4, 2008

Type of Camp: Residential Camp (RC)
Camp Length: 2 nights (3 days)
Number of Female Students: 9
Number of Male Students: 7
Number of Teachers:
Number of Aboriginals:
Number of participants from within 50 km :
Number of participants from within the province: 16
Number of participants from outside the province:

Grade Level(s) of Students: Grade 10 and Grade 11
Camp Website URL (if available):
Materials Description:
Paper, pencils/pens, Math problem sheets, T-shirts
Selection Process:
High schools in PEI were asked to nominate up to three grade 10 and Grade 11 students to participate in the camp. An invitation was given to at least one student from high schools which expressed interest in sending a student to the camp. Sixteen students who were formally invited to the Math camp participated in the event.

Organizer's Comments:
It was a very successful event. Many students were interested in participating the Math camp. Financial support were not enough to invite all interested students.

Number Indicating Increased Interest in Math science or engineering: 16

Number considering math, science or engineering careers: 16
Total Income: 2,200.00
Total Income from CMS: 1,000.00

Other Income Details:
Department of mathematics and Stats (UPEI): 500.00
Dean, faculty of sciences, UPEI : 700.00

Total Expenses: 2,200.00
Accommodation Expenses: 1,200.00

Meal Expenses: 900.00

Honoraria: 100.00

Prizes and Office Supplies: 0

Student Assistance: 0

Other Expenses: 200.00

Will you hold a camp next year: Yes

Expected Date: May 2009
Next Year's Contact's Name:
Next Year’s Contact’s Email: sislam@upei.ca
Next Year’s Contact’s Phone Number: 9025666499

Submitted: October 24, 2008

# Report on CMS Math Camp 2008 University of Prince Edward Island May 2-4, 2008 

Department of Mathematics and Statistics at University of Prince Edward Island was pleased to host one of the regional CMS Math Camps in May 2008. Talented grade 10 and grade 11 students from the province participated this math camp. It was a very successful residential math camp. This was the fourth time UPEI department of Mathematics and Statistics hosted CMS regional math camp. High schools in PEI were asked to nominate up to three grade 10 and Grade 11 students to participate in the camp. An invitation was given to at least one student from high schools which expressed interest in sending a student to the camp. Sixteen students who were formally invited to the Math camp participated in the event.

Most of the faculties and some senior undergraduate students (Ali, Catherine and Katie) volunteered the Math Camp. There were many educational sessions including Math relays, Team problem solving sessions and presentations by faculty members. For team problem sessions there were some prizes for the top teams. In addition, there were some fun activities such as math fun, movies, campus tour, swimming. This camp was organized by myself (Shafiqul Islam) and Mr. George Morrison. We thank Canadian mathematical society, Department of mathematics and Statistics (UPEI) and Dean, faculty of sciences (UPEI) for their financial supports. We also thank all participants, all high schools, UPEI faculties and senior undergraduate students for their help and support. Special thanks to our senior undergraduate students Ali, Catherine and Katie.

The complete schedule of the Math Camp was as follows:

## Schedule

Friday, May 2
9:00-10:00 Arrival, Residence check-in
(UPEI Bernadine Hall)
10:00-11:30 Fascinating Probabilities
11:30-12:15 Math Relays
12:15-12:45 Lunch
12:45-1:30 Team Problem Solving
1:30-3:00 $\pi$ Dr. Gordon MacDonald
3:00-3:30 Math Fun/Break
3:30-4:30 But Can You Prove It?
Dr. Lowel Sweet
4:30-6:30 B.B.Q
6:30-7:00 Campus Tour \& Free Time
7:30-10:30 Swimming and Pizza

## Saturday, May 3

8:00 Breakfast in Dining Hall
9:00-10:30 Team Problem Solving
Mr Michael Cassidy
10:30-10:45 Break
10:45-12:15 Tiling, Dr. David Horrocks
12:15-12:45 Lunch
12:45-1:30 Mathematical Card Tricks

1:30-3:00 Mathematics in the Time of the Pharaohs, Dr. asser Saad
3:00-3:15 Break
3:15-4:45 In the Beginning, Mathematically
Dr. Dennis Lomas
5:30-6:30 Dinner
7:00-10:30 Movie
Sunday, May 4
8:00 Breakfast
9:00-10:30 Counting the Elements in an Infinite Set, Dr. Max Burke
10:30-10:45 Break
10:45-11:45 Team Problem Solving
11:45-12:00 Wrapup
12:00 Depart from Residence

# CMS 2008 Regional Math Camps 

New Brunswick<br>University of New Brunswick<br>Fredericton

May 9-11, 2008

## CMS Mathcamp Report - UNB/CMS Math Camp

Organizer’s Name: Daryl Tingley
Email: daryl@unb.ca
Phone: 5064534768
Name of Camp: UNB/CMS Math Camp
Camp Location: Fredericton, NB
Date of Camp: May 11-12-13
Type of Camp: Residential Camp (RC)
Camp Length: 2 nights
Number of Female Students: 7
Number of Male Students: 13
Number of Teachers: 0
Number of Aboriginals:
Number of participants from within 50 km : 8
Number of participants from within the province: $20=8+12$
Number of participants from outside the province:
Grade Level(s) of Students: 10,11
Camp Website URL (if available): http://www.math.unb.ca/~daryl/mathcamps/2008
Materials Description:
Students were provided with several sets of problems. Several of the prepared talks provided handouts.

## Selection Process:

Students are selected on the basis of various math competitions. Most students are chosen using the New Beunswick Math competition for grades 78 and 9, run by UNB and Universite de Moncton. We also look at the Waterloo contests (Cayley, Fermat) and the Canadian Open Math Challenge and make sure the top few NB students from each of these is asked. Usually, the competition scores for the last few positions are close, so we give priority to girls and those from rural NB areas.

Camp Program Upload: schedule.pdf [attached to report as campprog.pdf]
Organizer's Comments:
Organizer's Comments:*The camp was similar to our previous camps. The students enjoyed themselves. They seem to appreciate both the math and the free time. (Nice weather=soccer at our camps.) As usual the comments we received suggests we are doing a pretty good job, given the range of abilities.

Number Indicating Increased Interest in Math science or engineering: 16 yes, 4 said they were already very interested.

Number considering math, science or engineering careers: 17 yes, 3 probably

Other Students' Comments:
"What did you like about the camp?"

- I liked the atmosphere (teamwork).
- The new concepts.
- Solve interesting problems, met good friends.
- Basketball math!
- I thank you for allowing me to join this camp.

Total Income: 2900

Total Income from CMS: 0

Other Income Details:
2400 from the province of NB
500 from NSERC representative
Total Expenses: 2926.25
Accommodation Expenses: 789.00
Meal Expenses: 1202.32
Honoraria: 234.23
Prizes and Office Supplies: 39.55
Student Assistance: 468.46

Other Expenses: 192.69(snacks)
Will you hold a camp next year: Yes
Expected Date: May 8, 2009 (tentative)_
Next Year's Contact's Name: Daryl Tingley
Next Year’s Contact’s Email: daryl@unb.ca
Next Year’s Contact’s Phone Number: 5064592643

Submitted: September 30, 2008

# UNB - CMS MATH CAMP <br> MAY 9-11, 2008 

## PROGRAM

FRIDAY, MAY 9<br>10:00 - Students assemble in, Tilley Hall, Room T422 between 10:00 and 11:00 and begin to work on some neat problems.<br>11:00 - Viqar Husain<br>12:00 - Lunch with the N. B. Mathematics Competition contestants.<br>1:00 - Continue working on problems, T422.<br>2:00 - Roman Mureika; Infinity<br>4:00 - Check into rooms, Bridges House<br>4:45 - Dinner<br>6:15 - Don Small - Dates<br>7:30 - Problems<br>8:30 - Informal games: please bring your favorite.<br>11:00 - In rooms, lights out soon after.

## SATURDAY, MAY 10

7:30 - Wakeup
8:00 - Breakfast
9:00 - Elizabeth Ann MacKinnon - Rings
10:30 - Alyssa Sankey - Instant Insanity
11:45 - Lunch
1:15 - Denis Tokaryk (Physics) - Narly Approximately
3:00 - Basketball Math
5:00 - Dinner
6:00 - Problems
8:00 - Free Time
11:00 - In rooms, lights out soon after.

## SUNDAY, MAY 11

8:00 - Wakeup
8:30 - Breakfast
9:30 - Problems wind up
11:00 - Alex Kasprzyk - Impossible things
12:00 - Lunch
1:00 - Math Relays with the Big BAD Judge

# Camps mathématiques régionaux de la SMC 2008 

Québec<br>L'Université du Québec à Rimouski

22 au 27 juin, 2008

## Rapport de camp mathématique - Camp Mathématique 2008(Rimouski)

Nom du responsable : Roselyne Escarras
Courriel : carrefour.st@uqar.qc.ca
Téléphone: 418-7231880 poste 2420
Nom du camp : Camp Mathématique 2008
Location du camp : Rimouski
Date du camp : 22 au 27 juin 2008
Type de camp : Camp résidentiel (CR)
Durée du camp : 5 jours et 6 nuits

Nombre de participantes : 2
Nombre de participants : 10
Nombre de participant(e)s en provenance de moins de 50 km :
Nombre de participant(e)s en provenance de l'intérieur de la province : 12
Nombre de participant(e)s en provenance de l'extérieur de la province :
Niveau(x) des participant(e)s : secondaire 4 et 5

Portail Internet (le cas échéant) : http://www.csteq.com/pages_htm/camp/camp.htm
Description du matériel :
Algèbre de Boole : notes, problèmes et explications (théorie) un circuit à monter (pratique)
Constructions géométriques : papier
Marche sur l'eau : bois, colle, vis, soulier plastique, sacs plastique, scie, gallon à mesurer, papier, lunettes de protection, bottes de protection
Logarithmes : notes, problèmes et explications
Une histoire de courbes : notes, problèmes et explications
Peut-on analyser toutes les données : explications sur PC
Procédé de sélection :
Procédé de sélection : Fin avril, une invitation par la poste a été envoyée à tous les jeunes sur la liste reçue. Nicole Marquis a téléphoné à tous les jeunes sur la liste reçue pour les inviter personnellement.

Téléchargement du programme du camp : D:\Carrefour 2007-2008\Camp\programme.doc [fichier campprog. doc joint au rapport]

Commentaires des responsables :
Tous les jeunes étaient heureux. Un problème avec un jeune. Il ne voulait pas participer aux activités de groupe quand ça ne l'intéressait pas. Il a fugué 2 fois et nous avons dû le chercher dans la ville pour le ramener aux résidences.

Nombre d'étudiant(e)s: 12
Nombre d'étudiant(e)s : 6

Autres commentaires des participant(e)s :
Bonjours a tous,
Je vous remercie de m'avoir offert un si beau voyage (camp math 2008). Cela a été une expérience de vie très appréciée. J'ai adoré cela. On a abordé les mathématiques d'une façon si intéressante que j’ai jamais vu de ma vie. J'ai eu la chance de rencontrer plein de personnes qui partagent les mêmes intérêts que moi et on se sent comme avec des frères car ils pensent un peu comme toi. Durant cette période, il n'y a pas une seconde ou je me suis ennuyé : c'était ou des cours, ou des ateliers, ou des sports, ou des jeux ou du sommeil!. J'ai appris énormément (des choses que l'on aborde jamais en classe!). Surtout quand on remet la définition des mathématiques en question !! Il y a juste une chose: la nourriture de la cafétéria était correcte mais celle de la cantine "De la gare" était ... moins correcte.
P.S. Cela ma vraiment donné le goût aux maths

Merci, Robin Milosz
Total des revenus : 4024.94

Total des revenus fournis par SMC : 2500
Autres revenus (détails) :
Avance de fonds AMQ : 1524.94
Total des dépenses : 4888.37
Dépenses d’hébergement : 266.00
Dépenses alimentaires: 1734.29
Honoraires : 800.00
Prix, fournitures de bureau, etc. : 37.61
Assistance aux étudiant(e)s: 0
Autres dépenses : 2050.47
Organiserez-vous un camp l'an prochain : Oui
Date prévue : juin
Nom du responsable de camp (an prochain) : Roselyne Escarras
Courriel du responsable de camp (an prochain) : carrefour.st@uqar.qc.ca
Numéro de téléphone du responsable de camp (an prochain) : 4187231880 poste 2420

## Commentaires :

Nous allons faire le camp si le carrefour des sciences reçoit son financement. Nous ne voulons pas refaire le camp bénévolement. 2 membres du comité 2008 ne reviennent pas, nous devons trouver des remplaçants. Une animatrice d'atelier ne revient pas.Si tous les autres animateurs d'atelier sont d'accord pour revenir nous pourrons poursuivre. Nous aimerions recevoir de l’aide lors des inscriptions. Il manque de la promotion de la part des enseignants.
[ 3 octobre 2008]

# CMS 2008 Regional Math Camps 

British Columbia Simon Fraser University Burnaby

June 23-27, 2008

## CMS Mathcamp Report - SFU Burnaby Math Camp 2008

Organizer's Name: Malgorzata Dubiel
Email: dubiel@math.sfu.ca
Phone: 778-782-3800
Name of Camp: SFU Burnaby Math Camp 2008
Camp Location: SFU Burnaby Campus
Date of Camp: June 23-27, 2008
Type of Camp: Day Camp (DC)
Camp Length: 5 days
Number of Female Students: 12
Number of Male Students: 12
Number of Teachers:
Number of Aboriginals: 1
Number of participants from within $50 \mathrm{~km}: 22$
Number of participants from within the province: 24
Number of participants from outside the province:
Grade Level(s) of Students: 8, 9 and 10
Camp Website URL (if available): http://www.math.sfu.ca/outreach/schools/camp/bcamp/
Materials Description:
Daily problems - correct solutions submitted before the end of the camp qualified for a prize
Handouts with problems from Problem Sessions and with the Games and Puzzles sessions
CMS Math Careers leaflet, SFU Mathematics Department leaflet
CMS ATOM Vol 7 as prizes
Selection Process:
Notices about the camp were sent to schools and teachers were asked to nominate their students for the Camp.
12 students ( $50 \%$ of participants) were women
20 students (83\%) were visible minorities, including one aboriginal
Camp Program Upload: SFUMathCampSchedule08.pdf [attached to report as campprog.pdf]
Organizer's Comments:
We have started to be more active in contacting schools with aboriginal students, including (initiated in September) volunteer tutoring in math at the Aboriginal Centre. We had a visit from all (4) grade 11 aboriginal students from Merritt Secondary, with their teacher and parents, on September 26th. We are building these programs, hoping that they will pay off in the future

Number Indicating Increased Interest in Math science or engineering: 24
Number considering math, science or engineering careers: 24

Total Income: 2925.57

Total Income from CMS: 1600

Other Income Details:
Registration fees (24x\$500) \$1200
Department of Mathematics \$125.57
Total Expenses: 2925.57
Accommodation Expenses:
Meal Expenses: 634.18
Honoraria: 850.00
Prizes and Office Supplies: 374.22
Student Assistance: 800

Other Expenses: 267.17
Will you hold a camp next year: Yes
Expected Date: July 6-10, 2009
Next Year's Contact's Name: Malgorzata Dubiel
Next Year’s Contact’s Email: dubiel@math.sfu.ca
Next Year’s Contact’s Phone Number: 7787823800

Remarks:
We have decided to change the dates. A combination of the timing of grade 10 provincial exams and of Canada Day contributed to lower than usually level of camp participants. We hope that moving the camp to July, first week after the Canada Day, will make this easier.

Submitted: October 22, 2008

## SFU Burnaby M ath Camp 2008 Schedule J une 23 - 27, 2008

M ost camp activities are held in AQ 4150 or in IRMACS. Refreshments are in AQ 4130.

| M onday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 9:00-9:30 <br> Flatland The <br> Movie <br> (IRMACS) <br> Jamie M ulholland <br> 9:30-10:45 <br> Problem Session <br> (AQ 4130) <br> K seniya Garaschuk <br> 10:45-11:00 <br> Snack Break <br> 11:00-12:15 <br> Exploring the <br> Origins of the <br> Universe using <br> Computer <br> Simulators <br> Derek Bingham | 9:00-10:00 <br> Problem Session <br> (AQ 4130) <br> Joe Qranfal <br> 10:00-10:15 <br> Snack Break <br> 10:15-12:15 <br> Hyperbolic <br> Tesselationa: <br> Doing M ath like <br> Escher <br> (CET Lab) <br> Nathalie Sinclair | 9:00-10:30 Contest $10: 30-10: 45$ <br> Snack Break $10: 45-12: 15$ <br> Games and Puzzles (AQ 4130) K evin Staley |
|  |  | $\begin{aligned} & \text { 12:15-13:00 } \\ & \text { Lunch AQ4130 } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 12: 15-13: 00 \\ & \text { Lunch A Q4130 } \end{aligned}$ | $\begin{aligned} & 12: 15-13: 00 \\ & \text { Lunch A Q4130 } \end{aligned}$ |
| 1:00-1:30 | 13:00-14:30 | 13:00-15:00 | 13:00-14:30 | 13:00-14:30 |
| Registration | Geometric | Exploring SFU | The | F ractals: |
| (IRMACS) | Shapes and drawings by Da | Burnaby Prepared by Chris | M athematics of Dynamics and | Playing the Chaos Game |
| 13:30-14:45 <br> Twisting Reality | Vinci <br> (IRMACS) | Stewart | Patterns 1 <br> (AQ 4130) | Randall Pyke (IRMACS) |
| (IRMACS) <br> Todd K eeler | David Gunderson | 15:00-15:15 <br> Snack Break | JF Williams |  |
|  | 14:30-14:45 |  | 14:30-14:45 | 14:30-15:00 |
| 14:45-15:00 | Snack Break | 15:15-16:00 | Snack Break |  |
| Snack Break | 14:45-16:00 | Presentation <br> (IRMACS) | 14:45-16:00 | Wrap-up, Prizes |
| 15:00-16:00 | Problem Session | Shane Reese | The |  |
| Games and | (AQ 4130) | (Brigham Y oung | M athematics of |  |
| Puzzles | A ndrea Blazenko | U niversity, Utah) | Dynamics and |  |
| J. Gray and J. M ulholland |  |  | P atterns II <br> Chiaka Drakes |  |

# CMS 2008 Regional Math Camps 

British Columbia Simon Fraser University Surrey

June 25-26, 2008

## CMS Mathcamp Report - SFU Surrey Math Camp 2008

Organizer's Name: randall pyke
Email: rpyke@sfu.ca
Phone: 778-782-7530
Name of Camp: SFU Surrey Math Camp
Camp Location: SFU Surrey campus, Surrey BC
Date of Camp: June 25, 262008
Type of Camp: Day Camp (DC)
Camp Length: 2 days
Number of Female Students: 15
Number of Male Students: 14
Number of Teachers: 0
Number of Aboriginals: 0
Number of participants from within 50 km: 29
Number of participants from within the province: 29
Number of participants from outside the province:
Grade Level(s) of Students: 9, 10
Camp Website URL (if available): http://www.math.sfu.ca/outreach/schools/camp/
Materials Description:
Welcome package; information about math programs at SFU, general information about SFU Surrey, pencils, paper, schedule, problems sets (3).

Selection Process:
No special efforts.
Camp Program:
Lectures, problems sessions, movie breaks, fun with puzzles.
Organizer's Comments:
Students very much enjoyed the camp. The variety of topics and group activities. Many students indicated (on the evaluation form) that the camp increased their motivation to pursue the mathematical sciences.

Number Indicating Increased Interest in Math science or engineering: 27
Number considering math, science or engineering careers: 16
Other Students' Comments:
"Loved the experience. Will come back next year."
"Lots of fun. Everyone was nice. Learned lots of interesting things."
"Awesome camp. Camp is exciting and dynamic and I feel privileged to attend."
"Needs more hands-on activities."

Total Income: \$1080.00
Total Income from CMS: \$500.00

Other Income Details:
Registration; \$20 x $29=\$ 580.00$

Total Expenses: \$770.00
Accommodation Expenses: \$000.00
Meal Expenses: \$434.00
Honoraria: \$13.50
Prizes and Office Supplies: \$72.50
Student Assistance: \$000.00

Other Expenses: \$250.00
Will you hold a camp next year: Yes

Expected Date: end of June/ early July
Next Year's Contact's Name: randall pyke
Next Year’s Contact’s Email: rpyke@sfu.ca
Next Year's Contact's Phone Number: 778-782-7530
Submitted: July 16, 2008


| Wednesday, June 25 |  | Room | Thursday, June 26 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $8.50-9.10$ Registration |  | $\begin{aligned} & 3200 \\ & 3200 \\ & 3200 \end{aligned}$ | $\begin{aligned} & \hline 9.00-10.15 \\ & 10.15-10.30 \\ & 10.30-11.30 \end{aligned}$ | Justin GrayProblem solving session |  |
| $\begin{aligned} & 0.50-9.10 \\ & 9.10-9.20 \\ & 9.20-10.30 \end{aligned}$ | Opening |  |  |  |  |
|  | Randall Pyke <br> Fractals and the Chaos Game |  |  | SNACK BREAK | $\begin{aligned} & 3200 \\ & 3200 \end{aligned}$ |
|  |  |  |  | Max Sterelyukhin |  |
| $\begin{aligned} & 10.30-10.45 \\ & 10: 45-12: 00 \end{aligned}$ | SNACK BREAK |  |  | Games and Puzzles |  |
|  | Randall Pyke | 3200 | $\begin{aligned} & 11.30-12.00 \\ & 12.00-12.30 \\ & 12.30-14.30 \end{aligned}$ | Flat Land: The Movie | 3200 |
|  | Fractals and the Chaos Game |  |  | LUNCH BREAK |  |
| 12.00-12.30 | LUNCH BREAK |  |  | $\xrightarrow{\text { Arman Kaveh/John LaRusic }}$ | 3200 |
| Wanna bet? Best Strategies for Games of Chance |  |  | $\begin{aligned} & 14.30-14.40 \\ & 14.40-15.40 \end{aligned}$ | Networks, Paths, and Travelling Salesmen |  |
|  |  |  | SNACK BREAK | $\begin{aligned} & 3200 \\ & 3200 \\ & \hline \end{aligned}$ |  |
| 13.30-14.00 | Movies: Math Girl | $\begin{array}{\|c\|} \hline 3200 \\ \hline 3200 \\ \text { Feet } \\ \hline \end{array}$ |  |  | Elena Halmaghi |
| 14.00-14.30 | SNACK BREAK |  |  |  | Games and Puzzles |
| 14.30-15.30 | Toby Donaldson |  |  |  | 15.40-16.00 | Prizes |
| Solving Rubik's Cube with your Computer, Hands, and Feet |  |  |  |  |  |

# CMS 2008 Regional Math Camps 

Nova Scotia<br>Dalhousie University<br>Halifax

July 6-11, 2008

## CMS Mathcamp Report - DALHOUSIE MATH CAMP

Organizer's Name: Suraj Sikka \& Roman Smirnov
Email: sikka@mathstat.dal.ca, smirnov@mathstat.dal.ca
Phone: 902-494-2572(O)902-477-1936(H)
Name of Camp: CMS-DALHOUSIE MATH CAMP
Camp Location: Dalhousie University, Halifax, N.S.
Date of Camp: July 6 to July 11, 2008
Type of Camp: Residential Camp (RC)
Camp Length: 5 nights
Number of Female Students: 11
Number of Male Students: 9
Number of Teachers:
Number of Aboriginals:
Number of participants from within $50 \mathrm{~km}: 4$
Number of participants from within the province: 16
Number of participants from outside the province: 0

Grade Level(s) of Students: 10, 11
Camp Website URL (if available): www.mathstat.dal/~smirnov/cmsdalmathcamp08
Materials Description:
The students\& the parents were given an information sheet/plans/activities for the week.

## Selection Process:

Equity of distribution in terms of gender, geographical location, and and preference of a chance to those who did not get one before. Also considered participation in Waterloo Math contests, grades, reference letters.
$16 / 20$ students were from outside the metro Area.
Camp Program:
Please check the website for the camp program.
Organizer's Comments:
The students, the instructors, the chaperons were all pleased with the camp. Every thing went very smoothly.
The chaperons did a great job and was very appreciated by the students. There was a tremendous support from the faculty Mathematics and Statistics of Dalhousie univ. and the Saint Mary's University and the office staff. The camp could not have been held without their help.
We have to come up with some new ways of attracting the top Mathematics/Statistics students to the camp. It appears that we are competing with many other organizations to attract these top students. Any ideas?

Number Indicating Increased Interest in Math science or engineering:
Number considering math, science or engineering careers:

Total Income: 9250.00
Total Income from CMS: 3250.00

Other Income Details:
Dalhousie Univ. President's Office....... \$3000.00
Dalhousie Univ. Dean of Science.......... \$2000.00
Students Registration Fee(20*50.00)...... \$1000.00

Total Expenses: \$9761.47
Accommodation Expenses: \$2553.10
Meal Expenses: \$2873.93
Honoraria: \$2000.00(chaperons)
Prizes and Office Supplies: \$88.08.08

Student Assistance: 0.0
Other Expenses: \$2246.36
Will you hold a camp next year: Yes
Expected Date: July 11, 2009
Next Year's Contact's Name: Suraj Sikka/Roman Smirnov
Next Year’s Contact’s Email: sikka@mathstat.dal.ca/smirnov@mathstat.dal.ca
Next Year's Contact's Phone Number: 902-494-2572(W) 902-477-1936(H)
Remarks:
It is clear from the expenses that we were short by $\$ 511.47$ from the income. This is primarily due to increased costs of food, accomodation etc. Do you think you can help us?
Since the prices keep going up, especially the food prices, we request that the financial assistance from the CMS should be increased by at least $\$ 500.00$

Report Submitted: October 21, 2008

Camps mathématiques régionaux de la SMC 2008

Ontario<br>L'université d’Ottawa

6 au 11 Juillet, 2008

# CMS 2008 Regional Math Camps 

Ontario<br>University of Ottawa

July 6-11, 2008

# CMS Mathcamp Report - University of Ottawa 

Organizer’s Name: Joseph Khoury
Email: jkhoury@uottawa.ca
Phone: (613)562-5800 ext. 3487
Name of Camp: University of Ottawa
Camp Location: Ottawa
Date of Camp: July 6-11
Type of Camp: Residential Camp (RC)
Camp Length: 5

Number of Female Students: 11
Number of Male Students: 26
Number of Teachers: 0
Number of Aboriginals:
Number of participants from within $50 \mathrm{~km}: 2$
Number of participants from within the province: 25
Number of participants from outside the province: 12
Grade Level(s) of Students: 10
Camp Website URL (if available): http://www.cms.math.ca/MathCamps/Ottawa08/ (password required)
Materials Description:

1) Four Problems to hand in During the week
2) Building Material for a Project

## Camp Program:

1) "I just thought I would send a note and let you know how much Logan loved being at the camp. I think he would have enjoyed spending the summer at the university. He has made many friends who he is emailing and msning with every day. Thanks again for providing such a wonderful program. He said he was just an average guy at the camp, something that he truly enjoyed. He can't wait to be able to get into university now. Thanks again"
2) "I am really glad to be hosted at University of Ottawa, it was a great experience, I really loved the camp! Do you need any volunteer for your future camps? I can offer my help! I really want to go back because it's really fun!"
3) Thank you so much for organizing the math camp! It must've taken countless hours of hard work and an endless amount of effort to plan such amazing activities to the last detail. I'm sure this camp changed many people's viewpoints on math and future education. I've learned so much during this camp that I'm willing to try even harder in the future. I was alway pretty good at math, but I never truly enjoyed math until this camp. I realized that math is so much more beyond the classroom and there are so many ways that we can apply it to our everyday lives. It's not just an academic subject; it's a way of thinking. This camp helped me so much that I'm willing to do whatever I can do to give back in the future. I would always be interested in volunteer opportunities and so on. I'm already encouraging a lot of my grade 9 friends to score high on Cayley so they could also attend this camp. It's an opportunity of a lifetime.

Organizer's Comments:

1) Many students expressed their interest in learning more about possibilities of carrees in Mathematics-Next year, we might bring a mathematician working in Industry to talk about his/her experience.
2) Some students expressed to return next year if we open the camp for higher grades

Number Indicating Increased Interest in Math science or engineering: 10
Number considering math, science or engineering careers: 12
Other Students' Comments:

Total Income: 23200.00
Total Income from CMS: 7000.00
Other Income Details:
0.00

Total Expenses: 23200.00

Accommodation Expenses: 6300.00
Meal Expenses: 9400.00
Honoraria: 4600.00
Prizes and Office Supplies: 2300.00
Student Assistance: 0

Other Expenses: 600.00
Will you hold a camp next year: Yes
Expected Date: June 20-26
Next Year’s Contact's Name: Joseph Khoury
Next Year’s Contact’s Email: jkhoury@uottawa.ca
Next Year’s Contact's Phone Number: (613) 562-5800 ext. 3487

Submitter: September 30, 2008
CMS MATH CAMP (July 6 to 11, 2008) - UNIVERSITY OF OTTAWA

CAMP MATHÉMATIQUES SMC (6 AU 11 JUILLET 2008) UNIVERSITÉ D'OTTAWA


# CMS 2008 Regional Math Camps 

Ontario<br>York University<br>Toronto

July 28-August 1, 2008

## CMS Mathcamp Report - Math Experiences 2008 (York)

Organizer's Name: Chris Wu
Email: mrwuthemathguy@yahoo.ca
Phone: (416) 807-6284
Name of Camp: Math Experience
Camp Location: York University
Date of Camp: July 28th to August 1st, 2008
Type of Camp: Day Camp (DC)
Camp Length: 5 days
Number of Female Students: 7
Number of Male Students: 14
Number of Teachers: 1
Number of Aboriginals: 0
Number of participants from within $50 \mathrm{~km}: 21$
Number of participants from within the province: 21
Number of participants from outside the province: 0
Grade Level(s) of Students: 3 Grade 9 Students, 18 Grade 10 students in September 2008
Camp Website URL (if available): N/A
Materials Description:
Students were given various warm-up problem sets (challenging contest questions from various competitions, classic problems, problems from Raymond Smullyan).
The presenters handed out materials/questions for the students to work on, which also gave students the foundation for their presentation (to follow up their learning at home).

## Selection Process:

Last year I ran the same camp and had 17 out of my 20 participants from inner city schools. The strong students from inner city areas were invited back, however, only 9 of them returned. -Altogether, I had 11 students from inner city areas attend my camp.
6 students of Caribbean descent were invited, however, only 1 came.
3 South Asian students were invited, 2 came to camp.
6 Vietnamese from last year returned.
11 Chinese students were recruited from the Grade 9 Pascal Honour Roll list.
1 girl from Taiwan was invited from one of the participants from an inner city environment to bring up the girl to boy ratio
Last year I had 11 girls, and 9 boys. This year, I tried to have 10 of each. After being committed to coming back, 5 of the girls were not able to return due to family vacations. As a result, I ended up having 7 girls and 14 boys.

Organizer's Comments:
It was great to have several recruits from the Pascal honour roll attend the math camp this year. -Last year, I only had two strong recruits, who I felt were holding back their knowledge because they did not want the other participants to feel inferior. -I tried to raise the level of the camp last year, but I felt that the 17 strong math
students from inner city areas were not ready for the pace that I wanted them to operate at. This years recruits forced the students from last year to work at a much higher level, and I'm glad that their eyes were opened to see how strong students from other areas work, and how self-motivated they were to succeed.
This year I had two volunteer math majors from York University. I was disappointed by their lack of commitment, and dismal enthusiasm if any in mathematics. They thought that they were assisting for a remedial camp, and struggled with the problems that I gave my students. -They showed little interest in the presentations and math content. In future years, I hope to have former math camp participants to volunteer and be positive role models to my participants.

Number Indicating Increased Interest in Math science or engineering: 21
Number considering math, science or engineering careers: 13
Other Students' Comments:
"Generally speaking, the math camp was just excellent. The camp got me more involved in math, and I started reading a lot of books on math. It was just a great experience for math lovers and I wish I could participate in more of these events." (Neil Wu)
"My math camp experience can be only described in one word: Awesome! The activities were fun, the learning was interesting, the food was wonderful, and I met some really nice people I came to the camp expecting dull and tedious work, but to my surprise, everything was motivating and stimulating. If I get another chance I would definitely revisit the Math Experience Camp again next year." (Bryan Zhong)
"After experiencing this year's math camp, I felt that I enjoyed last year's camp a bit more. I felt that last year's lectures, sessions, and events were a bit more interesting, and fascinating to learn. We had the chance to learn about topics that were more related to mathematics (Ex. Pythagorean theorem, Similar triangles, Right Angle Trigonometry, Number bases, etc.) Differently this year, the topics that we were introduced to were more about the importance of math in our daily lifestyle (Ex. Digital image processing, Perspective in Art, Mobius, etc.)

However, the thing I enjoyed about this year's math camp was that this year's classmates has participated a lot more in group work and were more involved into group discussions. This motivated me into becoming more engaged into mathematics." (Priscilla Luc)
"I think this camp experience is fantastic! Working with participants who are strong in solving problems and presenting ideas was very exciting and exhilarating. The professors and teacher who gave us the sessions with passion not only taught me knowledge, but also inspired me to explore more. I hope there will be more camps like this in the future." (Jasmine Ding)
"Coming into math camp for the second year, I found myself looking forward to meeting up with the old participants, relaxing, and have a good time socializing at lunch. The first day though, was not what I had expected. Instead, I found myself being surrounded with people so intent on playing with their rubik's cubes. I knew that this year was going to be quite different. And I was right; within the first hour I realized that I was one of the worst participants there academically. This kind of bummed me a little and I went through the first day just relaxing and watching others. But at home, I decided I would come back to camp the next day with a whole different mindset, one that was prepared to get as much as I could from this opportunity. I soon found myself actually having a good time; Meeting new people, learning new things, and catching up with old friends. However, it was quite a challenge keeping up with some of the other participants. Their academic ability made me fairly speechless. The turning point of my whole experience though was when I got to work from them. I was able to make friends with some of them and learn how they were so much better than me in math. Lunch would always come at a perfect time for me as it gave my brain some time for relaxing. The food was just as good as I remembered it last year. Before long, I found myself saying things like, "I could get used to this."

Like almost any average student, lessons are not exactly the highlight of your day. Strangely enough though, they were for me for this certain week. I found myself completely fascinated by some of the new things that I learned. The variety of subjects I liked a lot as I didn't think that math had so many applications in the world. As time went on, I used my breaks to make myself some new friends and get to know others better. One of the most surprising things I learned at math camp was that I found out that one of the participants there was a student that I had been competing with in an online math competition. It was nice to meet him because he finished first in that competition. Team competitions were what I found myself looking forward to because I love working with others.
As the days passed, I soon realized that math camp was over. I found myself reflecting a lot about how I did this year. My math experience then concluded with some bowling, one of my favourite pass times. I had a great time during the trip and as I walked up on the steps of the bus that would take me home; I finally came to the conclusion that I had a good time, at math camp. Math camp revived my interest in math in which I thought I had lost. Sure it was challenging, but I like a challenge every now and then, and I learned a great deal from this one." (Jimmy Tieu)
"Hosting a conference of some the city’s most brilliant and eccentric minds is no easy task. Keeping them interested for an entire week is a whole different story. And yet, Mr. Wu, with the help of his volunteers and various presenters, accomplished this like it was a remarkably easy feat. With fascinating seminars from experts in a plethora of different fields, challenging mathematical problems, and a comfortable social environment, the 2008 math camp at York University was definitely a success in every conceivable dimension. I, for one, found more intellectual stimulation at this one-week camp than an entire year in a gifted program at school. I strongly believe that I speak for all twenty or so students attending this camp: this was one of the most valuable weeks I could ever hope for. When one parses the juxtaposition of the two words "math camp", one might conjure an image of bored kids staring at esoteric mathematical logorrhea. The atmosphere in the York University lab could not be any further from this. Our talented presenters gave us insight into the infinitude of facets of pure and applied mathematics. These topics ranged from the fundamental concept of logarithms to the expansive depths of digital image processing and spherical geometry. All of these topics were delivered by knowledgeable, articulate presenters, with impeccable lucidity. If we could hear the voices in each other’s heads, I have a feeling that "Ah! I get it now!" and "That's how it works!" would have been heard all across the room. Usually, the most adept prestidigitators of mathematics are known as the "nerds". In our math camp, this concept was minimalized, if not completely eradicated. Everyone there was a proud nerd. We found that we could all get along pleasantly. For a week, we were exposed to our intellectual equals; this type of exposure is a truly priceless (no obscure pun intended) experience. I, for one, was immensely humbled. Here I was, with a community of brilliant minds, each excelling in their own quirky way! Being part of that for one week is something not to be forgotten. As for things to improve on, I am honestly clueless. The only thing I can think of is to double the length to two weeks! Otherwise, I am in no position to deny that the camp was run /perfectly/. Now, I am no lawyer; I am a mathematician. When a mathematician says "perfect", he means one hundred percent. I do truly mean it; even though praise without criticism might seem empty, I have no capability to offer criticism. All I can say is, keep up the good// work! In the future, I would gladly volunteer my time in the summer to contribute my part in giving younger savants the same enlightening experience. Being a strong believer in reciprocity, it's only fair that I should spend the same amount of effort that Mr . Wu and his wonderful committee have spent on me to give me this experience. If anybody at the mathematics society is reading this and is debating whether or not to continue this camp, let me give my two cents: depriving children of such an opportunity to explore the world of mathematics would be an immeasurable regret.
Now, if you do host a math camp for free, I would be more than delighted to be an assistant, or even a presenter. Ideally, I'd love to present about what I believe are my major idiosyncratic quirks: the links between mathematics and music, or programming. If you happen to have space anything pertaining to the camp where I could possibly help, please inform me! Of course, everything would be pro bono; all I wish for is the experience of giving others an experience! Thanks for everything!" (Cyril Zhang)

Total Income: \$2250.00

Total Income from CMS: \$1000.00
Other Income Details:
None.
Total Expenses: \$2211.00
Accommodation Expenses:
Meal Expenses: \$1250.00
Honoraria: \$300.00
Prizes and Office Supplies: None
Student Assistance: All
Other Expenses: \$661.00
Will you hold a camp next year: Yes
Expected Date: July 27th to July 31st 2008
Next Year's Contact's Name: Math Experience
Next Year’s Contact's Email: mrwuthemathguy@yahoo.ca
Next Year's Contact's Phone Number: (416) 807-6284
Remarks:
It has been increasingly more difficult to recruit strong math students from inner city schools as several inner city schools do not offer students the opportunity to write Waterloo or any National math competitions.

Submitted: August 30, 2008

# CMS 2008 Regional Math Camps 

Manitoba<br>University of Manitoba<br>Winnipeg

August 17-20, 2008

## CMS Math Camp Report - University of Manitoba Math Camp

Organizer’s Name: Wiliam Korytowski/ Don Trim
Email: korytows@cc.umanitoba.ca
Phone: 204-8953868

Name of Camp: University of manitoba MathCamp
Camp Location: University of Manitoba
Date of Camp: August 17, 2008 to August 20, 2008

Type of Camp: Residential Camp (RC)
Camp Length: 4 days/3 nights

Number of Female Students: 9
Number of Male Students: 11
Number of Teachers:
Number of Aboriginals:

Number of participants from within 50 km:
Number of participants from within the province: 20
Number of participants from outside the province:

Grade Level(s) of Students: 9 and 10
Camp Website URL (if available):

Materials Description:
Handouts consisting of notes and problems on congruences, diophantine equations, different bases, combinatorics and problem solving.

## Selection Process:

Advertizing in the Manitoba Mathematics Teacher’s journal and invitations send to individual students who did well on the Waterloo mathematics contests.

Camp Program:
Daily program consisted of lectures and problem solving, based on the lectures in the morning and afternoon. In the late afternoon and evening, students participated in sports and/or mathematical presentations.

Organizer’s Comments:
The students were very attentive and participated willingly in all activities. By inviting individuals who participated in the Waterloo contests has provided us with much more enthusiastic participants. Furthermore, the last two years, we have had more applicants than we could accommodate.

Number Indicating Increased Interest in Math science or engineering:
Number considering math, science or engineering careers:
Other Students’ Comments:
Available, but not at the present time. Don Trim, who has all the required materials is out of the country until January, 2009.

Total Income: \$5500.00
Total Income from CMS: \$3000.00

Other Income Details:
Registration fees $\$ 2500.00$

Total Expenses: \$5369.35
Accommodation Expenses: \$1650.00
Meal Expenses: \$2512.37

Honoraria: \$0.00
Prizes and Office Supplies: \$61.74
Student Assistance: \$925.00

Other Expenses: \$220.24
Will you hold a camp next year: Yes

Expected Date: August 23, 2009 to August 27, 2008
Next Year's Contact's Name: Don Trim
Next Year’s Contact’s Email: dtrim@cc.umanitoba.ca
Next Year's Contact's Phone Number: 204-4748705
Submitted: October 8, 2008

# CMS 2008 Regional Math Camps 

Ontario<br>University of Western Ontario<br>London

August 17-20, 2008

## CMS Mathcamp Report - Math Experiences 2008 (Western)

Organizer’s Name: Ajneet Dhillon
Email: adhill3@uwo.ca
Phone: $5196612111 \times 86103$

Name of Camp: Math Experiences 2008
Camp Location: University of Western Ontario
Date of Camp: 30th July to 1st Ausgust
Type of Camp: Day Camp (DC)
Camp Length: 3
Number of Female Students: 6
Number of Male Students: 17
Number of Teachers: 3
Number of Aboriginals: 0
Number of participants from within 50 km :
Number of participants from within the province:
Number of participants from outside the province:
Grade Level(s) of Students: 9
Camp Website URL (if available):
Materials Description:
Book by Ravi Vakil
Various handouts supplied by teachers
Selection Process:
Mathematics competition results
Camp Program Upload: Camp Schedule 2008.odt [attached to report as campprog.odt]
Organizer's Comments:
Was successful. We will try to run a larger camp next year.
Number Indicating Increased Interest in Math science or engineering:
Number considering math, science or engineering careers:
Total Income: 3477
Total Income from CMS: 750
Other Income Details:
Faculty of science \$700
Remainder was provided for by the mathematics department.

Total Expenses: 3477
Accommodation Expenses:
Meal Expenses: 1184
Honoraria: 1750
Prizes and Office Supplies: 45
Student Assistance: 0
Other Expenses: 624

Will you hold a camp next year: Yes
Expected Date: unkown
Next Year's Contact's Name: Ajneet Dhillon
Next Year's Contact’s Email: adhill3@uwo.ca
Next Year's Contact's Phone Number: 5196612111 x 86103
Submitted: September 22, 2008

## Schedule and Events

2008 CMS-UWO Math Camp

|  | Wednesday July 30 | Thursday July 31 | Friday August 1 |
| :--- | :--- | :--- | :--- |
| $9: 00-10: 15$ | Orientation <br> Paul Fennell, Peter <br> O'Hara, Frank Rachich | A Do-It-Yourself <br> Fractal <br> Gordon Sinnamon | Mathematical <br> Connections <br> Ian VanderBurgh |
| $10: 15-10: 30$ | Break | Break | Break |
| $10: 30-11: 45$ | Problem Solving <br> Frank Rachich | Problem Solving <br> Peter O'Hara | Mathematical <br> Connections <br> Ian VanderBurgh |
| $11: 45-12: 45$ | Lunch and Blitz Chess | Lunch and Blitz Chess <br> Livision Rules | Lunch and Blitz Chess <br> Coul Fennell <br> Conclusions <br> Gordon Sinnamon |
| $12: 45-2: 15$ | Break | Mathematical <br> Connections <br> Ian VanderBurgh |  |
| $2: 15-2: 30$ | Break | Math Relay <br> Paul Fennell, Peter <br> O'Hara, Frank Rachich | Team Competitions <br> Peter O'Hara, Paul <br> Fennell, Frank Rachich | | Mathematical |
| :--- |
| Connections |
| Ian VanderBurgh |

# CMS 2008 Regional Math Camps 

Alberta<br>University of Alberta<br>Edmonton

August 20-30, 2008

## CMS Mathcamp Report - Alberta Regional Summer Camp

Organizer’s Name: Andy Liu
Email: al3@ualberta.ca
Phone: 780-492-3527

Name of Camp: CMS Alberta Regional Summer Camp
Camp Location: St. Joseph's College, U of A campus, Edmonton
Date of Camp: August 20 to 30, 2008.
Type of Camp: Residential Camp (RC)
Camp Length: 10 nights
Number of Female Students: 9
Number of Male Students: 21
Number of Teachers: 0
Number of Aboriginals: 0
Number of participants from within $50 \mathrm{~km}: 20$
Number of participants from within the province: 28
Number of participants from outside the province: 2
Grade Level(s) of Students: 6 to 10
Camp Website URL (if available): None
Materials Description:
A problem book, various handouts, and eventually a CD which contains all academic material in the camp

## Selection Process:

Primarily based on contest results. A young student from the rural area was issued a special invitation and accepted. A girl from Saskatchewan who was invited to take part in the National Camp but could not asked to join ours, and she came.

Camp Program:
Sent to Daryl Tingley
Organizer's Comments:
This is our fifth camp now, and although we have changes in our staff, things run very smoothly. Most comments from students ask for more days and more people. However, it is unlikely we will expand further, seeing as we are already the largest and longest camp in the country.

Number Indicating Increased Interest in Math science or engineering: 30
Number considering math, science or engineering careers: not asked
Other Students' Comments:
We leave it up to the students to write directly to the sponsors.

Total Income: \$22300
Total Income from CMS: \$4500

Other Income Details:
\$8000 from iCORE, Calgary,
$\$ 4000$ from Faculty of Science, U of A,
$\$ 4000$ from Faculty of Engineering, U of A, \$1800 from SNAP Mathematics Foundation, Edmonton.

Total Expenses: \$22300
Accommodation Expenses: \$6600
Meal Expenses: \$6700
Honoraria: \$0
Prizes and Office Supplies: $\$ 1130$
Student Assistance: \$6120
Other Expenses: \$1750
Will you hold a camp next year: No

Report Submitted: September 29, 2008

# CMS 2008 Regional Math Camps 

Saskatchewan<br>University of Regina Regina

September 27, 2008

# CMS Mathcamp Report - University of Regina 

Organizer's Name: Leigh Anne MacKnight
Email: leighanne.macknight@uregina.ca
Phone: 1-306-337-3122
Name of Camp: University of Regina Math Camp
Camp Location: University of Regina
Date of Camp: Saturday September 27, 2008
Type of Camp: Day Camp (DC)
Camp Length: 1
Number of Female Students: 24
Number of Male Students: 10
Number of Teachers: 3
Number of Aboriginals: 0
Number of participants from within $50 \mathrm{~km}: 7$
Number of participants from within the province: 34
Number of participants from outside the province: 0

Grade Level(s) of Students: Grade 7 - Grade 12
Camp Website URL (if available): http://camp.math.uregina.ca/mathcamp/
Materials Description:
Every student was given a UofR folder with scrap paper and a pencil at the beginning of the day. They were given handouts specific to the activity when they arrived to participate in each activity.

## Selection Process:

I had sent messages out to Regina and Moose Jaw school boards. From there a poster/handout was sent to all high schools. This was done at the beginning of September but from the Regina attendance numbers I wonder if the information was sent out at all.

Organizer's Comments:
The activities were enjoyed by all. They were four totally different activities which added some variety. The snacks between activities were well-received (juice and cookies). The lunch was extremely popular (pizza, caesar salad, pop, juice, water and popsicles. I had a 'goodie' bag for each participant which they were given at the end of the day. Very popular! I had some books, both math related and not, given out in draws before the students headed home.

Possible improvements. Although the numbers were almost identical to 2007 I was very disappointed in the number participating from Regina. Next year I would consider contacting the Boards earlier. Also, if there was time, it would be advantageous to physically go to the Regina high schools and at least talk to guidance counsellors if not the students themselves to try to get more interest. We have an Aboriginal professor on Campus who was trying to recruit aboriginal students but without funding to get them here it did not work. I would like to revisit the question and try far in advance to have funding in place to get a number of aboriginal students to participate in Math Camp.

I found it interesting this year that the number of female participants was so much greater than the male. It was opposite in 2007. I am not sure why it happened but found it rather unusual.

Number Indicating Increased Interest in Math science or engineering:
Number considering math, science or engineering careers:
Other Students' Comments:
Answers to the the question, 'Would you attend Math Camp next year, why or why not?' were:
Because you learn new things and expand your mind.
It's cool.
The teachers did cool string tricks.
It is a good experience.

Total Income: 1350.00

Total Income from CMS: 500.00
Other Income Details:
34 @ $\$ 25=\$ 850.00$

Total Expenses: 1043.34
Accommodation Expenses: 0
Meal Expenses: 676.04
Honoraria: 0

Prizes and Office Supplies: 200.00
Student Assistance: 0

Other Expenses: 167.30
Will you hold a camp next year: Yes
Expected Date: Late September (in discussion)
Next Year's Contact's Name: Allen Herman
Next Year's Contact’s Email: aherman@math.uregina.ca
Next Year's Contact's Phone Number: 585-4487

Remarks:
It was a pleasure planning the Math Camp especially when it ran so smoothly. I am in a term job at the moment so will not be the one in charge for next years camp.

Submitted: October 3, 2008

## Mathematics Enrichment Camp 2008 (University of Regina)

- 9:00 AM: Registration - Kinesiology Foyer, Kinesiology Building
- 9:30 AM: Opening Remarks. ED 314
- 9:45 AM: Session 1:

Alpha Group: Chance (ED 318)
Beta Group: Pirates of Wascana Creek (ED 315)
Delta Group: Knots - So Special (ED 388)
Gamma Group: Tiling a Checkerboard with Dominoes (ED312)

- 10:45 AM: Break (Juice in ED 314)
- 11:05 AM: Session 2:

Alpha Group: Tiling a Checkerboard with Dominoes (ED312)
Beta Group: Knots - So Special (ED 388)
Delta Group: Chance (ED 318)
Gamma Group: Pirates of Wascana Creek (ED 315)

- 12:05 PM: Lunch, Riddell Center
- 12:50 PM: Session 3

Alpha Group: Pirates of Wascana Creek (ED 315)
Beta Group: Chance (ED 318)
Delta Group: Tiling a Checkerboard with Dominoes (ED 312)
Gamma Group: Knots - So Special (ED 388)

- 1:50 PM: Break (juice in ED 314)
- 2:10 PM: Session 4

Alpha Group: Knots - So Special (ED 388)
Beta Group: Tiling a Checkerboard with Dominoes (ED 312)
Delta Group: Pirates of Wascana Creek (ED 315)
Gamma Group: Chance (ED 318)

- 3:10 PM: Break (Juice in 314)
- 3:30 PM: Closing Activity
- 4:30 PM: Departure, Kinesiology Foyer (Thanks for coming. Hope everyone had a great time!)


## Canadian Mathematical Society 2008 MATH CAMPS

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