



2-DAY SUMMER CONFERENCE for **GRADE 7 and 8** TEACHERS of MATHEMATICS

The Centre for Education in Mathematics and Computing provides professional development opportunities for mathematics teachers. Our programs respond to the need for practical and enrichment information that can be implemented immediately in the classroom.

Problem solving forms the basis of effective mathematics programs. The sessions on curriculum will focus on problem solving. This conference will increase your tools and skills and enhance your teaching of mathematics. Teachers from any province or country will benefit. Teachers should have some previous teaching experience in an elementary or high school.

Whatever your personal, professional or mathematical goals, our conference can give you the edge you want.

Wednesday, August 23 to Thursday August 24, 2017

(Registration Deadline: Monday, June 19, 2017)

*Participant cost of **\$120** includes meals, conference fee materials, and harmonized sales tax (HST)*

A limited number of rooms (double occupancy) are available in a nearby hotel with no additional cost

Registration Now Open!

Follow the link <http://www.cemc.uwaterloo.ca/events/mathteachers-winnipeg.html> to register

The CENTRE for EDUCATION
in MATHEMATICS and COMPUTING
Faculty of Mathematics
University of Waterloo
200 University Ave. W.
Waterloo, ON, Canada N2L 3G1



www.cemc.uwaterloo.ca

Le CENTRE d'ÉDUCATION
en MATHÉMATIQUES et en INFORMATIQUE
Faculté de mathématiques
Université de Waterloo
200, avenue Université Ouest
Waterloo (ON), Canada N2L 3G1

Grades 7 and 8 Program

- Dates:** Starting Wednesday August 23 at 8:00 am, ending Thursday August 24, 2017 at 3:30 pm
- Location:** St. John's Ravenscourt School, Winnipeg, MB
- Program:** The focus is on presentations as well as attendee participation in mathematical activities and problem solving. These resources are intended to supplement your teaching program.

| Wednesday, Aug. 23 | Activity |
|---------------------|--|
| 8:00 am – 9:00 am | Early Registration, coffee & networking |
| 9:00 am – 10:30 am | CEMC Presentation. <i>Ian VanderBurgh</i> |
| 10:30 am – 10:45 am | Break |
| 10:45 am – 12:15 pm | Session 1: Purposeful Problem Solving. <i>Lam Nguyen</i> |
| 12:15 pm – 1:00 pm | Lunch |
| 1:00 pm – 2:30 pm | Session 2: TBA. <i>Bob Beaudry</i> |
| 2:30 pm – 2:45 pm | Break |
| 2:45 pm – 3:30 pm | Plenary Session |
| Thursday, Aug. 24 | |
| 8:00 am – 9:00 am | Registration, coffee, networking |
| 9:00 am – 10:30 am | Session 3a: How much fun can we have with paper? <i>Sherri Burroughs</i> Session 3b: Number Theory – Primes. <i>Carole Bilyk</i> |
| 10:30 am – 10:45 am | Break |
| 10:45 am – 12:15 pm | Session 4: Solving Harder Problems. <i>Ian VanderBurgh</i> |
| 1:00 pm – 2:30 pm | Session 5: Problem Solving with Platonic and Archimedean Solids. <i>Clay Kellough</i> |
| 2:30 pm – 2:45 pm | Break |
| 2:45 pm – 3:30 pm | Plenary Session TBA <i>Carole Bilyk & Sherri Burroughs</i> |

Register, view program online, by visiting <http://www.cemc.uwaterloo.ca/events/mathteachers-winnipeg.html>

Registration Fee: \$120 per registrant



Synopses of Sessions for Math Teachers' Conference – Grade 7 and 8 Teachers

Session 1:

Purposeful Problem Solving

Lam Nguyen

The Manitoba curriculum describes problem solving as not just simple computations embedded in a story, but as rich open-ended questions that engage learners in demonstrating their knowledge and understanding of math concepts. Many teachers find it challenging to incorporate problem solving into their programming in authentic ways where learners can persevere and learn through problem solving. This session takes a close look at purposeful problem solving by designing rich tasks that are connected to curricular outcomes, planning for learning, and creating thinking environments. Content is targeted for grades 7 and 8.

Session 2:

TBA

Bob Beaudry

Description TBA

Session 3a:

How much fun can we have with Paper?

Sherri Burroughs

Description TBA

Session 3b:

Number Theory - Primes

Carole

The prime numbers are essential to mathematics and provide endless opportunities for problem solving to enhance understanding. Some play with prime numbers and leave with ideas of activities for your grade 7 and 8 classroom.



Session 4:

Solving Harder Problems

Ian VanderBurgh

For many teachers, it is a rare time to be able to sit down for 90 minutes to just solve some problems. It is also important to get the chance to stretch our brains by working on some problems that are harder, but still accessible. In this session, we will work through a handful of problems, aiming to talk through approaches to some harder, but still accessible, problems that could be interesting for use as enrichment and discussion in the classroom.

Session 5:

Problem Solving with Platonic and Archimedean Solids

Clay Kellough

Using platonic and Archimedean solids as a gateway to problem solving discussions in 3-D Geometry. Links to Euler, graph theory and building with “Polydrons©”

Plenary:

Carole & Sherri

What role do games have in the mathematics classroom? How can games like SET, QUARTO!, TETRIS, LINK, Mancala and Ultimate Tic Tac Toe help students develop thinking skills? All these questions and more will be answered in this final session.