**Session 1:**
Integrating Problem Solving in Grades 9 and 10.
*Jason Van Rooyen*

This session will examine the when, where and how of using problem solving in grades 9 and 10. A wide variety of problems will be examined and discussed, with varying levels of difficulty.

**Session 2:**
Making The Flipped Classroom Work.
*Leanne Hughes, Sean Jackson*

A flipped classroom inverts traditional instruction by providing lectures online and bringing "homework" into class. This presentation briefly introduces flipped pedagogy, while focusing on the development of concrete examples regarding classroom activities. Participants will explore a variety of answers to the question, “What do I do with class time if I’m not giving lectures?” Using CEMC software as an example, we will develop a model for the effective use of classroom time, and expand upon our ideas to include difficult concepts in the 9 - 12 mathematics curriculum, as identified by session participants.

**Session 3:**
Educational Technologies to Enhance Student Learning.
*Paul Kates, Mark Morton*

A variety of technologies to enhance student learning exist that take minimal effort to learn and are suitable for a range of class structures and teaching strategies. This session will explore several categories of such technologies including screencasting, question facilitation, concept mapping, mathematics software, social bookmarking tools and will include demonstrations and hands-on activities with some of these technologies.

**Session 4:**
Advantages of a Bachelor of Mathematics, Today and for the Future.
*Serge D’Alessio, Khuzaima Daudjee, Bertrand Guenin, Ruxandra Moraru, Diana Skrzydlo*

This session will answer why a student should consider a mathematics degree. The panel will share recent developments in their academic fields. As well, they will discuss areas of employment for Math graduates: where jobs have been, can be, and possibly will be in the future.

**Session 5:**
An Angle on Geometry.
*Ian VanderBurgh*

Geometry has all but disappeared from most Canadian curricula. We will discuss the importance of geometry, and work through some content and some problems that could be used as enrichment for us and for our students.
Session 6:
Kaboom! A new Trajectory for Quadratics.
*Glen McMillan*

The expectations related to quadratic relationships can be abstract and challenging for many students. In this session, Glen will share his ideas on implementing this topic with a maximum level of understanding and a minimum level of frustration for students and teachers. Some time will be left at the end of the session for teachers to share their own best practices.

Session 7:
More Engaging Problems.
*Erin Thaler*

This session builds on a '3-Act-Math' approach popularized by Dan Meyer that uses curiosity and perplexity to engage students in problem solving. Examples, ideas and resources for implementing this type of mathematical task in the Grades 9-10 classroom will be shared.

Session 8:
Using Functions to Create a Masterpiece.
*Marcel te Bokkel*

Need another way to work on transforming polynomials? In this session, you will explore on-line graphing software and/or use graphing calculators to create masterpieces built with functions. A class ready handout will be shared that can be modified to all high school grades and levels. Examples of student work and some examples that are ready for you to create will be presented. Collecting of pictures using TI-Connect will also be demonstrated. Time will be given to play on your laptop or provided calculators and the slide show of your work will end the session.

Session 9:
Mind the Gaps.
*Michael Jacobs*

It is very common for students coming into Grade 9 to have gaps in their knowledge. However, sometimes these misconceptions have gone unnoticed by both teachers and students. Together we will look at some tried and tested diagnostics that will expose these misconceptions. We will look at why such misconceptions occur and what we can do to rectify them thus easing the transition from Grade 8 to Grade 9.