COMC Challenging Problem Analysis Workshop

From October 2 to 26, Meritus Academy will open a COMC challenging problem analysis workshop to help students further improve their problem-solving skills on the COMC exam. The content of the workshop is completely different from that of last year's workshop.

1. Workshop Objective

In additional to the careful analysis of past COMC problems, we will also delve specifically into the COMC Part C problems to focus on the following objectives for this workshop:

- How to look for COMC problem solving ideas
- How to correctly write the solutions for the COMC
- How to strategically solve COMC problems

2. Workshop Content

The materials for this course will mostly come from the COMC Part C problems. Regarding geometry problems, we will also teach Olympiad level problems in addition to COMC Part C problems. Below is the outline for the workshop content:

- 1) How to improve on geometry proofs, including:
 - how to extend auxiliary lines
 - how to apply concyclic points on a circle
 - how to properly write geometry proofs
- 2) How to solve general sequence and number theory problems
- 3) How to solve different kinds of function problems
- 4) How to solve combinatorics and games problems

The above 4 parts form the majority of the COMC Part C problems.

3. Workshop Instructors

This workshop will be taught by three teachers with decades of advanced math competition teaching experience. They are:

Dr. Tatiana Hessami Pilehrood, Dr. Emanoil Theodorescu and Dr. Allen Jiang. Dr. Allen Jiang is also the recipient of the Edyth May Sliffe Awards given by the Mathematical Association of America for outstanding teaching in mathematics. (**Distinguished Mathematics Teaching in Middle School and High School** was admitted as a member of the MAA)

The following students have all received high-level Olympiad training from teachers above this level:

1) International Mathematical Olympiad (IMO)

In 2024, two students from Meritus Academy, Emily Ma and Jerry Wang, had been selected for the 6-member national team to represent Canada in the IMO.

2) Canadian Mathematical Olympiad (CMO)

In 2024, three students from Meritus Academy, Zhekai Shen, Emily Ma and Jerry Wang, were in the top 7 and received the Silver Medal honorable mentions respectively.

3) European Girls' Mathematical Olympiad (EGMO)

In 2024, two students from Meritus Academy, Emily Ma and Emma Tang were selected for the national team, which consisted of four students.

4) Canadian National Open Math Challenge (COMC)

In 2023, there are many students from Meritus Academy who have achieved good results in this exam.

About **46** students from Meritus Academy have won national or Ontario honorable mentions due to their outstanding COMC performance, and are eligible to be selected for CMO, CJMO or CMO Repêchage, and EGMO trials.

4. Workshop Schedule (The content is different from that of last year's workshop)

1) Date and Time: From October 2 to 26, 8 classes in total, 2.5 hours per class

Class No.	Content	Date & Time
Class 1	Geometry	Wednesday, Oct. 2, at 7:00 – 9:30 PM
Class 2	Sequence & Number Theory 1	Saturday, Oct. 5, at 7:00 – 9:30 PM
Class 3	Analytic Geometry	Wednesday, Oct. 9, at 7:00 – 9:30 PM
Class 4	Sequence & Number Theory 2	Saturday, Oct. 12, at 7:00 – 9:30 PM
Class 5	Algebra 1	Wednesday, Oct. 16, at 7:00 – 9:30 PM
Class 6	Combinatorics & Games 1	Saturday, Oct. 19, at 7:00 – 9:30 PM
Class 7	Algebra 2	Wednesday, Oct. 23 at 7:00 – 9:30 PM
Class 8	Combinatorics & Games 2	Saturday, Oct. 26, at 7:00 – 9:30 PM

2) Course Format: Online

3) Cost: \$25/hour. 20 hours in total. $$25/hour \times 20 \text{ hours} = $500.$

Please note the following:

- If a student is taking 2 math competition courses at Meritus Academy, then this workshop is **free**.
- If a student is taking 1 math competition course at Meritus Academy, then this workshop is \$250.
- If a student is taking any other courses at Meritus Academy, there is an additional \$30 discount per course taken at Meritus Academy.

If you are interested in the workshop, please <u>click here</u> to register.

Meritus Academy