香 港 資 優 教 育 學 苑
The Hong Kong Academy for Gifted Education
香 港 特 別 行 政 區 政 府 教 育 局 資 助
Subvented by the Education Bureau, the Government of the HKSAR

Learn about Gigi & Yoyo

S1IMO008C
(Token- required)

[Gifted Programme]

Mathematical Olympiad Course (Level I)

Introduction to Olympiad Mathematics 2025 (Phase I)

Instructor from International Mathematical Olympiad
Hong Kong Committee Limited

INTRODUCTION TO OLYMPIAD MATHEMATICS

Phase I

Application Deadline
17 Jan 2025 12:00 noon

Result Release
21 Feb 2025

Intended Learning Outcomes

Upon completion of the gifted programme, gifted students should be able to:

1. broaden mathematical knowledge in a variety of areas on the basis of senior secondary mathematics curriculum

2. strengthen the problem solving and higher-order thinking skills

3. learn more about the scope of International Mathematical Olympiad Training

If student members withdraw from the programme after the Application Deadline, the token will be deducted.

◆ Gifted Programme Introduction

- An introductory level comprehensive mathematics programme which covers a wide range of topics

- Broaden students' mathematical knowledge and strengthen their problem-solving skills

- Students can learn more about the scope of International Mathematical Olympiad Training

- Consists of 2 phases

- This programme is co-organized with International Mathematical Olympiad Hong Kong Committee Limited (IMOHKCL)

◆ Suitable for

- S1 to S6 HKAGE student members
- Class size: 30

All applicants **MUST** attend the **Aptitude Test** held on **15 Feb 2025**.
Except for those who have
a) completed 2 courses in Maths Ignition series with "certificate of distinction" **OR**
b) completed 3 courses in Maths Ignition series with "certificate of merit" or above **OR**
c) completed 4 courses in Maths Ignition series with "certificate of completion" or above **OR**
d) attended the Aptitude Test held on 11 May 2024, 17 Aug 2024 or 16 Nov 2024

Remarks: Not for student members who have completed any phase of "International Mathematics Olympiad Training" or "Introduction to Olympiad Mathematics" before

Remarks:
- Due to the limited seats in computer rooms, students who attended the Aptitude Test on 16 Nov 2024 would not be allowed to take the test on 15 Feb 2025. Their results on 16 Nov 2024 will be used for this programme.
- Students will be selected randomly in attending the Aptitude Test if the application is over-subscribed. Only selected students could join the Aptitude Test held on 15 Feb 2025.
- A notification email will be sent on **22 Jan 2025** for the application result of the Aptitude Test.
- All unselected students will be regarded as their application of this programme unsuccessful.

◆ Medium of Instruction

Cantonese with English handouts

◆ Pre-requisite

Students should know the basic knowledge of the following:

Quadratic Equations and Functions, Binomial Theorem, Mathematical Induction, Remainder Theorem and Factor Theorem, Arithmetic and Geometric Sequences, Circles and Trigonometry

◆ **Enquiries** 📞 3940 0101 ✉ programme@hkage.org.hk

◆ Aptitude Test

- Students who wish to apply for this programme must take a general aptitude test on **15 Feb 2025 (2:00 p.m. – 4:00 p.m.).** Except for those who have attended the Aptitude Test held on 11 May 2024, 17 Aug 2024 or 16 Nov 2024.

- This general aptitude test covers a wide range of topics in mathematics. The purpose of the test is to figure out the applicant's knowledge in different fields of mathematics in order to choose the most suitable students for different programmes. Neither under-qualified nor over-qualified students will be admitted.

- The result of an aptitude test will be valid for one year. If a student takes the test more than once, the latest result will prevail. The following table lists the programmes for which the results of this general aptitude test will apply.

Programme Date	Code	Programme Name	Aptitude test valid			
			11 May 2024	17 Aug 2024	16 Nov 2024	15 Feb 2025
Mar 2025	S1IMO007C	CGMO Training 2025 (Phase I)	✓	✓	✓	✓
Mar 2025	S1IMO008C	Introduction to Olympiad Mathematics 2025 (Phase I)	✓	✓	✓	✓

Remarks:
1. All aptitude tests will only be arranged on the designated dates. No make-up test will be arranged.
2. No Calculator is allowed.
3. Please bring along with your Identification Card, e.g. HKID, student ID.
4. Please arrive at the venue 15 minutes prior to the Aptitude Test begins.

If students who have selected to join the aptitude test are absent without any reasons and prior notification provided, it will result in a lower priority in joining the aptitude test next time when they apply.

◆ Certificate

E-Certificate will be awarded to participants who have:

- attended **at least 7 sessions**; and

- completed all the assignments with satisfactory performance

◆ Schedule

Session	Date	Time	Venue
Aptitude Test	15 Feb 2025	2:00 p.m. – 4:00 p.m.	Mongkok (TBC)
1	1 Mar		Room 105, HKAGE
2	8 Mar		Room 105, HKAGE
3	15 Mar		
4	22 Mar		
5	29 Mar	2:00 p.m. – 5:30 p.m.	Room 303, HKAGE
6	5 Apr		
7	12 Apr		
8	26 Apr		Room 204, HKAGE
9	3 May		Room 105, HKAGE

- For any assessment to be held in the programme, no make-up will be arranged.

◆ Sample Notes

1. Does there exist a multiple of 2017 of the form $111\ldots111$?

2. If $a+b+c=10$, what is the greatest possible value of ab^2c^3?