S1IM0005C

(Token- required)

[ Gifted Programme ]

**Mathematical Olympiad Course (Level I)** 

# Maths Ignition – Coordinate Geometry

Instructor from International Mathematical Olympiad Hong Kong Committee Limited



## **Intended Learning Outcomes**

Result Release 19 Dec 2025

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

- Broaden their mathematical knowledge in the topic of Coordinate Geometry on the basis of junior secondary mathematics;
- 2. Strengthen their problem solving and higher-order thinking skills;
- 3. Learn more about the scope of International Mathematical Olympiad Training.

# **Gifted Programme Introduction**

- Maths Ignition is an introductory programme. It is designed as a series of courses on different topics and is developed as a bridging programme to the 'IMO Training' programme.
- "Maths Ignition Coordinate Geometry" is the fifth course of the series. It aims to broaden students' knowledge in coordinate geometry on the basis of junior secondary mathematics curriculum through exploration and investigation approach.
- This programme is co-organized with International Mathematical Olympiad Hong Kong Committee Limited (IMOHKCL)

### **Suitable for**

- S1 to S3 HKAGE student members
- Class size: 30
- All applicants MUST attend the Aptitude Test held in HKAGE on 6 Dec 2025 except for those who have attended the Aptitude Test held on 15 Feb 2025, 24 May 2025, or 23 Aug 2025.
- \* Not for students who have enrolled in:
- 1. CGMO Training (Phase I) (S1IMO007C) or
- 2. Introduction to Olympiad Mathematics (Phase I) (S1IMO008C) or
- 3. Any phase of International Mathematics Olympiad (IMO) Training before.

#### Remarks:

- Due to the limited seats in computer rooms, students who have attended the Aptitude Test on 23 Aug 2025 will not be allowed to take the test on 6 Dec 2025. Their results on 23 Aug 2025 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 6 Dec 2025.
- A notification email will be sent on 25 Nov 2025 for the application result of the Aptitude Test.
- All unselected students will be regarded as having unsuccessful applications to this programme.

This programme is the same as "Mathematical Olympiad Course (Level I): Maths Ignition - Coordinate Geometry (S1IMO005C)" in the 24/25 school year.

### **Medium of Instruction**

Cantonese with English handouts

# **Aptitude Test**

- Students who wish to apply for this programme must take a general aptitude test on 6 Dec 2025 (1:45 p.m. - 3:45 p.m. or 4:00 p.m. - 6:00 p.m.), except for those who have attended the Aptitude Test held on 15 Feb 2025, 24 May 2025, or 23 Aug 2025.
- 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			
			15 Feb 2025	24 May 2025	23 Aug 2025	6 Dec 2025
Jan 2026	S1IM0007C	CGMO Training 2026 (Phase I)	✓	✓	✓	<b>√</b>
Jan 2026	S1IM0008C	Introduction to Olympiad Mathematics 2026 (Phase I)	✓	✓	✓	<b>√</b>
Feb 2025	S1IM0005C	Maths Ignition - Coordinate Geometry	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>

#### Remarks:

- All aptitude tests will only be arranged on the designated dates. No make-up test will be arranged.
- No Calculator is allowed.
- 3. Please bring along 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 reason and prior notification provided, it will result in a lower priority in joining the aptitude test next time when they apply.





### **Schedule**

Session	Date	Time	Venue		
Aptitude Test	6 Dec 2025	1:45 p.m. – 3:45 p.m. or 4:00 p.m. – 6:00 p.m.	To be confirmed		
1	28 Feb 2026	2:00 p.m. – 5:00 p.m.			
2	7 Mar 2026	2:00 p.m 5:00 p.m.	Room 203, HKAGE		
3	14 Mar 2026	2:00 p.m 5:00 p.m.			
4	21 Mar 2026	2:00 p.m 5:00 p.m.	Room 303, HKAGE		

- A notification email will be sent on 25 Nov 2025 for the application result of the Aptitude Test.
- For any assessment to be held in the programme, no make-up will be arranged.

### Certificate

E-Certificate will be awarded to participants who have:

- attended at least 3 sessions; and
- completed all the assignments with satisfactory performance

# **Sample Notes**

- 1. What is the distance between the straight lines 3x + 4y = 5and 3x + 4y = 6?
- What is the radius of the circle  $x^2 + y^2 4x + 6y 8 = 0$  ?

# **Appendix - IMO-related Programmes**

- IMO-related programmes is a series of programmes that provide International Mathematical Olympiad (IMO) related training. It aims to equip students with the mathematics knowledge and curriculum of IMO, problem solving skills, and high-order thinking skills progressively.
- There are different enrollment methods, e.g. aptitude test. For details, please refer to each programme's poster

Level I

Maths Ignition (MI) Programmes

- For S1-S3 HKAGE student members
- Mathematical Introductory training in Olympiad by topics
- Enroll through aptitude test

Level I to II

Introduction to Olympiad **Mathematics** (ITOM)

- For S1-S6 HKAGE student members
- Two phases of training
- Enroll through aptitude test; OR
- Students who attained (a) distinction in 2 MI courses; OR (b) merit or above in 3 MI courses; OR (c) completion or above in 4 MI courses could enroll directly

Level I to III

China Girls' Mathematical Olympiad

- For S1-S6 HKAGE female HKAGE student members
- Three phases of training
- Enroll through aptitude test; OR
- Students who have completed any phase of IMO/CGMO/ITOM Training in the past two years could enroll directly
- CGMO HK Team members will be selected based on their performance in the trainings

Level III to IV

International **Mathematical** Olympiad (IMO) Trainings\*

- Four phases of training
- The application is limited to invited members only
- IMO HK Team representatives are selected based on their performance assessments during trainings
- The HKAGE and IMOHKCL reserve the right of the final decision in case of any dispute concerning the IMO HK Team list

\*For detailed criteria, flowchart and timeline, please refer to the next page.







### **International Mathematical Olympiad Related Programmes**

(English version only 只提供英文版)

