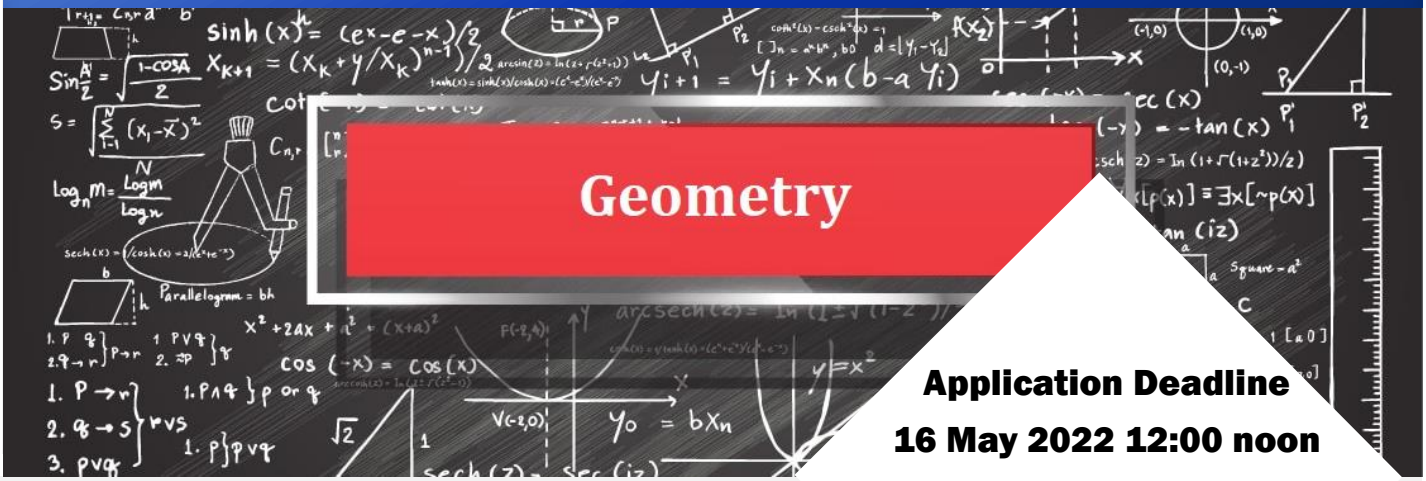
香 港 資 優 教 育 學 苑
The Hong Kong Academy for Gifted Education

E1MAT010C
(Token- required)

Geometry and Topology Course (Level I)

Perspectives on Junior Secondary Mathematics - Geometry

Mr. Lo Yat Lung
Caritas Fanling Chan Chun Ha Secondary School, Mathematics Teacher



Application Deadline
16 May 2022 12:00 noon

Result Release
27 May 2022

Intended Learning Outcomes

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

1. recognise the effect on 2-D shapes after the transformation including reflection, rotation, translation, dilation, etc;
2. identify whether two triangles are congruent/similar with simple reasons;
3. inquire geometry knowledge in 2-D space using trigonometric relations;
4. inquire, describe and represent geometric knowledge in 2-D figures using numeric and algebraic relations;
5. recognise the properties of simple 3-D object.

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

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Introduction

Do you want to inquire advanced mathematics knowledge step by step? Mathematics knowledge is built from foundation. This programme teaches the key geometric knowledge at junior secondary levels in a succinct way to equip participants with the basic knowledge required for learning mathematics at an advanced level. It enables participants to learn mathematics at higher levels according to their own interests and abilities and discover the joy of learning mathematics. This programme is co-organized with Caritas Fanling Chan Chun Ha Secondary School.

Schedule

Session	Date	Time	Venue
1	16 July	2:00 p.m. – 5:00 p.m.	Caritas Fanling Chan Chun Ha Secondary School, 28 San Wan Road, Fanling, N.T. (Map)
2	23 July		
3	30 July		
4	6 August		

Target Participants

- P4 to P6 HKAGE student members only in 2021/22 school year
- Class size: 30

This programme is same "Geometry and Topology Course (Level 1): Perspectives on Junior Secondary Mathematics – Geometry (E1MAT010C) in 20/21 school year.

Pre-requisite

Students should have the basic knowledge in:

- angles related with lines and rectilinear figures
- angles in triangles and polygons
- solving equations
- square root
- determining the type of quadrilaterals

Medium of Instruction

Cantonese with Chinese Handouts

Screening

Please answer the screening question in the online application form.

*The screening question is designed to help the applicant understands the course level and the course content. The question must be answered by the student applicant and it can only be attempted once. The answer cannot be changed once the application is submitted. Selection is based on students' performance in answering the question. Only students who can demonstrate motivation and the knowledge Geometry in the screening question can be enrolled in the programme

Certificate

E-Certificate will be awarded to participants who have:

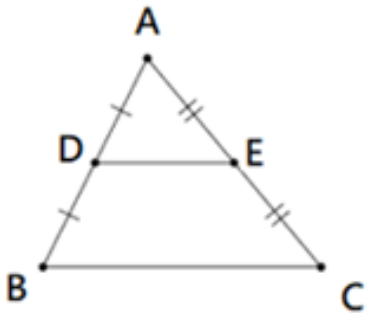
- attended **AT LEAST 3** sessions; AND
- completed all the assignments with satisfactory performance

Enquiries 3940 0101 programme@hkage.org.hk

Sample Notes

B. 利用座標幾何證明

本部份將會利用座標幾何證明幾何定理



命題 1: 中點定理(mid-point theorem)

ABC 是一個三角形，D 和 E 是 AB 和 AC 的中點，則

(a) BC=2DE, (b) DE//BC