






Math Magic and Algebra Enrichment (MATP1211)

Introduction	Magic is usually performed with props, such as wands, poker cards or coins. Have you heard of mathematical magic with algebra? In this programme, you will learn many interesting properties of algebra and use them to reveal, as well as design, magnificent math magic. This programme is co-organized with TWGHs S. C. Gaw Memorial College		
Programme Type / Level	Algebra Course (Level 1) (Token-required)		
Instructor(s)	Mr. Lau Hon Cheong (Panel Head of Mathematics of TWGHs S. C. Gaw Memorial College)		
Pre-requisite	No special prerequisites are needed. Knowledge of negative numbers and Excel is an advantage but not a must. This programme is a basic level programme. It is recommended to choose other programmes if students have mastered the relevant knowledge.		
Target Participants		<ul style="list-style-type: none"> ➤ P4 to P6 HKAGE student members ➤ Class size: 24 * Priority will be given to P4 and P5 student members. 	
Medium of Instruction		Cantonese with Chinese handouts	
Certificate		E-Certificate will be awarded to participants who have: <ul style="list-style-type: none"> ❖ Attended AT LEAST 3 sessions AND ❖ Completed all the assignments with satisfactory performance 	
Intended Learning Outcomes		Upon completion of the programme, participants should be able to: <ol style="list-style-type: none"> 1. handle the arithmetic involving directed numbers 2. establish algebraic expressions and manipulate them; 3. apply certain algebraic skills such as factorization and setting up equations to solve practical problems. 4. Introduction to the rectangular coordinates system 5. find the general term of some sequences and the summation of these sequences. 	
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 knowledge of algebra in the screening question can be enrolled in the programme.	
Application Deadline	29 Apr, 2019 12:00 n.n	Application Result Release Date	10 May, 2019

Student members may withdraw from the programme on or before the deadline. Otherwise, the token will be deducted.

Schedule



Session	Date	Time	Venue
1	15 Jun	9:30 a.m. – 12:30 p.m.	Rm 401, TWGHs S. C. Gaw Memorial College*
2	22 Jun		
3	29 Jun		
4	13 Jul		

* Address: 7 Tsing Sum Street, Town Centre, Tsing Yi, N.T. ([Map](#))

Sample Example for the Programme

活動(二)：心裡有數

1. 先想一個數 (如：6152894)，然後隨意將每一個數字調位 (如得出：1984265)。數字由 0-9，可以重複。
2. 求兩個數的差，即將大減小 (如 $6152894 - 1984265$)，得出 4168629。
3. 心裡將得出的數其中一個 0 以外的數字移走，告訴主持人剩下的數是什麼。
4. 主持人知道你心裡移走的是甚麼字。

試利用代數解釋這個魔術背後的原理。(同學可先用 4 位數來試驗。)

Reference:

波沙曼提爾 (2005).神奇數學 117.: 天下文化.

安·魯尼 (2013).數學，為什麼是現在這樣子？：一門不教公式，只講故事的數學課：臉譜.

Enquiries



For enquiries, please contact us at 3940 0101 after language selection, press "1".

MATHEMATICS

數學