



Algebra 2 (MATO2211)

Algebra is one of the major mathematical topics. Using innovative as well as interactive teaching materials, this online learning programme enables students to gain fundamental knowledge of algebra, such as factorization of simple polynomials, linear equations in two unknowns and identities

Introduction

Module 1 : Factorization

- Understand factorization as a reverse process of expansion;
- Factorize polynomials by taking out common factors and grouping of terms;
- Factorize polynomials by using identities including difference of two squares, perfect square expressions;
- Factorize polynomials by cross-method.

Module 2 : Linear Equations in Two Unknowns

- Formulate and solve simultaneous equations by algebraic methods;
- Explore simultaneous equations that are inconsistent or that have no unique solution.

Module 3 : Identities

- Explore the meaning of identities and distinguish between equations and identities;
- Discover and use the identities: difference of two squares.

Programme Type / Level

Algebra Online Learning Programme (Level 1) ([Non Token-required](#))

Writer

Mr. Cheuk Wing Hong and Mr. Kwan Chi Kuen (Secondary School Mathematics Teacher)

Target Participants

➤ P4 to P6 HKAGE student members

* Students who fail the online programme can enrol in it again in the next quarter.
(Quarter ONE: 2 April – 30 June; Quarter TWO: 2 July – 30 Sep;
Quarter THREE: 2 Oct – 30 Dec; Quarter FOUR: 2 Jan – 30 Mar).

Medium of Instruction



English

Intended Learning Outcomes

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

1. Factorize polynomials by taking out common factors, grouping of terms, identities (including difference of two squares and perfect square expressions) and cross-method;
2. Formulate and solve simultaneous equations by algebraic methods;
3. Explore simultaneous equations that are inconsistent or that have no unique solution;
4. Evaluate the meaning of identities and distinguish between equations and identities;
5. Discover and use the identities: difference of two squares, the perfect square expression, difference and sum of two cubes.



Duration

15 hours

System Requirement

Browser: IE 8 OR above; Firefox 6 OR above; Safari
Screen resolution: 1024x768

Application Procedure



1. Click "[HERE](#)" to go to online application platform
2. Complete and submit the online application form
3. You and your parent will receive the Online Application Confirmation email from our system
4. Click "[HERE](#)" to access to the moodle platform
5. Use the USERNAME and PASSWORD indicated in the email to login
6. You may start now!

Remarks

- You have to pass the online test in order to complete the course by attempting **ONCE** only.
- A tick next to an activity name may be used to indicate when the activity is complete. If a box with a solid border is shown, please click it to tick the box when you think you have completed the activity. (Clicking it again removes the tick if you change your mind.)

Enquiries



For enquiries, please contact us at 3940 0101.

MATHEMATICS

數學