

### Class 1

### **H2** Mathematics bridging (IP students)

Date/Day	Time
24 <sup>th</sup> October 2024 Thursday	10:00AM – 12:00PM
29 <sup>th</sup> October 2024 Tuesday	10:00AM – 12:00PM
5 <sup>th</sup> November 2024 Tuesday	10:00AM – 12:00PM
7 <sup>th</sup> November 2024 Thursday	10:00AM – 12:00PM
12 <sup>th</sup> November 2024 Tuesday	10:00AM – 12:00PM
14 <sup>th</sup> November 2024 Thursday	10:00AM – 12:00PM
19 <sup>th</sup> November 2024 Tuesday	10:00AM – 12:00PM
21 <sup>st</sup> November 2024 Thursday	10:00AM – 1:00PM Timed trial

### Lesson details

Total: \$840

(First 50% payment is due before 1<sup>st</sup> lesson, remaining payment is due on the 3<sup>rd</sup> lesson)

Consultation via WhatsApp/Zoom

Recording of lesson in event of absenteeism

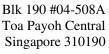
Timed trial: Students are to arrange for an online consultation with tutor after scripts are marked and returned. Consultations are usually 30~45 minutes.

# Topics (Subjected to change)

- 1. Equations and Inequalities
  - Formulating a system of linear equations from a problem situation
  - Solving inequalities of the form  $\frac{f(x)}{g(x)} > 0$

where f(x) and g(x) are linear expressions or quadratic expressions that are either factorisable or always positive

- 2. Patterns
  - Relationships by finding an algebraic expression for n<sup>th</sup> term
- 3. Arithmetic and Geometric Progression
  - Concepts of sequence and series for finite and infinite cases
  - Relationship between  $u_n$  (n<sup>th</sup> term) and  $S_n$  (sum to n terms)
  - Sum and difference of two series
- 4. Differentiation
  - Recap of differentiation techniques
  - Implicit Differentiation
  - Maxima and Minima
- 5. Integration
  - Recap of integration techniques
  - General power rule of integration
  - Trigonometric formula
  - Integration by substitution
  - Integration by parts
- 6. Permutation and Combination
  - Addition and multiplication principles for counting
  - Concepts of permutation and combination
  - Arrangement of distinct objects in a line including cases involving restriction





## **H2 Mathematics bridging O level students)**

Class 2

Date/Day	Time
12 <sup>th</sup> November 2024 Tuesday	10:00AM – 12:00PM
14 <sup>th</sup> November 2024 Thursday	10:00AM – 12:00PM
19 <sup>th</sup> November 2024 Tuesday	10:00AM – 12:00PM
21 <sup>st</sup> November 2024 Thursday	10:00AM – 12:00PM
26 <sup>th</sup> November 2024 Tuesday	10:00AM – 12:00PM
28 <sup>th</sup> November 2024 Thursday	10:00AM – 12:00PM
3 <sup>rd</sup> December 2024 Tuesday	10:00AM – 12:00PM
5 <sup>th</sup> December 2024 Wednesday	10:00AM – 1:00PM Timed trial

### Lesson details

Total: \$840

(First 50% payment is due before 1<sup>st</sup> lesson, remaining payment is due on the 3<sup>rd</sup> lesson)

Consultation via WhatsApp/Zoom

Recording of lesson in event of absenteeism

Timed trial: Students are to arrange for an online consultation with tutor after scripts are marked and returned. Consultations are usually 30~45 minutes.

Topics	(Subjected to	change)
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- 1. Equations and Inequalities
  - Formulating a system of linear equations from a problem situation
  - Solving inequalities of the form  $\frac{f(x)}{g(x)} > 0$

where f(x) and g(x) are linear expressions or quadratic expressions that are either factorisable or always positive

- 2. Patterns
  - Relationships by finding an algebraic expression for n<sup>th</sup> term
- 3. Arithmetic and Geometric Progression
  - Concepts of sequence and series for finite and infinite cases
  - Relationship between  $u_n$  (n<sup>th</sup> term) and  $S_n$  (sum to n terms)
  - Sum and difference of two series
- 4. Differentiation
  - Recap of differentiation techniques
  - Implicit Differentiation
  - Maxima and Minima
- 5. Integration
  - Recap of integration techniques
  - General power rule of integration
  - Trigonometric formula
  - Integration by substitution
  - Integration by parts
- 6. Permutation and Combination
  - Addition and multiplication principles for counting
  - Concepts of permutation and combination
  - Arrangement of distinct objects in a line including cases involving restriction