

## Proposal for highschool tutoring

### Introduction

This proposal is to provide access to what I need to do and to have in the all-round type tutorial, including equipments and methodologies.

### General partition

Regarding to HKDSE syllabus, partitioning by half-year as follows:

- Number and algebra:
  1. Algebraic notations handling and complex numbers;
  2. Solving simple equations in one unknown;
  3. Solving system of simple equations in two unknowns;
  4. Solving quadratic equations in one unknown;
  5. Introducing functions and graphs;
  6. Exponentiation and logarithms;
  7. Handling polynomials;
  8. Variations;
  9. Solving system of equations in advanced (More about equations);
  10. Solving inequalities;
  11. Linear programming;
  12. Sequence and series.
- Locus:
  1. Equation of straight lines;
  2. Distancing and variable location;
  3. Equation of circles;
  4. Equation of locus.
- Euclidean Geometry:
  1. Trigonometry;
  2. Sine Law, Cosine Law and Heron's formula;
  3. Properties of circle;
  4. Area and Volume;
  5. 3-dimensional geometry.

- Data Handling:
  1. Mean, mode, median, and standard deviation;
  2. Statistical charts reading;
  3. Counting;
  4. Probability;
  5. Statistical measure.
- Paper practising:
  1. By-topic practicing;
  2. By-year practicing (CE);
  3. By-year practicing (HKDSE);
  4. Challenging practicing.

### **Cycle Routine**

For each cycle, each students will have four lessons in total. The regular routine may follows

- One lesson as a thorough goal setting of the chapters and brief recalling of memories.
- two lessons on examples and practising with tutor guidance; and
- One lesson for test.

Each lesson consists of one hour and ten minutes. Details are included in later section.

### **Equipment**

- Timetable
- Process checking (Score included)
- Teaching notes
- Test
- Comment sheet