

### AQA AS & A Level Mathematics

#### Course Overview

In order to study mathematics at AS & A Level, the mathematics you enjoy and excel in at GCSE should be algebra and trigonometry. If you have done Level 2 Further Maths, you will find the work on differentiation most useful.

#### Course Content

**Year 12:** You will study for AS Mathematics:

- **Pure Maths:** proof, algebra and functions, coordinate geometry, sequences and series, trigonometry, exponentials and logarithms, differentiation, integration.
- **Mechanics:** kinematics, forces and Newton's laws.
- **Statistics:** sampling, data presentation and interpretation, probability, distributions, hypothesis testing.

**Year 13:** You will continue to study for A Level Mathematics:

- **Pure Maths:** extends all the work in Year 12 and includes numerical methods.
- **Mechanics:** extends all the work in Year 12 and includes work on vectors and moments.
- **Statistics:** extends all the work in Year 12.

#### Assessment

AS Level is awarded based on your performance in two equally weighted papers usually taken at the end of year 12.

Paper 1: 67% pure maths and 33% mechanics. Paper 2: 67% pure maths and 33% statistics.

A Level is awarded based on your performance in three equally weighted papers usually taken at the end of year 13.

Paper 1: 100% pure maths. Paper 2: 50% pure maths and 50% mechanics. Paper 3: 50% pure maths and 50% statistics.

Exams taken at AS do not contribute towards your A Level result.

#### Entry Requirements

You will need at least a grade 6 in GCSE mathematics. A grade 7 would be advisable. You will need at least a grade D at AS in Y12 in order to progress to A Level in Y13.

#### Progression

An A level in mathematics is essential for many courses at university such as mathematics, physics, engineering and is highly desirable in a wide range of subjects such as chemistry, natural sciences, computing, economics and architecture.

#### Course Contact

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