

# Mathematics

# A Level Specification: OCR A H240

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## What will I study?

Year 1

**Pure**: quadratics, polynomials, graphs, binomial theorem, trigonometry, logarithms, calculus, vectors and proof.

**Statistics**: probability, binomial distribution, hypothesis testing, including the use of a large data set.

**Mechanics**: kinematics, forces and Newton's Laws.

#### Year 2

Topics from Year 1 are studied in more depth, with the addition of: **Pure**: functions, numerical methods, and differential equations.

Statistics: normal distribution.

**Mechanics**: motion under gravity, friction and simple moments.

#### How will I be assessed?

Three exams, each two hours long **Pure**: 100 marks: 33.3% **Pure and Statistics**:100 marks: 33.3% **Pure and Mechanics**:100 marks: 33.3 %

## How will I Learn?

Excellent teaching will lead you through exciting and demanding topics. You will back this up with plenty of independent work, with lots of support from your classmates and teachers. There will be regular low-stakes tests, as well as larger assessments to ensure you are well-prepared for the exams at the end of the course.



## What skills will I need?

- A love of Mathematics.
- Excellent algebra and problem-solving skills.
- Lots of resilience.
- Ability to work independently.
- Good organisational skills.

## **Careers and Progression**

One of the most sought after A-levels, Mathematics has an abundance of skills that are transferable across many areas. Just about every university course holds A-level Mathematics in the highest regard. It is the most popular A-level course in the UK.

## A truly comprehensive Sixth Form with success and opportunity for

