

# Mathematics

## Course description and Assessment

### **The Course (A Level)**

A level Mathematics also consists of PURE and APPLIED Mathematics, in the ratio of 2:1.

In year 13 you will sit:

- 2 Pure Paper (2 hours each)
- 1 Applied Paper (2 hours)

These examinations will contain content from both Year 12 and 13 combined.

# Mathematics

## Course content

### **A Level Course Content**

#### **PURE**

- Algebraic Methods
- Functions and Graphs
- Sequences and Series
- Binomial Expansion
- Radians
- Trigonometric Functions
- Trigonometry and Modelling
- Parametric Equations
- Differentiation
- Numerical Methods
- Integration
- Vectors

#### **STATISTICS**

- Regression, Correlation and Hypothesis Testing
- Conditional Probability
- The Normal Distribution

#### **MECHANICS**

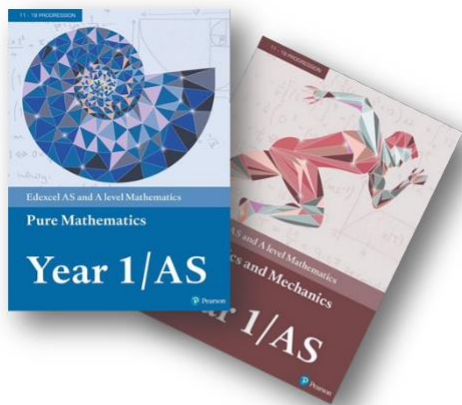
- Moments
- Forces and Friction
- Projectiles
- Applications of Forces
- Further Kinematics



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## Recommended textbook and equipment

You will need Pearson's Edexcel textbooks for Pure Mathematics Year 1 and Statistics & Mechanics Year 1. These will be available from the mathematics department for a small deposit.



**Casio ClassWiz FX-991EX**  
This brand new advanced scientific calculator is specifically designed for the new A level course.

You will also need a new calculator.

Again these will be available to buy through the mathematics department.

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## Future Pathways

