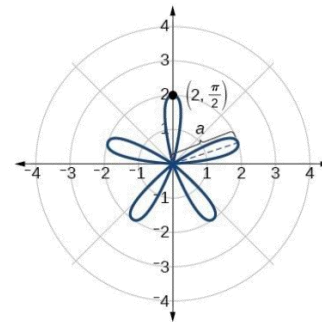


# FURTHER MATHS

## Year 13 Curriculum



Following on from successful study of the AS level in Further Maths, you can choose to continue to complete the full course in A level Further Mathematics. This is undoubtedly challenging, but is a highly respected achievement, especially for those interested in pursuing university level study of Maths, Physics, Engineering and related disciplines at top universities.

The course is divided into sections similar to the AS year, with 50% of the study being devoted to Pure Maths, and 25% each to the branches of Further Statistics and Decision Mathematics. In exceptional circumstances students may choose to study different "Options" units – perhaps Further Mechanics rather than one of Decision or Further Statistics – and this will be supported by the school.

**Problems posed at this highly advanced level do expect full understanding of all topics and then additionally the ability to problem solve and make connections between the seemingly disparate strands of Mathematics.**

The examinations at the end of Year 13 are the only ones that count towards the final grade awarded in Further Mathematics A level – but all the study within the AS Further Maths course is part of this syllabus, so last year's hard work pays off.

### Pure Maths area of study for Further Maths Y13:

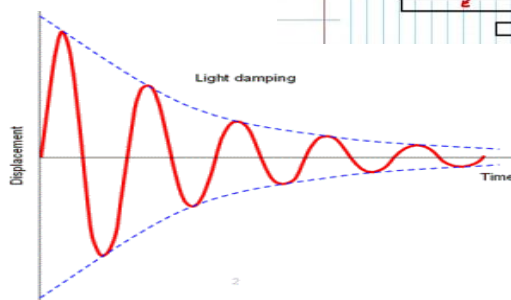
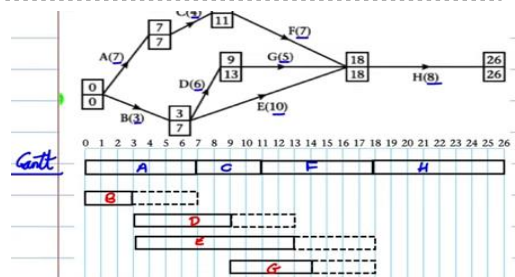
1. Further Complex Numbers
2. Further Series including Maclaurin
3. Further Volumes of Revolution
4. Polar Co-ordinates
5. Hyperbolic functions
6. Differential Equations
7. Modelling with Differential equations.

### In Decision you will study:

1. The planarity algorithm
2. algorithm
3. Travelling Salesman Problem
4. Simplex Methods

### In Statistics you will study:

1. Geometric and Negative Binomial Distributions
2. Hypothesis Tests
3. The Central Limit theorem
4. Probability generating functions.



**A level Further Maths (Edexcel) has four papers, all 1h30m in length and equally weighted:**

**Paper 1: Core Pure Mathematics**  
**Paper 3: Further Statistics**

**Paper 2: Core Pure Mathematics**  
**Paper 4: Decision Mathematics**