
MATHEMATICS

Year 12

Topics studied:

Core 1:

Coordinates, points and lines

Surds

Quadratics

Differentiation and its applications

Inequalities

Index Notation

Graphs of nth power functions

Polynomials

Transforming graphs

Investigating shapes of graphs

Circles

Core 2:

Trigonometry

Sequences, including geometric sequences

The Binomial theorem

The Sine and Cosine rules

Integration

Exponentials and Logarithms

Factors and Remainders

Radians

The Trapezium rule

Statistics 1:

Representation of data

Measures of location

Measures of spread

Probability

Permutations and Combinations

Probability distributions

The Binomial and Geometric distributions

Expectation and variance of a random variable

Correlation

Regression



Examination Board:

OCR

Assessment Structure:

Three examinations to take place at the end of the year.

Examinations in each of the modules; Core 1, Core 2, Statistics 1

Subject specific websites to support revision and independent learning:

MyMaths

FMSP website

OCR Website (past papers and mark schemes)

YouTube (tutorials, video solutions to past exam questions)

Recommended subject guides:

- CGP AS-Level Mathematics, Exam Board: OCR, Complete Revision and Practice. ISBN 978 1 84762 582 3. [Available from book shops, CGP website and amazon]

Additional Information:

Revision timetables are issued in March/April and ran by the KS5 mathematics team.

Each module will have a specific revision time/day.

Revision lists, notes and practice exam questions are available on the Fairfax website for each module.

Revision books are also available to purchase.

