SUBJECT: Further Mathematics EXAM BOARD: AQA



Proof, Complex Numbers, Matrices, Further Algebra & Functions, Further Calculus, Further Vectors, Polar Coordinates, Hyperbolic Functions.

+ TWO of the following:

Course Overview (Y12)

Mechanics

Dimensional Analysis, Momentum & Collisions, Work, Energy & Power, Circular Motion.

Statistics

Discrete Random Variables & Expectation, Poisson Distribution, Type 1 and Type II Errors, Continuous Random Variables, Chi Tests for Association, Confidence Intervals,

Discrete Maths

Graphs, Networks, Network Flows, Linear Programming, Critical Path Analysis, Game Theory, Binary Operations.

Useful websites

<u>http://www.furthermaths.org.uk/student_area/</u> - Further Maths Support Programme www.aqa.org.uk - specification, specimen papers.

http://www.mathcentre.ac.uk/ - support materials, free of charge. There are a variety of resources – self-study guides; test yourself diagnostics and exercises; video tutorials; iPod and 3G mobile phone downloads; and case studies.

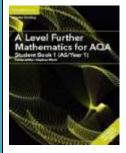
Resources are available on-line, and may be printed or downloaded.

http://plus.maths.org/content/ - Plus is an internet magazine written by the

Millenium Mathematics Project which aims to introduce readers to the beauty and the practical applications of mathematics.

Essential text books and reading list

A-Level Further Mathematics for AQA Student Book 1 (AS/Year 1)



Authors: Stephen Ward, Paul Fannon Publisher: Cambridge University Press

ISBN-13: 9781316644430 To be published July 2017

	A graphics calculator is also recommended.
Summer task	In addition to the Summer task for Mathematics, students should investigate what is meant by the square root of a negative number – where does this question lead you?