

The Course

We are following the AQA A-Level syllabus

(www.aqa.org.uk) GCE Mathematics 7357

What previous knowledge do I need?

You should have a grade 7 or above in GCSE Mathematics.

Will I be able to succeed in A-Level Maths?

Those students who work hard and achieved a 7 or better at GCSE do well. Be warned that you cannot 'cruise' through the course without working hard, even if maths comes very naturally to you.

The Content

- Overarching themes
- Proof
- Algebra and functions
- Coordinate geometry
- Sequence and series
- Trigonometry
- Exponentials and logarithms
- Differentiation
- Integration
- Numerical methods
- Vectors
- Statistical sampling
- Data presentation and interpretation
- Probability
- Statistical distributions
- Statistical hypothesis testing
- Quantities and units in mechanics
- Kinematics
- Forces and Newton's laws
- Moments
- Use of data in statistics

Assessment

Three equally weighted two hour exams. You can use a calculator for **all** the exam papers.

Paper 1- What's assessed?

- Proof
- Algebra and Functions
- Coordinate Geometry
- Sequence and series
- Trigonometry
- Exponentials and logarithms
- Differentiation
- Integration
- Numerical methods

Paper 2 - What's assessed?

Any content from paper 1 and ...

- Vectors
- Quantities and units in mechanics
- Kinematics
- Forces and Newton's laws
- Moments

Paper 3 - What's assessed?

Any content from paper 1 and ...

- Statistical sampling
- Data presentation and interpretation
- Probability
- Statistical distributions
- Statistical hypothesis testing

Coursework is not required for A-level Mathematics

Why should I take A-Level Mathematics?

Either because:

- You enjoy it and would like to learn more and do more mathematics.
- You want to hone your analytical skills and learn more about logical reasoning.
- You like the conciseness and precision of the most ancient academic discipline.
- You're good at it and you want to capitalise on your strength.
- It complements other A levels with numerical or analytical content.

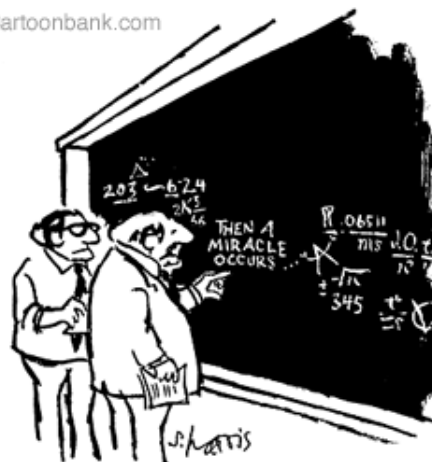
or because you know that:

- Mathematics is an essential foundation for many degrees including most science subjects and some social sciences.
- A-level Maths is one of the most widely-accepted and respected subject choices by many universities.
- GCE A level mathematicians are worth more to employers than other applicants with otherwise identical qualifications.
- Studying mathematics can support you in your other A level studies .

In studying Advanced GCE Mathematics you can expect to become:

- more analytical
- more adept at problem solving
- more numerate
- more questioning
- more insightful
- more qualified for a wide range of university courses and careers.

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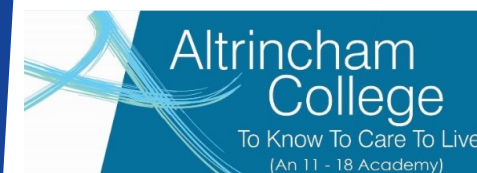
"I think you should be more explicit here in step two."

Zoom Out

MATHS Matters....

The infographic features a central yellow banner with the text "MATHS Matters....". Below the banner are several circular icons representing different career paths: statistics, transport, engineering, IT, graphics, food technology, teaching, finance, computer games, and robotics. At the bottom, there is a text box that reads "IT ALL ADDS UP TO A GREAT CAREER find out more at <http://www.mathscareers.org.uk>".

If you have any questions please contact Mrs E Jones on ejs@altrinchamcollege.com



GCE Advanced Mathematics Altrincham College Sixth Form



A guide to help you decide whether A-level Mathematics is the right choice for you

