

RWBA Maths Preparation Work:

FACULTY: Mathematics

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DEPARTMENT: Mathematics

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Course: A-level Mathematics

Objective: To become fluent in key number and algebraic skills required for A-Level mathematics

Activity: Complete sample diagnostic test and improve skills, where necessary, using resources provided

Time to be allotted to this task: Variable

NOTES: You will take a diagnostic assessment in the first week of the course. This preparation pack provides you with the guidance and resources to prepare fully for this assessment.

TASK:

A-Level Mathematics Summer Preparation Pack 2023-24

How to Prepare

During the first couple of weeks of the course you will take a diagnostic test to assess your algebraic and number skills from GCSE Maths. To be successful on the course, you should be fluent in these skills. The Summer Preparation Pack provides details of the skills that you will need, a sample assessment and resources that you can use to help you prepare. If you score less than 50% in the diagnostic assessment, you will be required to join additional bridging classes, in which you will continue to work on these skills alongside the new A-Level content.

The maths summer preparation pack can be found under a separate item on the Sixth Form Summer Work menu, titled 'Mathematics Year 12 Summer Preparation Pack'.

END RESULT:

You will have ensured that you are prepared for the challenges of the A Level mathematics course and the diagnostic assessment.

HAND IN DATE: *the diagnostic assessment takes place in the first week of the course.*

INFORMATION ABOUT THE COURSE

The basics...

- From September you will have 10 hours of Mathematics lessons per fortnight, split between two teachers.
- On average, you are expected to spend *at least* the same amount on time studying independently – like for like. Clearly, this commitment will increase as you prepare for examinations. This means that when you don't have homework, you should be reviewing your work.

- You will study three areas of mathematics: pure, mechanics and statistics. You will study aspects of all three in both years. At the end of the two years, you will take three two-hour papers, all with equal weighting (two pure and one applied (statistics and mechanics)).
- There are a set of textbooks that accompany the full course. These are:

Title	ISBN
Edexcel AS and A level Mathematics Pure Mathematics Year 1/AS Textbook	9781292183398
Edexcel AS and A level Mathematics Statistics & Mechanics Year 1/AS Textbook	9781292232539
Edexcel A level Mathematics Pure Mathematics Year 2 Textbook	9781292183404
Edexcel A level Mathematics Statistics & Mechanics Year 2 Textbook	9781446944073

We strongly recommend that you purchase the books to work with in class. They are available from Amazon, and other good retailers. You will only need the first two books initially, in year 12. Don't forget the current year 13s may have second-hand books for you to purchase.

Calculators...

- For the linear A-level you *must* have a calculator with new functions:
 - an iterative function
 - the ability to compute summary statistics and access probabilities from standard statistical distributions
 - the ability to perform calculations with matrices up to at least order 3 x 3 (FM only)
- The Casio fx-991EX model (approx. £20) covers all this functionality and is the one we recommend.
- You do not require a graphical calculator, but they can be extremely useful throughout Mathematics and Further Mathematics A-levels. If you wish to purchase one, the equivalent to the fx-991EX is the Casio Graphing Scientific Calculator fx-CG50.