AS-level Mathematics tips and advice

If you're hoping to ace your mathematics exams, I want to assure you that with some preparation, you can do it! As a top scorer, I would like to share some tips and resources that I found helpful. Let's prepare together to get you the grades you want!

Tips and advice:

Pure Mathematics:

* You must show all necessary working clearly. You should observe the points of each question because most of them require clear and detailed answers.
* Be careful while using the calculator. If the question asks for answers in radians, then your calculator must be in radian mode.
* When calculating trigonometry, using the unit circle is effective.
* You must know the difference between differentiation and integration as they sometimes get confused.
* Give non-exact numerical answers correct to 3 significant figures, or 1 decimal place for angles in degrees, unless a different level of accuracy is specified in the question.
* Don’t make careless mistakes. Check your answers at the end of the exam or carry your calculations meticulously during the process.

Probability and Statistics:

* Read the questions carefully and know the keywords. For geometric distribution (statistics), the questions include words like “the first time” and “until.” Even a single word might trick you. For example, in the normal approximation to the binomial questions, they add the word “inclusive” which means the number is included. This question was asked in my exam.
* You should be able to interpret different types of graphs. These include stem-and-leaf diagrams, box-and-whisker, histograms, and cumulative frequency graphs.
* Be careful when using normal distribution tables.
* These teachers are the best:

<https://www.youtube.com/@CAIEPapersSolved/featured>

<https://www.youtube.com/@64maths/featured>

* Useful websites:

<https://www.savemyexams.com/as/maths_pure-1/cie/20/revision-notes/>

<https://www.savemyexams.com/as/maths_probability--statistics-1/cie/20/revision-notes/>

<https://znotes.org/caie/as-level/maths-9709/>

Structure:

You will give two papers:

1. Pure Mathematics 1: paper 1 (1 hour 50 minutes)

* 75 marks
* 10 to 12 structured questions based on the Pure Mathematics 1 subject content
* Example:

<https://pastpapers.co/cie/view.php?id=cie/A-Level/Mathematics-9709/2022-Oct-Nov/9709_w22_qp_11.pdf>

1. Probability and Statistics 1: paper 5 (1 hour 15 minutes)

* 50 marks
* 6 to 8 structured questions based on the Probability & Statistics 1 subject content
* Example:

<https://pastpapers.co/cie/view.php?id=cie/A-Level/Mathematics-9709/2021-May-June/9709_s21_qp_51.pdf>

Assessment objectives:

**AO1: Knowledge and understanding**

• Show understanding of relevant mathematical concepts, terminology, and notation

• Recall accurately and use appropriate mathematical manipulative techniques.

**AO2: Application and communication**

• Recognise the appropriate mathematical procedure for a given situation

• Apply appropriate combinations of mathematical skills and techniques in solving problems

• Present relevant mathematical work, and communicate corresponding conclusions, clearly and logically.

If you have any questions, feel free to contact me anytime. I would be delighted to help.

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Or utako\_yyh (if you want to see my original characters. I am drawing characters to make some topics easier to understand)

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You’ve got this!