A-Level Preparation into the Sixth Form 2025

Mathematics

Preparation for A-Level Mathematics

To successfully tackle the challenges of A-Level Mathematics, it is important to be well-prepared. You are expected to have a solid grasp of a number of key skills that you will have learned during your GCSE course, as these will be essential throughout both Year 12 and Year 13 Mathematics.

To ensure the best possible start to your A-Level course, you must have a secure understanding of the following GCSE topics. You should practise these topics by completing the Summer Homework, which can be found on the school website at Mathematics Summer Homework for the PDF document.

Topics to Review:

1. Law of indices
2. Straight line graphs
3. Algebraic fractions
4. Manipulating algebraic expressions
5. Changing the subject of a formula
6. Linear equations, inequalities and simultaneous equations
7. Solving quadratic equations
8. Graphs –sketching and recognising common graphs
9. Transformations of graphs
10. Trigonometry
11. Vectors
12. Statistics
13. Probability

If you are not sure of any of these topics, use a GCSE textbook for reference or check out the video from DrFrost (https://www.youtube.com/@DrFrostMaths/videos).

All questions must be completed. If you have any concerns, please speak to your Maths teachers during the first few weeks of September. Maths clinics are held every Tuesday from 1:20 pm to 1:55 pm in OC1.

Please note that **two Key Skills Tests** covering these topics will be held in September.

Wider Reading

Please see the following websites for Maths related articles:

http://nrich.maths.org/students or **http://plus.maths.org**