

Year 12 Summer Work Updated - May 2020

There are three parts to the summer work for all A level Mathematicians. Please note that there will be a test in the second week of term based on topics from the summer work.

1. Practise the higher level skills from GCSE. There are a number of ways in which this can be done:
 - a. Work through past exam papers for GCSE - these are readily available online and the website mathsgenie.co.uk is a good source where mark schemes and video solutions are also available.
 - b. Attend the live lessons for prospective A level students being made available for free on YouTube by HegartyMaths here:
youtube.com/hegartymaths/live
 - c. Amazon have made the book "New Head Start to A-Level Maths (CGP A-Level Maths 2017-2018)" available for free as a Kindle edition.
2. Purchase a copy of the required texts for your Year 1 studies of A level maths:
 - a. Edexcel AS and A level Mathematics
Pure Mathematics
Year 1/AS
ISBN: 978-1-292-18339-8
 - b. Edexcel AS and A level Mathematics
Statistics and Mechanics
Year 1/AS
ISBN: 978-1-292-23253-9
3. From the Pure Mathematics book, work through the following sections:
Chapter 1 - Algebraic Expressions - all exercises
Chapter 2 - Section 2.1 Solving Quadratic Equations
Section 2.2 Completing the Square
Chapter 5 - Section 5.1 $y=mx+c$
Section 5.2 Equations of Straight lines
Section 5.3 Parallel and Perpendicular lines

The topics in these sections are mainly a consolidation of skills you have covered in your GCSE. You will need to ensure you can apply your skills to the more complex problems in each section.

The website Exam Solutions (<https://www.examsolutions.net/as-maths/edexcel/>) and Maths genie <https://www.mathsgenie.co.uk/newalevel.html> both include helpful video explanations for you to refer to if necessary.

There will be a test on all of the work in these sections in the second week of term in September. There will not be any additional lessons on these topics in September, but do ask your maths teacher in the first week if there is something you are unsure about.