

# SIXTH FORM SUMMER TRANSITION TASK

	<b><u>MATHEMATICS</u></b>	
	<b>Qualification Level</b>	A-Level
	<b>Exam Board/ Syllabus</b>	MEI (OCR)
	<b>Contact(s)</b>	Mrs Leeding

## **Task 1**

Please work through the Algebra skills booklet. These topics are key areas of mathematics that you will need to be confident with to be able to succeed in your Maths A-level. You should have seen all of these topics at GCSE, but there are examples for each of the seven sections to help you. You should write out your working and answers on paper and bring them with you in September.

You can access the booklet here: [Maths transition task Booklet](#)

## **Task 2**

You should research the 6 topics listed below, and then choose **one** to create a short presentation on. The presentation should include as much detail as possible, and this could include some of the following:

- Who is credited with the discovery?
- How is it useful in A-level maths?
- Is it used outside of mathematics?
- Is it linked to other areas of mathematics?
- Are there any formulae linked to this topic?

Topics to research:

- The discriminant
- Standard deviation
- Normal Distribution
- Newton's second law of motion
- The number e
- Logarithms

### **Wider reading – for interest**

- Why Do Buses Come in Threes?: The Hidden Maths of Everyday Life: The Hidden Mathematics of Everyday Life - Rob Eastaway & Jeremy Wyndham
- Thinking Mathematically - J. Mason, L. Burton, K. Stacey
- Fermat's Last Theorem: The Story Of A Riddle That Confounded The World's Greatest Minds For 358 Years - Simon Singh
- Seventeen Equations that Changed the World - Ian Stewart
- The Mathematics of Love: Patterns, Proofs, and the Search for the Ultimate Equation – Hannah Fry
- Alex's Adventures in Numberland – Alex Bellos

- The Simpsons and Their Mathematical Secrets - Simon Singh