

MATHEMATICS: BRIDGING ACTIVITY

If you are planning to take A level Mathematics, we require you to complete the **Transition to A level Mathematics** course on the website 'Integral.' This is an online course which will help you to develop fluency in the techniques you will need and to think about the key mathematical concepts that underpin A level Mathematics.

The Transition to A level Mathematics course will cover the following areas of maths from GCSE:

- Integers
- Geometry
- · Surds and indices
- Trigonometry
- Algebraic manipulation
- Coordinate geometry
- Completing the square

This online course comprises of 2 to 5 hours of study on each of the seven units. Each unit focuses on the GCSE work which is important at the start of an A level Mathematics. The course is designed for you to work through by yourself without input from a teacher over the summer. Each of the seven topics is structured in the following way:

- Chapters containing videos and activities.
- An assessment scores will appear on a certificate of completion.
- Going deeper optional material to give you a head start at A level.

You are required to make neat, and detailed, notes for each section on lined paper. You must show all working and file into a level arch folder.

At the end of the course, you can download your certificate which will show the name you signed up with and your assessment scores. Place this certificate in your folder with your workings.

Sign up using your full name here:

https://my.integralmaths.org/integral/self_reg_students.php

First day checklist:

Lever arch folder

- o Clearly labelled with your name and titled "Pure 1".
- o 16 dividers labelled as follows:

Bridging Work

- Certificate at the front
- Notes from videos, activities, and assessment workings x7 with red pen annotations and markings
- All corrections made with a red pen.

Topic Assessments

- 1. Algebraic Expressions
- 2. Quadratics
- 3. Equations and inequalities
- 4. Graphs and transformations
- 5. Straight line graphs
- 6. Circles
- 7. Algebraic methods
- 8. The binomial expansion
- 9. Trigonometric ratios
- 10. Trigonometric identities and equations
- 11. Vectors
- 12. Differentiation
- 13. Integration
- 14. Exponentials and logarithms

A level Maths Calculator



Useful comparison table:

CASIO Scientific & Graphic Calculator Comparisons | CASIO

A Level maths students need at least the fx-991 CW.

Further Maths students may want a graphical calculator the fx-CG100.

Lined paper.

Black pens, red pens, pencil, and ruler.

Edexcel Year 1 Pure Mathematics textbook.

