BUDMOUTH ACADEMY
WEYMOUTH

Sixth Form Pre-Course Task - Further Maths

Welcome to A Level Further Maths!

A Level Further Maths is a fascinating course with lots of additional content compared to A level Maths.

Doing Further Maths as well as Maths A level means that you are studying a lot of maths. Because of that it's important that you keep up with lots of independent practice and revision of the content we are covering.
Further Maths is an additional A level in Mathematics. It is for students who are looking to pursue a maths or maths related degree (e.g. physics or computing).

But it is a course with both lots of content and lots of challenging and difficult content. Year 13 course content builds on year 12 content. Historically students who don't have a secure knowledge of year 12 content really struggle with year 13. For this reason it's essential that you build good revision habits from the start, complete homework to a high standard and speak with your teacher when you are confused or stuck.

The course is split into four different units. We study Core Pure 1, Core Pure 2, Decision and then one other from either Further Statistics or Further Mechanics. The decision on which we do is decided towards the end of year 12 and depends on both the teacher and the class. Each unit is 25% of the course.

Core Pure 1 and 2 (50% of the course)	**Decision** (25% of the course)
Complex Numbers and Argand Diagrams Series Roots of Polynomials Matrices and Linear Transformations Proof Vectors Methods in Calculus Polar Coordinates Hyperbolic Functions Differential Equations	Algorithms Graphs and Networks Algorithms on Graphs Route Inspection Linear Programming The Simplex Algorithm Critical Path Analysis

In preparation for you joining us in September, please complete the following pre-course task and Bridging the Gap booklet where you will have the opportunity to showcase your prior knowledge, skills and to outline your specific areas of interest within this subject area more widely.

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You can write your responses directly into the boxes provided or type your responses on a separate document.

TASK 1: Tell us how this subject links to your future aspirations.
For example, this might be the career you'd like to enter into or the apprenticeship/university course you'd like to pursue.

Useful website for careers guidance:

https://www.ucas.com/explore/search/courses?query=
https://www.ucas.com/careers-advice
https://findapprenticeshiptraining.apprenticeships.education.gov.uk/courses
https://uk.indeed.com/
https://nationalcareers.service.gov.uk/

Pre-course reading recommendations:

- https://alevelmathsrevision.com/ Walkthrough videos, exam questions and revision.
- https://www.physicsandmathstutor.com/ A level past and practice papers
- https://www.youtube.com/@TLMaths Videos on topics within the course.

If you have any questions about this course or require any further information on the tasks set above, please contact Dr Stone

Please note that all pre-course tasks should be handed to your subject teacher by **Friday 11th September**, if these have been typed then please print them out before handing in.

We look forward to working alongside you and seeing all you can achieve on this course.

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