Regular Problem Solving Classes - STEP
Online
4th December 2021

Overview

A series of maths problem solving classes designed to develop students' problem solving skills so they have the confidence to apply for universities that include a STEP admissions test as part of their offer.

These regular classes offer students the opportunity to develop their problem-solving skills by trying out challenging problems that require deep mathematical thinking, and so help them meet the challenges they may face in embarking on a maths-rich university course or career. The problems are fun and rewarding and attending the sessions will enrich a student's mathematical experience. Students will look at problems from a range of sources to tackle Sixth Term Examination Papers (STEP) used by Cambridge and Warwick Universities.

The course will comprise of 6 sessions, each lasting 2 hours and spread over 6 months. The sessions take place on Saturday mornings. In every session there will be some teaching, but you will also spend a considerable amount of each lesson tackling challenging questions. In addition to tackling challenging maths questions, you will also have the opportunity to meet likeminded students from your own school as well as from other local schools.

Aims

- To develop confidence in dealing with maths problems
- To develop students' resilience when attempting maths problems
- To provide information about the problem solving skills required in STEP university admissions tests
- To give students the opportunity to attempt problems both in groups and on their own
- To give students the opportunity to think about how solutions to problems are presented
- To provide students with the opportunity to explore areas of maths not in the standard curriculum

Who will benefit from attending?

The classes are suitable for any A level Mathematics student with an enquiring mind who wishes to develop their problem solving ability at A level and beyond. The classes start when the students are in Year 13.

They are particularly suitable for those students who are required to sit a STEP admissions test as part of a university offer.

Content

Students attending the classes will encounter problems covering a variety of topics. These include:

- Working with integers
- Reasoning and logic
- Sequences and series
- Induction
- Curve sketching and identification
- Coordinate geometry
- Vectors
- Trigonometry
- Complex numbers
- Integration
- Differential equations

Materials and Equipment

You will need a device to actively participate in the online sessions. A microphone is a necessity and a camera is useful. Ensure you have pen and paper to hand as well as an inquisitive mind!

Other Information

The session dates are planned as follows:

- Dec 4th (2021)
- Jan 8th (2022)
- Feb 5th
- Mar 5th
- Apr 2nd
- May 14th

Key Facts

Event ref:	#8589
Audience:	Students
Target year:	Year 13
Curriculum focus:	University admissions tests, A level Mathematics, A level Further Mathematics
Mathematical focus:	Problem solving
Event format:	Student course
Region:	South West
Venue:	Online
Next session:	Sat 14th May 2022
Course times:	10:00 - 12:00

Registration

For more information, or to register for this event, please visit https://amsp.org.uk/events/details/8589