



Advanced Mathematics
Support Programme®

Continuing Professional
Development
Standard

National Centre
for Excellence in the
Teaching of Mathematics



North West Surrey Teacher Network

Fun with Proof - how understanding of proof can support students in KS5

9th March 2021

Overview

The North West Surrey Teacher Network is an AMSP-funded project, allowing teachers of Maths in the Chertsey and Woking area of Surrey to meet, collaborate and share best practice. Meetings will take place termly and the programme is planned by teacher request. The meetings will be a mixture of informal sessions and training events.

Agenda

- Why do we need to include proof, and why is that challenging to achieve?
- Squeezing the max from some juicy proofs
- What are the high level messages from this set of proofs?

Content

Proof is arguably the single most important topic in the A level Maths curriculum, so why do we find it such a challenge to give students a good grounding in this? In this session, we'll look at teaching proof from some basics upwards and consider how we can distil the experience we have gathered into something that students can benefit from swiftly.

The meeting will be led by Jo Sibley who lives on the sunny south coast in Poole and has taught Maths and Further Maths for 21 years. She has been an FMSP Area Coordinator and is now on the AMSP National Team as the Coordinator for Online Professional Development.

Aims

- Teaching proof from the basics upwards, including communicating mathematically
- Transferring the proof experience you have gathered over years into the brains of your students
- Share different examples of proof and refresh our enthusiasm for challenging mathematics

Who will benefit from attending?

All teachers of A level Mathematics who would like to develop their teaching of proof

Related meetings

This session will focus on proof in the A level classroom. There is a related session on 25th March focusing on proof at GCSE level and the transition to A level; details can be found here: <https://amsp.org.uk/events/details/8226> While there are links between the sessions, we are aiming to avoid any overlap in the examples, so teachers can attend both if they wish.

Materials and Equipment

We recommend that you have the following available for the session:

- A working microphone, to facilitate discussion
- A beverage of your choice, working on the principle that "a mathematician is a machine for turning coffee into theorems..."

Electronic copies of all resources used will be available after the event.

The AMSP uses BigBlueButton (BBB), which is an online conferencing system that allows participants to collaborate in real time. It is easy to use and has features which enable a tutor and participants to communicate live on-line by using audio, video, instant messaging and, if needed, writing on a shared virtual whiteboard.

The session will be remote and will take place on the BigBlueButton platform, as such you will need a laptop/desktop computer or other internet enabled device.

We will set up the classroom and send you the classroom link, via e-mail, shortly before the session is due to start.

BBB is designed to be used on a variety of platforms but you will get the best experience via a desktop or laptop computer, running either Google Chrome or Mozilla Firefox as the browser. Note: Internet Explorer and Edge are not suitable currently.

It is advised that you check the requirements to access the online classroom in advance of the live session that you will be attending. You can do this at any time.

Key Facts

Event ref:	#8225
Audience:	Teachers
Curriculum focus:	A level Mathematics, A level Further Mathematics
Mathematical focus:	Pure, Problem solving
Event format:	Network meeting
Event length:	1 hour
Venue:	Online, in South Big Blue Button room
Date:	Tue 9th Mar 2021
Course times:	16:00 - 17:00

Registration

For more information, or to register for this event, please visit <https://amsp.org.uk/events/details/8225>