



Advanced Mathematics  
Support Programme®

Continuing Professional  
Development  
Standard

National Centre  
for Excellence in the  
Teaching of Mathematics



## Developing problem-solving skills in Year 12

### London

24th January 2020

#### Overview

This day places the development of problem-solving at the forefront of our practice, and considers why it is important, and how it is done well.

As teachers of maths we all teach problem-solving, and we all know that it is hard to do well. It is abstract and therefore tough for many students (ranging across all of the already abstract areas of maths); it is essential, and yet easy to downplay in our classroom within the battle to cover all skills and content.

Problem-solving permeates the exam papers under the new specifications, and so it is critical that we teach it well. This course provides an efficient and effective way to enhance the development of problem solving skills in your classroom.

#### Aims

- To highlight the need for mathematical thought processes in students
- To provide teachers with the skills and strategies needed to effectively prepare their students for the problem solving requirements of the final examination
- To provide teachers with a plan for developing their most able students so they are able to consider universities that require admissions tests
- To encourage the use of a variety of problem solving activities in AS/A level maths classrooms
- To introduce and assess a range of problem solving materials designed for AS/A level maths students.

#### Who will benefit from attending?

The course is aimed at both new and experienced teachers of Maths.

The course aims to give teachers a chance to reflect on their own approach to problem-solving in the classroom, share and appreciate best practice and implement it in their plans for future teaching.

## Content

09:30 Arrival

10:00 Introduction - What does problem-solving feel like to students?

10:30 Developing mathematical thinking.

11:15 Introducing problem solving into the Year 12 curriculum

12:30 Lunch

13:15 Sources of problems

14:30 Collaborative problem solving

15:00 Opening doors to admissions tests

15:45 End of day

## Materials and Equipment

Please bring a laptop

## Eligibility

Priority will be given to teachers from state funded schools.

## Key Facts

<b>Event ref:</b>	#7016
<b>Audience:</b>	Teachers
<b>Curriculum focus:</b>	A level Mathematics, University admissions tests
<b>Mathematical focus:</b>	Mechanics, Statistics, Pure, Problem solving, Use of technology, Reasoning
<b>Event format:</b>	Face-to-face Professional Development
<b>Event length:</b>	1 day
<b>Region:</b>	London and South East
<b>Venue:</b>	UCL Institute of Education, Room 784, 20 Bedford Way, London, WC1H 0AL
<b>Date:</b>	Fri 24th Jan 2020
<b>Course times:</b>	10:00 - 15:45
<b>Fee:</b>	Free
<b>Priority Area subsidy:</b>	£250

## Registration

For more information, or to register for this event, please visit <https://amsp.org.uk/events/details/7016>