# A LEVEL FURTHER MATHEMATICS A H245



# **Support highlights**

We know teaching has been greatly disrupted in 2020, so to support you we've collated together some of our most useful resources below for you. This includes resources to help you focus your teaching towards individual abilities of students, resources to help determine your students' capabilities and above all resources to help save you time, enabling you to quickly get back up to speed in the classrooms and support your students in preparing for exams. Many more resources are available from the <u>OCR Website</u>.

## **Delivery guides**

#### Download a zip folder with all delivery guide content.

Our delivery guides provide an insight into general teaching approaches, common student misconceptions and contextual links across the specification for each topic. Each guide has a collection of links to free OCR and third-party resources suggested by teachers which will save you time trawling lots of websites so that you can focus on delivering the content.

# Section Check in tests

#### Download these resources

Our Section Check In tests are short sets of questions on a section of the specification. Questions cover AO1 (routine), AO2 (reasoning) and AO3 (problem solving and modelling). Each test has 10 questions, plus an extension activity, and worked solutions. You can use them in lots of ways: to aid diagnostics, as in-class assessments, homework tasks or revision. As the name suggests, they are great to check in with how your students are doing with a topic before either progressing to a topic that follows on or consolidating understanding further. These will be really helpful for checking in with your returning students.

## **Teaching activity: Matrices**

#### Download the teaching activity on Matrices.

Two part student activity using matrix arithmetic in an encryption challenge.

## You may also like

<u>Command Words Poster</u>. Guidance on the wording used in the examination.

<u>Calculator Poster.</u> Useful guidance for using the calculator in the examination.

## Assessment materials

Access past papers, mark schemes and examiners' reports from the OCR website.









# **Professional Development**

### Find an event

See our range of professional development courses using the '<u>Find an event</u>' search tool.

We're now running all our CPD training online rather than face-to-face. Future courses will be in the form of a webinar, offering the same high-quality training as our face-to-face training. If you have any questions, please email professionaldevelopment@ocr.org.uk

# **Cambridge Assessment resources**

## **Resource Plus from Cambridge International**

These <u>digital resources</u> are now available to all OCR teachers free of charge. Resource Plus gives you access to high quality videos, ready-made lesson plans and teaching materials that you can use to help your students learn and prepare for their exams. We also offer Resource Plus materials that are designed for you to share with your students. Here are a couple of links you may find particularly useful.

### 5.2 Permutations and Combinations

Appropriate for Further Statistics option, section 5.01 or for Discrete option, section 7.01

## 6.1 Poisson Distribution

Appropriate for Further Statistics option, section 5.02.

# University of Cambridge resources

## **Underground Maths**

provides a <u>range of rich resources</u> for teaching and learning A Level mathematics. Makes use of past paper questions and other learning activities to enable all students to explore the connections that underpin pure mathematics. <u>Can we solve these</u> <u>equations in x, y, z, a and b?</u> is an old Cambridge Colleges Examination for Entrance Scholarships question, with hints and solution.

## Nrich

has a <u>range of puzzles</u>, lesson activities and interesting further reading articles to challenge and motivate students. The Post 16 curriculum pages has links to <u>pure</u><u>and applied material</u>. <u>Thousand Words</u> is an interesting complex number problem to challenge students understanding of Argand diagrams.

## **Cambridge Mathematics**

is a joint project of four departments of the University of Cambridge which is working internationally with maths education specialists. <u>Espresso 29</u> is an interesting article for Further Maths Statistics students.

## The STEP Support Programme

is offered by the University of Cambridge to help university applicants develop their <u>advanced mathematical problem-solving</u> skills. The problems set are designed to challenge and extend your knowledge. The early STEP 1 foundation modules build primarily on GCSE and AS knowledge.

<u>Assignment 7</u> extends the work on roots of equations.

#### Support highlights

## **Publisher materials**

#### **Cambridge University Press**

Cambridge University Press have a <u>wide range of student textbooks</u> to support this specification, include Cambridge Elevate textbooks. Prices for these textbooks ranch from £5.25 (plus VAT), through to £40.75 (plus VAT).

### **Hodder Education**

Hodder Education has produced <u>Student Books</u>, <u>eTextbooks</u> and <u>Whiteboard</u>. <u>eTextbooks</u> for this qualification. Also available are Student Revision Notes. Prices vary for these Textbooks, more details can be found by following the link.

## **Keep connected**

<u>Studying A Level Further Mathematics at home</u>. Guide to a range of resources that could be used for independent study.

## Get in touch



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## www.ocr.org.uk

## OCR Customer Support Centre

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