

**ENTRY LEVEL**

**Moderators' report**

# **MATHEMATICS**

---

**R449**

For first teaching in 2016

**R449/01/02 Summer 2024 series**

# Contents

Introduction .....3

Online courses.....3

General overview .....4

Marking – Written tasks .....5

Marking – Practical task.....5

Comments on individual questions.....6

## Introduction

Our moderators' reports are produced to offer constructive feedback on candidates' performance in the examinations. They provide useful guidance for future candidates.

The reports will include a general commentary on candidates' performance, identify technical aspects examined in the questions and highlight good performance and where performance could be improved. The reports will also explain aspects which caused difficulty and why the difficulties arose, whether through a lack of knowledge, poor examination technique, or any other identifiable and explainable reason.

Where overall performance on a question/question part was considered good, with no particular areas to highlight, these questions have not been included in the report.

## Online courses

We have created online courses to build your confidence in delivering, marking, and administering internal assessment for our qualifications. Courses are available for Cambridge Nationals, GCSE, A Level and Cambridge Technicals (2016).

### Cambridge Nationals

All teachers delivering our redeveloped Cambridge Nationals suite from September 2022 are asked to complete the Essentials for the NEA course, which describes how to guide and support your students. You'll receive a certificate which you should retain.

Following this you can also complete a subject-specific Focus on Internal Assessment course for your individual Cambridge Nationals qualification, covering marking and delivery.

### GCSE, A Level and Cambridge Technicals (2016)

We recommend all teachers complete the introductory module Building your Confidence in Internal Assessment, which covers key internal assessment and standardisation principles.

Following this you will find a subject-specific course for your individual qualification, covering marking criteria with examples and commentary, along with interactive marking practice.

### Accessing our online courses

You can access all our online courses from our teacher support website [Teach Cambridge](#).

You will find links relevant to your subject under Assessment, NEA/Coursework and then Online Courses from the left hand menu on your Subject page.

If you have any queries, please contact our Customer Support Centre on 01223 553998 or email [support@ocr.org.uk](mailto:support@ocr.org.uk).

#### Would you prefer a Word version?

Did you know that you can save this PDF as a Word file using Acrobat Professional?

Simply click on **File > Export to** and select **Microsoft Word**

(If you have opened this PDF in your browser you will need to save it first. Simply right click anywhere on the page and select **Save as . . .** to save the PDF. Then open the PDF in Acrobat Professional.)

If you do not have access to Acrobat Professional there are a number of **free** applications available that will also convert PDF to Word (search for PDF to Word converter).

## General overview

Thank you to all those centres who correctly administered the tests and ensured that the required samples were sent to the moderator along with the correct paperwork.

There were a proportion of centres whose paperwork was incomplete or unsatisfactory in some way. Please make sure that either or both of the Coursework Summary forms GCW183 and the Controlled Assessment Cover Sheet CCS159 (both available from Teach Cambridge, under the Assessment > Forms tab) are sent to the moderator with the sample. All correspondence with the moderator will be through email initially. Please make sure that the email contact address given to the board is correct and regularly checked. It is also essential that deadlines are kept to for all correspondence with the moderator if results are to be issued on time, especially informing OCR of the marks initially.

The area that is still continuing to cause many problems with a significant number of centres was an increase in arithmetical and clerical errors as well as, for some centres, a lack of consistency across papers. Moderators were concerned that a significant proportion of centres (especially those new to Entry Level) were not completing sufficient internal moderation before marks were submitted. This should be done to check the following:

- the mark scheme has been correctly and accurately applied
- notes within the mark scheme have been read and applied
- the mark scheme has been consistently applied by all markers
- totals on individual papers are correct
- totals submitted to OCR are correct.

In the long run good internal moderation will cause both moderators and centres less problems.

Moderators did note that a number of centres continued to be using only one version of the assessments. While this is acceptable, it may be disadvantaging a proportion of candidates. Centres are reminded that there are three versions of each of the Preliminary and Final papers and candidates can attempt all versions and submit their best results. Centres are also reminded that the candidates must attempt each version of each test once only.

Centres are also considering how papers will be presented to candidates – whether back-to-back copies, as colour papers to differentiate versions or produced as a booklet. Please check that when papers are printed all pages are present and stapled in the correct order when given to candidates and that all pages are correctly scanned if uploading the work to OCR. It is also not advisable to reduce the size of scripts although for some candidates, enlargements may be useful.

## Marking – Written tasks

There was a general concern shown by moderators that a small number of centres were still not using the new versions of the mark schemes or not applying them correctly on both Preliminary and Final papers and therefore disadvantaging candidates. Where more than one mark is available for a question, in general the correct answer will gain full marks even if intermediate working has not been seen. In a reasonable number of cases the marking seen by all the moderators seemed to show a general adherence to the mark scheme, although there is a significant minority of centres where the mark scheme seemed to be incidental rather than central to the marking. A number of centres had candidates who had incorrect answers marked right and correct ones marked wrong. Teachers can (and should) write on scripts to clarify marking. There was also an increase in centres where candidates work had not been marked wrong. Please remember, these are examination scripts and should be fully marked even if they are also to be used as internal diagnostic tests. It is recommended that actual marks given are written on the scripts not purely ticks to be counted.

## Marking – Practical task

It is essential that Practical tasks are sent to the moderator with information regarding all of the following:

- indication of the starter task and guidance given to candidates on their task
- clear notes of how marks have been given for all three strands. Especially on AO1 where reference to the skills criteria and level should also be clear
- annotation of the scripts with skills criteria and level to explain where marks have been given for all three strands.

Where centres final marks were out of tolerance this was mainly to do a lack of annotation to justify the awarding of marks on the practical task.

When moderating the practical task, it was noted that a significant proportion of candidates were following a structure given to them and/or answering a set of questions supplied by centres but their work was being marked as if it had been done independently. If the supervisor has done the planning on behalf of the candidate by providing the structure or a set of questions then there should be a maximum of six marks given on AO1 and no marks on AO3 unless the candidate has done subsequent independent planning. Where most candidates did the same task within each centre this was more obvious. Centres are also reminded that marks for AO1 should either be marked out of 6 (structured tasks) OR out of 12 (unstructured tasks) NOT including both AO1 marks in the total.

Additionally, it is important that candidates who complete their own task and who are to be given more than six marks in AO1 should have a significant number of mathematical techniques to show at all levels and that the rough working is also included if a lot of work has been done using EXCEL or similar IT programs as this does not demonstrate mathematical skills at drawing graphs for example. Just using IT to research information is not a mathematical skill. To achieve more than ten marks there should be mathematical skills at all three levels obvious within the task.

With a large proportion of centres, there was no indication of how much discussion had occurred to help the candidates to improve their work. A discussion about the project should occur between an independent supervisor and the candidate to make sure the candidate understands the project they are presenting and has worked independently. This should then be annotated on the scripts where necessary. For many centres there was also no commentary included to justify how marks had been given in each strand. It is important that the breakdown of marks between AO1, AO2 and AO3 is included. Without this it is impossible for moderators to understand why marks are given.

## Comments on individual questions

### On A1

Question 5 please make sure the directions are clear and unambiguous for full marks. Do not accept the word 'up', reference to '2<sup>nd</sup> right' must be clear.

Question 7 (b) the tally must be completed correctly.

Question 11 the explanation must include reference to 'tens' and 'units'.

Question 12 the numbers should have a description not just be written out as a list.

Question 13 a minimum of four congruent triangles must be drawn for full marks but if one triangle is drawn correctly then one mark is available.

Question 15 the rectangle drawn must be correct for marks to be given. Part marks can only be given if the rectangle is wrong but some working can be seen.

### On B1

Question 10, the explanation must include reference to 'tens' and 'units'.

Question 11 there should be no additional incorrect lines drawn.

Question 12 if the answer is wrong but the sum is seen (1 mark) and if they then do 'their total'  $\div 7$  (1 mark).

### On C1

Question 3 (d) the range must be given as '11' not '4 to 15' for a mark.

Question 5 please make sure the measurements reflect the actual sizes on the paper.

Question 8 shading is not required.

Question 9 (b) the angle is  $40^\circ$ .

### On A2

Question 3, for full marks estimation **must** be seen. But the sight of 11.95 and 'no' can be given two marks.

Question 4 (b) coins must be shown for full marks.

Question 12 (a) pm must be included for full marks.

Question 13 (b) the coordinate must be in correct notation, not  $x = ..$   $y = ..$

**On B2**

Question 10 please check that the angle matches that on the printed copy.

Question 11 the statement must compare their estimate with the amount of money.

Question 12 the triangle drawn, if wrong, may get part marks. Please read the notes.

**On C2**

Question 1 (b) please read the notes to see alternative acceptable answers .

Question 10 (b) there must not be 'pm' with 24 hr clock times.

Question 12 the tolerance for this syllabus is  $\pm 2$  mm.

Question 13 (c) please read the notes to check what marks can be given if the candidate does not get the answer correct.

**OCR support**

Please make sure that you have understood the difference between a 'structured' and 'unstructured' practical task. An assessment guide for the Practice Task P3, and a building your confidence in internal assessment (R449), with candidate exemplar, can be found on Teach Cambridge.

---

# Supporting you

---

## Teach Cambridge

Make sure you visit our secure website [Teach Cambridge](#) to find the full range of resources and support for the subjects you teach. This includes secure materials such as set assignments and exemplars, online and on-demand training.

**Don't have access?** If your school or college teaches any OCR qualifications, please contact your exams officer. You can [forward them this link](#) to help get you started.

## Reviews of marking

If any of your students' results are not as expected, you may wish to consider one of our post-results services. For full information about the options available visit the [OCR website](#).

## Keep up-to-date

We send a monthly bulletin to tell you about important updates. You can also sign up for your subject specific updates. If you haven't already, [sign up here](#).

## OCR Professional Development

Attend one of our popular CPD courses to hear directly from a senior assessor or drop in to a Q&A session. Most of our courses are delivered live via an online platform, so you can attend from any location.

Please find details for all our courses for your subject on **Teach Cambridge**. You'll also find links to our online courses on NEA marking and support.

## Signed up for ExamBuilder?

[ExamBuilder](#) is a free test-building platform, providing unlimited users exclusively for staff at OCR centres with an [Interchange](#) account.

Choose from a large bank of questions to build personalised tests and custom mark schemes, with the option to add custom cover pages to simulate real examinations. You can also edit and download complete past papers.

[Find out more](#).

**You will need an Interchange account to access our digital products. If you do not have an Interchange account please contact your centre administrator (usually the Exams Officer) to request a username, or nominate an existing Interchange user in your department.**



## Need to get in touch?


If you ever have any questions about OCR qualifications or services (including administration, logistics and teaching) please feel free to get in touch with our customer support centre.

Call us on  
**01223 553998**

Alternatively, you can email us on  
**support@ocr.org.uk**


For more information visit

 **[ocr.org.uk/qualifications/resource-finder](https://ocr.org.uk/qualifications/resource-finder)**

 **[ocr.org.uk](https://ocr.org.uk)**

 **[facebook.com/ocrexams](https://facebook.com/ocrexams)**

 **[twitter.com/ocrexams](https://twitter.com/ocrexams)**

 **[instagram.com/ocrexaminations](https://instagram.com/ocrexaminations)**

 **[linkedin.com/company/ocr](https://linkedin.com/company/ocr)**

 **[youtube.com/ocrexams](https://youtube.com/ocrexams)**

## We really value your feedback

Click to send us an autogenerated email about this resource. Add comments if you want to. Let us know how we can improve this resource or what else you need. Your email address will not be used or shared for any marketing purposes.



**I like this**



**I dislike this**

Please note – web links are correct at date of publication but other websites may change over time. If you have any problems with a link you may want to navigate to that organisation's website for a direct search.



OCR is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored. © OCR 2024 Oxford Cambridge and RSA Examinations is a Company Limited by Guarantee. Registered in England. Registered office The Triangle Building, Shaftesbury Road, Cambridge, CB2 8EA. Registered company number 3484466. OCR is an exempt charity.

OCR operates academic and vocational qualifications regulated by Ofqual, Qualifications Wales and CCEA as listed in their qualifications registers including A Levels, GCSEs, Cambridge Technicals and Cambridge Nationals.

OCR provides resources to help you deliver our qualifications. These resources do not represent any particular teaching method we expect you to use. We update our resources regularly and aim to make sure content is accurate but please check the OCR website so that you have the most up to date version. OCR cannot be held responsible for any errors or omissions in these resources.

Though we make every effort to check our resources, there may be contradictions between published support and the specification, so it is important that you always use information in the latest specification. We indicate any specification changes within the document itself, change the version number and provide a summary of the changes. If you do notice a discrepancy between the specification and a resource, please [contact us](#).

You can copy and distribute this resource in your centre, in line with any specific restrictions detailed in the resource. Resources intended for teacher use should not be shared with students. Resources should not be published on social media platforms or other websites.

OCR acknowledges the use of the following content: N/A

Whether you already offer OCR qualifications, are new to OCR or are thinking about switching, you can request more information using our [Expression of Interest form](#).

Please [get in touch](#) if you want to discuss the accessibility of resources we offer to support you in delivering our qualifications.