

## ENTRY LEVEL CERTIFICATE

*Moderators' report*

# **MATHEMATICS**

**R449**

For first teaching in 2016

## **R449/01/02 Summer 2019 series**

Version 1

# Contents

Introduction .....	3
General overview .....	4
Marking of the Written Tests .....	5
Comments on individual questions.....	5
Marking of the Practical Task.....	7



### 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 > Save As Other ...** 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*).



### We value your feedback

We'd like to know your view on the resources we produce. By clicking on the icon above you will help us to ensure that our resources work for you.

## Introduction

Our Moderators' reports are produced to offer constructive feedback on centres' assessment of moderated work, based on what has been observed by our moderation team. These reports include a general commentary of accuracy of internal assessment judgements; identify good practice in relation to evidence collation and presentation and comments on the quality of centre assessment decisions against individual Learning Objectives. This report also highlights areas where requirements have been misinterpreted and provides guidance to centre assessors on requirements for accessing higher mark bands. Where appropriate, the report will also signpost to other sources of information that centre assessors will find helpful.

OCR completes moderation of centre-assessed work in order to quality assure the internal assessment judgements made by assessors within a centre. Where OCR cannot confirm the centre's marks, we may adjust them in order to align them to the national standard. Any adjustments to centre marks are detailed on the Moderation Adjustments report, which can be downloaded from Interchange when results are issued. Centres should also refer to their individual centre report provided after moderation has been completed. In combination, these centre-specific documents and this overall report should help to support centres' internal assessment and moderation practice for future series.

## General overview

Thank you to all those centres who correctly administered the tests and ensured that the required samples were sent to the moderator, after they were notified, along with the correct paperwork. Please remember that centres should wait until they are notified by email and then send their sample to the moderator.

There were a large proportion of centres whose paperwork was incomplete or unsatisfactory in some way. Please make sure that both the Coursework Summary Form (GCW183) and a Controlled Assessment Cover Sheet (CCS159) for each candidate 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 OCR 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 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 result in less problems for both centres and moderators.

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 Written Tests and candidates can attempt all versions and submit their best results. Centres are also reminded that candidates may only attempt each version of each test once within any two week period.

Centres are also considering how the tests will be presented to candidates – whether back to back copies, on coloured paper to differentiate versions or produced as a booklet. Please check that when the tests are printed all pages are present and stapled in the correct order. It is also not advisable to reduce the size of the paper although for some candidates enlargements may be useful.

## Marking of the Written Tests

There was a general concern shown by moderators that a number of centres were not applying the mark schemes correctly on both the Preliminary and Final Written Tests, thereby disadvantaging candidates. Where more than 1 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. Many candidates had incorrect answers marked right and correct ones marked wrong. Teachers can, and should, write on scripts to clarify marking.

Please remember, these are examination scripts so it is important to mark all answers, whether correct or incorrect, even if they are also to be used as internal diagnostic tests. It is recommended that actual marks given are written on the scripts, rather than ticks to be counted.

## Comments on individual questions

### R449/W1A

Q5 - please make sure the directions are clear and unambiguous for full marks. Do not accept the word 'up'.

Q7(b) - the tally must be completed correctly for the mark.

Q11 - the explanation must include reference to 'tens' and 'units'.

Q13 - a minimum of 1 congruent triangle must be drawn for the first mark.

Q15 - the rectangle drawn must be correct for marks to be given.

### R449/W1B

Q10 - the explanation must include reference to 'tens' and 'units'.

Q12(c) - if the answer is wrong but the sum is seen they can gain 1 mark. If they then do  $28 \div 7$  they can gain another mark.

### R449/W1C

Q3(d) - the range must be given as '11' not '4 to 15' for the mark.

Q5 - please make sure the measurements reflect the actual sizes on the paper.

Q8 - shading is not required.

Q9(b) - the angle is  $40^\circ$ .

R449/W2A

Q3 - for full marks estimation must be seen.

Q4 - coins must be shown for full marks.

Q7a - the reflection MUST be in a vertical line, not a horizontal line.

Q12(a) - pm must be included for full marks.

R449/W2B

Q11(b) - the statement must compare their estimate with the amount of money Paul has.

Q12 - an incorrectly drawn triangle drawn may gain part marks. Please read the Guidance column carefully.

R449/W2C

Q10(b) - there must not be 'pm' with 24 hour clock times.

## Marking of the 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
- Annotation of the scripts to explain where marks have been given for all three strands.

Where centres final marks were either too generous or too harsh, this was mainly to do with poor marking 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 6 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.

Additionally, it is important that candidates who complete their own task and who are to be given more than 6 marks in AO1 should have a significant number of mathematical techniques to show at all levels. Rough working should also be included if a lot of work has been done using Excel or similar IT programmes as this does not show mathematical skills at drawing graphs, for example. Just using IT to research information is not a mathematical skill. To achieve 10 marks or more, there should be mathematical skills at all 3 levels demonstrated 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 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 as without this it is impossible for moderators to understand why marks have been given.

There is exemplar material to help centres marking the Practical Task available on the OCR website (<https://www.ocr.org.uk/qualifications/entry-level/mathematics-r449-from-2016/assessment/>).

## Supporting you

For further details of this qualification please visit the subject webpage.

### Review of results

If any of your students' results are not as expected, you may wish to consider one of our review of results services. For full information about the options available visit the [OCR website](#). If university places are at stake you may wish to consider priority service 2 reviews of marking which have an earlier deadline to ensure your reviews are processed in time for university applications.

### CPD Training

Attend one of our popular CPD courses to hear exam feedback directly from a senior assessor or drop in to an online Q&A session.

Please find details for all our courses on the relevant subject page on our website.

[www.ocr.org.uk](http://www.ocr.org.uk)

## OCR Resources: *the small print*

OCR's resources are provided to support the delivery of OCR qualifications, but in no way constitute an endorsed teaching method that is required by OCR. Whilst every effort is made to ensure the accuracy of the content, OCR cannot be held responsible for any errors or omissions within these resources. We update our resources on a regular basis, so please check the OCR website to ensure you have the most up to date version.

This resource may be freely copied and distributed, as long as the OCR logo and this small print remain intact and OCR is acknowledged as the originator of this work.

Our documents are updated over time. Whilst every effort is made to check all documents, there may be contradictions between published support and the specification, therefore please use the information on the latest specification at all times. Where changes are made to specifications these will be indicated within the document, there will be a new version number indicated, and a summary of the changes. If you do notice a discrepancy between the specification and a resource please contact us at: [resources.feedback@ocr.org.uk](mailto:resources.feedback@ocr.org.uk).

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

Whether you already offer OCR qualifications, are new to OCR, or are considering switching from your current provider/awarding organisation, you can request more information by completing the Expression of Interest form which can be found here: [www.ocr.org.uk/expression-of-interest](http://www.ocr.org.uk/expression-of-interest)

Please get in touch if you want to discuss the accessibility of resources we offer to support delivery of our qualifications: [resources.feedback@ocr.org.uk](mailto:resources.feedback@ocr.org.uk)

## Looking for a resource?

There is now a quick and easy search tool to help find **free** resources for your qualification:

[www.ocr.org.uk/i-want-to/find-resources/](http://www.ocr.org.uk/i-want-to/find-resources/)

[www.ocr.org.uk](http://www.ocr.org.uk)

OCR Customer Support Centre

### General qualifications

Telephone 01223 553998

Facsimile 01223 552627

Email [general.qualifications@ocr.org.uk](mailto:general.qualifications@ocr.org.uk)

OCR is part of Cambridge 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 2019** 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.



Cambridge  
Assessment



001