The new GCSE (9-1) Mathematics

A guide for learners and parents to what's changed in GCSE maths

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OCR
Oxford Cambridge and RSA

The new GCSE (9-1) Mathematics

In 2013 the Department for Education announced plans for **reforming** GCSE qualifications. GCSE Mathematics (along with English) is in the **very first group** of the new, reformed GCSE qualifications that will be taught and examined.

The final examinations in the **previous** GCSE Mathematics qualifications will take place in 2016, with the first examinations in the **new** GCSE (9-1) Mathematics happening in summer 2017.

To prepare learners for the summer 2017 exams, centres who teach GCSEs over **two years** will begin delivering content for the new GCSE (9-1) Mathematics from **September 2015**. Centres teaching GCSEs over one year (common in many post-16 colleges) will begin a year later.

Previous GCSE grades	New GCSE grades
A*	9
	8
A	7
B	6
	5
C	4
D	3
E	
F	2
G	1
U	U

For further information on new GCSE grading, please see
https://www.gov.uk/government/news/setting-standards-for-new-gcses-in-2017

1	2	3	4	5	6	7	8	9

Foundation tier

Higher tier

overlap

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Grading and tiers

One of the main changes for new GCSEs is a **new grading** scale. Learners receiving GCSEs will now no longer be awarded a grade from A* to G and instead a numbered scale will be used, from **9** (the highest grade) to **1**. This is why the new qualifications are referred to as GCSE (9-1). As new GCSEs are being introduced in different years for different subjects, you will see a **mixture** of letter grades and number grades for different qualifications on results statements from 2017.

GCSE (9-1) Mathematics will still have two tiers (**Foundation** and **Higher**), but the new tiers cover slightly different ranges of grades than before. The Foundation tier now covers a slightly wider range of grades, as it now goes **up to Grade 5** (comparable to high Grade C / low Grade B performance from the old scale). The Higher tier will now cover **Grade 4** (comparable to Grade C from the old scale) **and above**, whereas the previous Higher tier included grades from Grade D and above. This means that the easiest questions on the GCSE (9-1) Higher tier will be slightly more challenging than the easiest questions on the previous GCSE's Higher tier. Higher tier learners just missing out on a Grade 4 can pick up a Grade 3, though!

Learners that have older brothers or sisters who did the previous GCSE may now find themselves entered for a different tier than their siblings, even if they feel their ability is the same. This is one consequence of the changes in grading and tiers.

The top **Grade 9** will be awarded to the top 20% of those who get Grade 7 or above. It has been introduced to give increased definition at the top of the grading scale, to clearly identify the **very highest** performers!
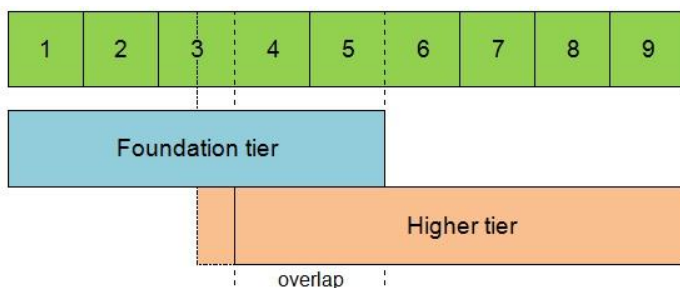
Exam structure

The **new GCSE (9-1) Mathematics** requires learners to spend a little longer in the exam hall than before. The previous GCSE saw learners spending between 3 and 4 hours (depending on the tier) in exams, split across exams ranging from 1 to 2 hours long. The new GCSE (9-1) Mathematics requires all learners sit exams totalling **4½ hours**. The OCR qualification breaks this into 3 different 1½ hour exams, which in **discussion with teachers** we felt was the best time for all!

One exam at each tier is a non-calculator exam. We've placed this as the middle exam that learners sit, so that for the **first** paper they do sit they will have the **reassurance** of a calculator with them!

We've also done lots of work improving question wording, to ensure things are as **clear** and **concise** as possible!

	Paper 1	Paper 2	Paper 3
Foundation tier	1½ hour Calculator ✓ Grades 1-5 100 marks	1½ hour Non-calculator ✗ Grades 1-5 100 marks	1½ hour Calculator ✓ Grades 1-5 100 marks
	Paper 4	**Paper 5**	**Paper 6**
Higher tier	1½ hour Calculator ✓ Grades 4-9 100 marks	1½ hour Non-calculator ✗ Grades 4-9 100 marks	1½ hour Calculator ✓ Grades 4-9 100 marks

GCSE (9-1) Mathematics Specification available in full from ocr.org.uk/gcsemaths

Formulae

There is now a greater requirement for learners to **memorise** important mathematical formulae by heart, with few formulae allowed to be provided to learners in exams. Formulae to be memorised include the quadratic formula, Pythagoras' theorem and trigonometry ratios.

With those formulae that can be given to learners in the exam, OCR will **give the required formula** actually within the specific question, meaning that learners will **no longer need** to go back to a separate formulae sheet at the front of the question paper to find a formula!

Content

Most of the topics from the previous GCSE maths are included in the new GCSE (9-1) Mathematics, **building** on topics learnt through school, but there are now some **new topics** that weren't previously required. Some of these appear on both tiers, **others** are only for Higher tier learners. These include Venn diagrams, knowing some exact values for trigonometry and equations of circles (Higher tier only).

There are also some topics that **previously only appeared** on the Higher tier exams, but in the new qualification will now appear on **both tiers**. These topics include standard form and vectors.

Assessment Objectives

Assessment Objectives are **designations** we give to each question in a question paper, which ensures we're asking the **correct balance** of styles. There are 3 of them for the new GCSE (9-1) Mathematics:

- AO1 Use and apply standard techniques
- AO2 Reason, interpret & communicate mathematically
- AO3 Solve problems within maths & in other contexts

Compared to the previous GCSE maths, there is a greater emphasis on **problem solving** skills in the new GCSE (9-1) Mathematics, so learners should be enabled to get to grips with the mathematics they study more than previously!

Exam sessions and resits

Like the previous GCSE maths, for all learners there will be the opportunity to enter in the **summer entry series**. There will also be a resit session in November, which for new GCSE (9-1) Mathematics is only for learners over the age of 16 by the 31 August before the November series.

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Meet the team at **ocr.org.uk/mathsteam** and contact them at:

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