

Edexcel GCSE Mathematics: Re-sit Rules for Modular Specification B (2381)

Dear Colleague,

I have received a number of queries recently concerning **re-sits for GCSE Mathematics** – what can be entered, what tiers, can be taken, which results will count, that sort of thing. This e-mail is intended to address these issues and give you confidence that you know which unit results will contribute to your students' grades, and to help you to make appropriate entries in the future.

There's a lot of confusion about re-sit rules – and it's important to be clear because your students' results could be affected by your correct understanding of them. It doesn't help that they have changed over the years and that they can be complicated by “terminal” requirements – so in this document I'll be taking them slowly, with a few examples as illustrations.

Introduction

Re-sit rules and terminal examinations requirements were introduced by QCA as was in response to public perception that modular examinations made things too easy and that you could keep taking modules until you got the result required. This guidance is intended to make it clear what's allowed and what isn't when it comes to repeating units.

Note that these rules apply to the current modular specification 2381; there will be a separate document for the new modular specification 2MB01. It's also worth bearing in mind that Ofqual have been asked by government to look at re-sits in GCSE and AS/A level qualifications, but it's likely that modular mathematics 2381 will be allowed to run its course under present regulations.

There's an assumption in what follows that you know how the Uniform Mark Scale (UMS) works for modular mathematics at GCSE – if you don't, you might like to start at Appendix 1 which sets things out.

The Rules

From the 2381 specification (Issue 1, page 71):

Students may re-sit any unit or stage test once only at each tier and the better result will count towards the final award. The shelf life of individual units is limited only by the shelf-life of the specification. The full qualification may be retaken more than once.

Units will be held in Edexcel's unit bank for the shelf-life of this specification remains available. Once the qualification has been certificated, all unit results are deemed to be used up. These units cannot be used again towards a further award of the same qualification at the same level.

These rules themselves are quite confusing – you might not gather from the above that

Unit 3 can be re-taken as many times as required.

Once a qualification has been certificated it is still possible for Unit 1 and Unit 2 results to contribute to subsequent certification.

Candidates may in fact re-sit any unit or stage test more than once at each tier, though it is not necessarily the case that the better result will count towards the final award.

Taking each of these in turn:

Unit 3 can be re-taken as many times as required.

Unit 3 is the **terminal** examination and accounts for 50% of the marks for the whole GCSE. Terminal rules were introduced to ensure that modular qualifications were not split up into very small units and that there would be a certain amount of 'synoptic' material in the final unit which drew from everything that had gone before. Given the hierarchical nature of mathematics, this material is readily apparent in Unit 3.

The definition of a terminal examination or unit is that it is the one which is sat at the end of the course (however long that may take) and that the mark achieved will count to the final award (i.e. the final UMS total and thus the grade awarded). As such, the **best** result for Unit 3 cannot be included when totalling a student's UMS score, it must be the most **recent**.

Since the most recent result is always being counted, each terminal examination is, in a sense, a first attempt since once taken, all previous attempts are wiped from the bank. Some examples are shown in the pages below.

Remember that Unit 1 has codes 5381F (Foundation) and 5381H (Higher). Unit 2 (Stage 1) has codes 5382F and 5382H, Unit 2 (Stage 2) has codes 5383F and 5383H and Unit 3 has codes 5384F and 5384H. Unit 2, although it has two stages, can effectively be treated as two separate units for all intents and purposes. It is possible for a student to enter Unit 2 (Stage 1) at a different session from Unit 2 (Stage 2), and perhaps re-sit only one or other of the Stages as required.

Teachers sometime ask – which one counts, her grade D or grade E? As far as school league tables are concerned, the best grade will count; I'm sure a student with two certificates would produce the best one if asked to.

Once a qualification has been certificated it is still possible for Unit 1 and Unit 2 results to contribute to subsequent certification.

You will have noticed from the examples above that although Units 1 and 2 were taken only once each, they were able to be counted in two or three separate certifications. Thus once the qualification has been certificated, all unit results are **not** deemed to be used up and these units **can** be used again towards a further award of the same qualification at the same level.

Results for Units 1 and 2 will stay on the bank for the lifetime of the specification and may be used *as many times as required* in conjunction with the most recent Unit 3 result for certification, as in the examples above.

Candidates may in fact re-sit any unit or stage test more than once at each tier, though it is not necessarily the case that the better result will count towards the final award.

The specification says that *students may re-sit any unit or stage test once only at each tier and the better result will count towards the final award*. As we have seen, that doesn't apply to Unit 3 which can be re-sat as many times as possible and it's the most recent, not the better, result for that Unit that counts towards the final award.

For units 1 and 2, however, students can re-sit a unit more than once – most don't, but when they do we will take the **better of the most recent two attempts** to calculate the final result.

(This was communicated to centres in 2009 in a letter which can be found on our website – see Appendix 2.)

The following examples show instances where students have re-sat units once or twice, and the results they have achieved. These are for Higher tier students only; later on you will see some examples of students who have sat different units at different tiers.

Some examples follow to illustrate the above:

Student A

Date	March 2008	November 2008	June 2009	November 2009
Unit(s) Sat	5381F	5382F 5383F	5384F	5384F
UMS Score	42	35 41	113	122
Grade			D (231)	C (240)

Student A, a Foundation tier student, sat Unit 1 in March 2008, Unit 2 (both Stages) in November 2008 and Unit 3 June 2009 and achieved a grade D ($231 = 42 + 35 + 41 + 113$). He re-sat Unit 3 in November 2009 and with a slightly better performance, achieved a grade C ($240 = 42 + 35 + 41 + 122$).

Student B

Date	March 2008	November 2008	June 2009	November 2009	June 2010
Unit(s) Sat	5381F	5382F 5383F	5384F	5384F	5384F
UMS Score	40	36 42	112	118	127
Grade			D (230)	D (236)	C (245)

Student B, a very similar Foundation tier student, sat Unit 1 in March 2008, Unit 2 (both Stages) in November 2008 and Unit 3 June 2009 and achieved a grade D ($230 = 40 + 36 + 42 + 112$). She re-sat Unit 3 in November 2009 with a slightly better performance but still achieved a grade D overall ($236 = 40 + 36 + 42 + 118$). She sat Unit 3 a **third** time in June 2010 with an improved performance and achieved grade C overall ($245 = 40 + 36 + 42 + 127$).

Student C

Date	March 2008	November 2008	June 2009	November 2009	June 2010
Unit(s) Sat	5381F	5382F 5383F	5384F	5384F	5384F
UMS Score	31	30 31	123	133	106
Grade			D (215)	D (225)	E (198)

Student C, a Foundation tier student from the same class, sat Unit 1 in March 2008, Unit 2 (both Stages) in November 2008 and Unit 3 June 2009 and achieved a grade D ($215 = 31 + 30 + 31 + 123$). She re-sat Unit 3 in November 2009 with a slightly better performance but still achieved a grade D overall ($225 = 31 + 30 + 31 + 133$). She sat Unit 3 a **third** time in June 2010 but was probably getting a bit fed up by then and didn't do so well, achieving a grade E overall because her most recent Unit 3 result had to count ($198 = 31 + 30 + 31 + 106$). Who knows, she might have had another go in November 2010 – that would be possible under the rules.

Student D

Date	March 2008	November 2008	March 2009	June 2009	November 2009
Unit(s) Sat	5381H	5382H 5383H	5381H	5382H 5384H	5383H 5384H
UMS Score	65	46 45	61	53 155	50 154
Grade				B (318)	A (322)

Student D, sat Unit 1 in March 2008, Unit 2 (both Stages) in November 2008, re-sat Unit 1 in March 2009 and sat Unit 3 June 2009 along with a re-sit of Unit 2 (Stage 1), achieving a grade B ($318 = 65 + 53 + 45 + 155$). He re-sat Unit 2 (Stage 2) and Unit 3 in November 2009 and with a slightly better performance in his Unit 2 (Stage 2) re-sit, achieved a grade A (despite achieving slightly less on Unit 3: $322 = 65 + 53 + 50 + 154$). [You'll also note that the lower Unit 1 score from March 2009 isn't used in any of the calculations.]

Student E

Date	March 2008	November 2008	March 2009	June 2009	November 2009
Unit(s) Sat	5381H	5381H 5382H 5383H	5381H 5382H	5383H 5384H	5382H 5383H 5384H
UMS Score	65	63 44 48	60 46	44 161	47 45 165
Grade				B (318)	A (320)

Student E was desperate for a grade A and a keen re-sitter. She sat Unit 1 in March 2008, and again, along with Unit 2 (both Stages) in November 2008. She re-sat Unit 1 and Unit 2 (Stage 1) in March 2009 and then sat Unit 3 along with a re-sit of Unit 2 (stage 2) in June 2009, achieving a grade B ($318 = 63 + 46 + 48 + 161$).

Her best result for Unit 1 was 65 in March 2008 – if that had been available to be counted, she would have achieved a grade A (just, with 320 UMS) in June 2009. However, the computer took the better of the two most recent attempts (63, in November 2008).

She re-sat Unit 2 (both Stages) and Unit 3 in November 2009 and with a slightly better performance on Unit 3, achieved a grade A ($320 = 63 + 47 + 45 + 165$, although her best attempt at Unit 2, Stage 2, from November 2008, wasn't counted).

Appendix 1: The use of the Uniform Mark Score (UMS) in GCSE Mathematics 2381

What is a Uniform Mark Score?

The Uniform Mark Score (UMS) system is really a very fine grading system, except that instead of grades A to G, for instance, candidates are given a score of anything from 200 to 0 to indicate their performance on any given paper or coursework task. This enables comparison of achievement on different modules, or the same module taken at different times.

For the modular Mathematics 2381 specification, it also allows us to measure achievement at different tiers and allows credit for achievement at one tier to be added to credit for achievement at a different tier.

Grade boundaries may differ from year to year and from module to module, but a UMS figure gives a fixed indication of performance throughout. For example, a grade C on a Unit 1 Foundation tier paper may be set at 24 marks out of 30 one year, and 26 out of 30 the next; each score would still gain 48 UMS.

For mathematicians, UMS is best understood by looking at examples with all the numbers added in.

In the tables which follow, figures in *(blue) italic* show UMS (Uniform Mark Score) marks; figures in **(red) bold** show actual marks earned on the paper.

UMS for 2381 GCSE Modular Mathematics

	Unit 1 20%	Unit 2 Stage 1 15%	Unit 2 Stage 2 15%	Unit 3 Terminal 50%	Total 100%
Max	<i>80</i>	<i>60</i>	<i>60</i>	<i>200</i>	<i>400</i>
A*	<i>72</i>	<i>54</i>	<i>54</i>	<i>180</i>	<i>360</i>
A	<i>64</i>	<i>48</i>	<i>48</i>	<i>160</i>	<i>320</i>
B	<i>56</i>	<i>42</i>	<i>42</i>	<i>140</i>	<i>280</i>
C	<i>48</i>	<i>36</i>	<i>36</i>	<i>120</i>	<i>240</i>
D	<i>40</i>	<i>30</i>	<i>30</i>	<i>100</i>	<i>200</i>
E	<i>32</i>	<i>24</i>	<i>24</i>	<i>80</i>	<i>160</i>
F	<i>24</i>	<i>18</i>	<i>18</i>	<i>60</i>	<i>120</i>
G	<i>16</i>	<i>12</i>	<i>12</i>	<i>40</i>	<i>80</i>

For all specifications using a UMS system, thresholds are set (far right-hand column) for the number of UMS to be accumulated to achieve each grade (e.g. 257 UMS accumulated from Units 1 to 3 would give you a grade C).

Looked at for each separate component, you can see what how much each Unit contributes to the overall final UMS score.

Take, for example, the Unit 1 paper from March 2008:

5381	A*	A	B	C	D	E	F	G
<i>UMS score (max 80)</i>	72	64	56	48	40	32	24	16
Foundation (F)				25	21	18	15	12
Higher (H)	29	25	19	13	9	7		

At Higher tier, the maximum UMS possible is 80 UMS from a maximum paper mark of 30. The grade boundary for A was set at 25, thus earning 64 UMS for a candidate at that boundary.

At Foundation tier, the C boundary was set at 25 out of 30 and any candidate scoring 25 would get 48 UMS. The maximum UMS at Foundation tier for 30 marks would be 55 UMS (although the table says 56 – I could put 55/56 on the table but would that be more confusing?). Since the Foundation tier grade range doesn't extend to grade B, we don't have 56 UMS available (since this is equivalent to a grade B at the Higher tier).

	Unit 2 Stage 1 15%	March 2008	
		H	F
Max	60	25	
A*	54	24	
A	48	19	
B	42	14	
C	36	9	19
D	30	7	15
E	24	6	12
F	18		9
G	12		6

A similar sort of thing applies for Unit 2, Stage 2 and Unit 3 as seen below: the grade boundaries for Unit 2, Stage 2 given are those for the March 2008 recently determined; those for Unit 3 are *speculative* (meaning what it says) June 2009 boundaries.

	Unit 2 Stage 2 15%	March 2008	
		H	F
Max	60	25	
A*	54	23	
A	48	19	
B	42	15	
C	36	12	20
D	30	8	15
E	24	6	11
F	18		7
G	12		3

	Unit 3 50%	June 2009	
		H	F
Max	200	120	
A*	180	108	
A	160	84	
B	140	60	
C	120	36	84
D	100	22	66
E	80	14	48
F	60		30
G	40		12

NB: Marks shown are for the total of both terminal papers, each one out of 60.

So for, let us say, an Foundation tier candidate scoring 25 out of 30 on the March 2008 Unit 1 (48 UMS), 19 out of 25 on the March 2008 Unit 2, Stage 1 (36 UMS), 20 out of 25 on the March 2008 Unit 2, Stage 2 (36 UMS), and 84 out of 120 on the June 2009 Terminal Unit 3 (total of both papers) (120 UMS), they will get a total of 360 UMS giving them a grade C overall. (It's unusual for a student to score right on the boundary for each unit, but a higher UMS total in one can compensate for a lower UMS score in another.)

For marks between grade boundaries, candidates will get appropriately scaled UMS marks.

It is also possible for candidates to take different unit examinations at different tiers; they will on each occasion be awarded a UMS total which goes toward their final grade. Their final grade range achievable will be determined, however, by the tier at which they enter the Terminal Unit 3 examination.

Appendix 2:

The following letter, which was circulated to centres in 2009, can be found on the Edexcel website at <http://www.edexcel.com/quals/gcse/gcse-leg/maths/2381/Pages/default.aspx> - click on the link for **Assessment Materials** and then on the link for **2381 Re-sit rules**.

Dear Head of Mathematics

Re-sit Rules for GCSE Mathematics 2381, Mathematics B

We are writing to you to clarify the re-sit rules for 2381 after certification. If you have candidates who wish to re-sit Mathematics GCSE, here follows example re-sit paths that a candidate may take:

Example 1

A candidate follows the normal re-sit path.

Original Sitting: 5381F ¹		(UMS) 25
1st retake attempt at same tier:	5381F ²	22

In this example, the candidate has retaken once at the same tier. The best UMS marks from the two sittings will be selected for the final grade at cash-in.

Example 2 (single Tier)

If a candidate manages to sit a unit 3 times, the mark for the latest two sittings (this may not be the best one) will be taken into consideration when the qualification is cashed-in.

i.e. Candidate has sat the following

Original Sitting: 5381F ¹		(UMS) 33
1st retake attempt at same tier:	5381F ²	32
2nd retake attempt at same tier:	5381F ³	26

Even though the best mark is 33, we will take the better mark from the last 2 sittings; in this case it will be 32. Only the better mark for the latest two sittings will be taken into consideration when the qualification is cashed-in.

Example 3 (two Tiers)

A candidate follows this re-sit path by mixing tiers.

Original Sitting: 5381F ¹		(UMS) 25
1st retake attempt at same tier:	5381F ²	22
2nd retake attempt at same tier:	5381F ¹	20
1st retake attempt at same tier:	5381F ²	17
2nd retake attempt at same tier:	5381F ³	15

In this example, the system would ignore the score from the original sitting, taking the better mark from the last 2 sittings for each tier. In this case it will be 22 for Foundation and 20 for Higher. When the qualification is cashed in, the unit with the higher UMS mark will be used, in this instance, the 22 uniform marks for the Foundation result.

Should the candidate then have another retake attempt at higher tier, the score from 5381H¹ would then be ignored and the best score would be taken from 5381F² & 5381F³ and 5381H² & 5381H³. From these two options, the best UMS will be carried forward.

Cash-Ins & Grading:

Candidates are allowed to take units at different tiers, however cannot be entered for both tiers of the same unit in the same exam session.

The terminal unit (5384) will dictate if the candidate receives a Higher or a Foundation tier result. For example a candidate may take 5381F, 5382H, 5383H but then take the terminal unit (5384) at Foundation tier, the highest overall grade they can achieve will be a Grade "C". If they take the terminal unit at Higher the highest overall grade they could achieve will be a Grade "A* ", depending on their individual unit results.

The terminal unit (5384) cannot be carried forward to the next session - this unit needs to be taken when cashing-in. The unit tests 5381-5383 can be carried forward, in the way explained above. For example if 5381 needs to be re-sat after the qualification has already been cashed in, the candidate must also re-sit 5384 as this result will not be carried forward.