## UMS - uniform mark guidance: an example GCSE Mathematics B (2MB01)

Note: This document deals solely with the uniform mark scale. For information on the terminal requirement and resit rules, see "GCSE 2010 - Terminal requirement and resit rules"

## What are uniform marks and why do we use them?

Candidates being certificated for modular specifications may have taken their unit exams at different times. There can be some variation in the level of demand of exam papers from series to series. The uniform mark scale (UMS) enables equal levels of performance to be given equal credit regardless of when the exam was taken.

The maximum mark for a unit exam paper remains the same every exam series. When examiners mark a candidate's exam paper, the total is referred to as the candidate's raw mark. When the marking is complete, the senior examiners set the raw mark grade boundaries for the paper. The UMS grade boundaries never change. Once the raw mark grade boundaries have been set, the raw marks are mapped to the uniform marks (for examples see appendix). Candidates' raw marks are then converted to uniform marks which are used to calculate their grades. The process of converting raw marks to uniform marks is illustrated below.

Angela took unit 5MB1H for the first time last exam series and has done a resit of the unit in this exam series.

Unit $1(5 \mathrm{MB1H})$ is out of 60 raw marks and the maximum UMS mark is 120 .
Table 1 shows the raw mark grade boundaries set by the examiners for this series and the previous series together with the UMS grade boundary marks which apply to every series.

Table 1 - Grade boundaries for 5MB1H

| Unit Grade | Max. <br> Mark | A* | A | B | C | D | E | F | G |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5MB1H raw mark <br> boundaries last <br> exam series | 60 | 47 | 37 | 27 | 17 | 12 | 9 |  |  |
| 5MB1H raw mark <br> boundaries this <br> exam series | 60 | 50 | 39 | 28 | 17 | 12 | 9 |  |  |
| UMS Mark | 120 | 108 | 96 | 84 | 72 | 60 | 54 |  |  |

## IMPORTANT NOTE:

*The raw boundary marks listed above are fictional, used to exemplify how UMS works in this subject area and should not be taken as the actual grade boundaries for the unit.

Note: Higher tier units are awarded at grades A*- D with E allowed. A raw mark boundary is set for the allowed E grade ( 9 in both series in this example) which is defined as the mid point of the E grade range. Consequently, the UMS score for the allowed E grade boundary on the higher tier unit 1 is 54 marks as opposed to 48 marks for the E grade boundary mark on the foundation tier (see table 2)

The raw mark boundary for the A grade is 39 this series whereas it was 37 in the last series. A candidate scoring 39 raw marks this series is considered to have achieved the same level of performance as a candidate scoring 37 raw marks in the last series. Consequently, both candidates receive the same UMS score (96).

The appendix shows a section of the raw to uniform mark mapping for both this and the previous exam series.

In this series Angela scored a raw mark of $43 / 60$ for paper 5 MB1H.
Last exam series Angela scored 41/ 60.
Using the mappings in the appendix, a raw mark of 43 in this series maps to 100 uniform marks and a mark of 41 last series maps to 101 uniform marks

Although Angela's raw mark was lower last series, it gained a higher uniform mark and so will be the mark used towards her final grade

## Qualification results - GCSE in Mathematics B (2MB01)

Raw marks from both foundation and higher tiers are mapped to the same uniform mark scale. Table 2 shows the grade boundaries for units 5MB1F and 5MB1H for this series along with the UMS grade boundaries.

Table 2 - Grade boundaries for 5MB1H and 5MB1F

| 2MB01 |  | $A^{*}$ | A | B | C | D | E | F | G |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5MB1F | Foundation Unit 1 |  |  |  | 39 | 32 | 25 | 19 | 13 |
| 5MB1H | Higher Unit 1 | 50 | 39 | 28 | 17 | 12 |  |  |  |
|  | UMS | 108 | 96 | 84 | 72 | 60 | 48 | 36 | 24 |

Notes:

- The maximum uniform mark available for candidates entered for the foundation tier is 83 because B grade is not available on foundation tier papers
- A raw mark boundary is set for the higher tier paper for the allowed E grade. The mark has not been included in this table because it maps to 54 uniform marks (see note on table 1). This differs from the foundation tier E grade boundary which is 48 uniform marks.


## Qualification grade

A candidate's total UMS score for the three units is used to determine his/ her qualification grade. For 2MB01 the qualification UMS grade boundaries are shown in table 3. These do not change. Since both foundation and higher tier papers map to the same uniform mark scale, candidates do not have to enter the same tier for each unit (and can resit a unit at a different tier from the original sitting). The qualification grade is determined solely by the UMS total.* The maximum UMS total available depends on the candidate's tiers of entry for each unit.

* Note: This is a change from specification 2381 which had a specific terminal unit. A candidate's tier of entry for the terminal unit determined his/ her tier of entry for the overall qualification.

Table 3-2MB01 qualification UMS grade boundaries

| Qualification <br> Grade | A* | A | B | C | D | E | F | G |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Maximum <br> UMS - 400 | 360 | 320 | 280 | 240 | 200 | 160 | 120 | 80 |

A candidate with a UMS total of 307 for the three units would get a grade $B$

## Appendix - Raw mark to UMS mappings 5MB1H (not complete)

## This series

| UMS | Unit <br> 5MB1H |
| :---: | :---: |
| $\mathbf{1 2 0}$ | 60 |
| $\mathbf{1 1 9}$ | 59 |
| $\mathbf{1 1 8}$ | 58 |
| $\mathbf{1 1 7}$ |  |
| $\mathbf{1 1 6}$ | 57 |
| $\mathbf{1 1 5}$ | 56 |
| $\mathbf{1 1 4}$ | 55 |
| $\mathbf{1 1 3}$ | 54 |
| $\mathbf{1 1 2}$ | 53 |
| $\mathbf{1 1 1}$ |  |
| $\mathbf{1 1 0}$ | 52 |
| $\mathbf{1 0 9}$ | 51 |
| $\mathbf{1 0 8}$ | $\mathbf{5 0}$ |
| $\mathbf{1 0 7}$ | 49 |
| $\mathbf{1 0 6}$ | 48 |
| $\mathbf{1 0 5}$ | 47 |
| $\mathbf{1 0 4}$ | 46 |
| $\mathbf{1 0 3}$ | 45 |
| $\mathbf{1 0 2}$ |  |
| $\mathbf{1 0 1}$ | 44 |
| $\mathbf{1 0 0}$ | 43 |
| $\mathbf{9 9}$ | 42 |
| $\mathbf{9 8}$ | 41 |
| $\mathbf{9 7}$ | 40 |
| $\mathbf{9 6}$ | $\mathbf{3 9}$ |
| $\mathbf{9 5}$ | 38 |
| $\mathbf{9 4}$ | 37 |
| $\mathbf{9 3}$ | 36 |
| $\mathbf{9 2}$ | 35 |
| $\mathbf{9 1}$ | 34 |
| $\mathbf{9 0}$ |  |
| $\mathbf{8 9}$ | 33 |
| $\mathbf{8 8}$ | 32 |
| $\mathbf{8 7}$ | 31 |
| $\mathbf{8 6}$ | 30 |
| $\mathbf{8 5}$ | 29 |
| $\mathbf{8 4}$ | $\mathbf{2 8}$ |
| $\mathbf{8 3}$ | 27 |
| $\mathbf{8 2}$ | 26 |
| $\mathbf{8 1}$ | 25 |
| $\mathbf{8 0}$ | 24 |
| $\mathbf{7 9}$ | 23 |
|  |  |

## Last series

| UMS | Unit <br> 5MB1H |
| :---: | :---: |
| $\mathbf{1 2 0}$ | $57-60$ |
| $\mathbf{1 1 9}$ | 56 |
| $\mathbf{1 1 8}$ | 55 |
| $\mathbf{1 1 7}$ |  |
| $\mathbf{1 1 6}$ | 54 |
| $\mathbf{1 1 5}$ | 53 |
| $\mathbf{1 1 4}$ | 52 |
| $\mathbf{1 1 3}$ | 51 |
| $\mathbf{1 1 2}$ | 50 |
| $\mathbf{1 1 1}$ |  |
| $\mathbf{1 1 0}$ | 49 |
| $\mathbf{1 0 9}$ | 48 |
| $\mathbf{1 0 8}$ | $\mathbf{4 7}$ |
| $\mathbf{1 0 7}$ | 46 |
| $\mathbf{1 0 6}$ | 45 |
| $\mathbf{1 0 5}$ |  |
| $\mathbf{1 0 4}$ | 44 |
| $\mathbf{1 0 3}$ | 43 |
| $\mathbf{1 0 2}$ | 42 |
| $\mathbf{1 0 1}$ | 41 |
| $\mathbf{1 0 0}$ | 40 |
| $\mathbf{9 9}$ |  |
| $\mathbf{9 8}$ | 39 |
| $\mathbf{9 7}$ | 38 |
| $\mathbf{9 6}$ | $\mathbf{3 7}$ |
| $\mathbf{9 5}$ | 36 |
| $\mathbf{9 4}$ | 35 |
| $\mathbf{9 3}$ |  |
| $\mathbf{9 2}$ | 34 |
| $\mathbf{9 1}$ | 33 |
| $\mathbf{9 0}$ | 32 |
| $\mathbf{8 9}$ | 31 |
| $\mathbf{8 8}$ | 30 |
| $\mathbf{8 7}$ |  |
| $\mathbf{8 6}$ | 29 |
| $\mathbf{8 5}$ | 28 |
| $\mathbf{8 4}$ | $\mathbf{2 7}$ |
| $\mathbf{8 3}$ | 26 |
| $\mathbf{8 2}$ | 25 |
| $\mathbf{8 1}$ |  |
| $\mathbf{8 0}$ | 24 |
| $\mathbf{7 9}$ | 23 |
|  |  |

