



# My Maths Cloud

## A Level Scoring System

$(1+x)^n = 1 + nx + \frac{n(n-1)}{2!}x^2 + \dots$   
 $y = e^{ax}$   
 $\frac{dy}{dx} = f'(x) e^{ax}$   
 $\Rightarrow \int f'(x) e^{ax} dx = e^{ax} + c$   
 $N(t) = \frac{ae^{kt}}{1+be^{kt}}$   
 $U_n = a + (n-1)d$   
 $S_n = \frac{n}{2} [2a + (n-1)d]$

$\sum_{i=1}^n i = \frac{n(n+1)}{2}$   
 $\frac{dy}{dx} = \frac{dy}{dt} \times \frac{dt}{dx}$   
 $\int y \frac{dx}{dt} dt$

$\text{Area} = \int_a^b f(x) dx$   
 $\sin 2x = \sin(x+x)$   
 $= \sin x \cos x + \cos x \sin x$   
 $= 2 \sin x \cos x$   
 $\sigma_x = \sqrt{\frac{\sum x^2}{n} - \bar{x}^2}$   
 $\bar{x} = \frac{\sum f \cdot x}{n}$

## Raw Marks vs UMS marks

The raw mark (exam paper mark) is the actual number of marks a student achieved on an exam or assessment, whereas the 'final mark' or the UMS mark (Uniform Mark Scale mark) is a conversion of the raw mark. To make sure that any differences in the difficulty of exams or assessments are taken into account when adding up marks to give an overall grade, the 'raw' or exam paper mark is either converted into a UMS mark or scaled. UMS grade boundaries are fixed so they are the **same for each exam session**. Raw mark grade **boundaries change for each exam session** depending on how all other students did.

**The UMS does not apply to LINEAR qualifications** though (Edexcel GCE, AQA, OCR, OCR MEI), which now uses scaled subject marks and are awarded at qualification rather than at paper level. Raw marks do not change every year obviously, but the boundaries for them do - the boundaries change every year depending on how everyone performed. There is a component scaling calculator to help you transfer your raw marks into scaled ones. The link is:

<https://qualifications.pearson.com/en/support/support-topics/results-certification/understanding-marks-and-grades/converting-marks-points-and-grades.html>

For MODULAR qualifications (Edexcel IAL), the UMS mark is different from the score on the exam paper (the so-called raw mark). You may be wondering how the raw mark translates to the UMS. How is the UMS calculated? The raw marks get converted in UMS. The board doesn't reveal the exact formula they use for calculating the UMS - they have their own algorithm to calculate the UMS. The only way to find your UMS is through the converter online (for Edexcel IAL) where you enter your raw marks OR from an issued document called grade boundaries every year that mentions the raw marks for the boundaries along with the respective UMS marks. For the converter, one needs to just enter the raw marks, the year and pick the paper, and then it converts it to the UMS. The link is:

<https://qualifications.pearson.com/en/support/support-topics/results-certification/understanding-marks-and-grades/converting-marks-points-and-grades.html>

Boundaries are subject to change each year dependent on how everyone else did but percentage-wise they are on average ROUGHLY

- A\* 90%-100%
- A 80%-89%
- B 70%-79%
- C 60%-69%
- D 50%-59%
- E 40%-49%
- U 0%-39%

For example, boundaries fluctuate. Last 2 years for A Level Edexcel had very low boundaries (72% for A\* and 55% for A)

Edexcel GCE: Raw Marks			
<p><b>AS</b></p> <p><b><u>Boundaries:</u></b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:160</p> <p><b>(2 papers - 80 marks each)</b></p> <p>Highest grade achievable is an A</p>	<p><b>A Level</b></p> <p><b><u>Boundaries:</u></b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:300</p> <p><b>(3 papers - 100 marks each)</b></p>	<p><b>Further AS</b></p> <p><b><u>Boundaries:</u></b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:160</p> <p><b>(2 papers - 80 marks each)</b> <b>Note: one paper contains 2 modules</b></p> <p>Highest grade achievable is an A</p>	<p><b>Further A Level</b></p> <p><b><u>Boundaries:</u></b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:300</p> <p><b>(4 papers - 75 marks each)</b></p>

**Edexcel IAL: UMS**

Note: Each paper is out of 100 UMS and 75 total marks

AS	A Level	Further AS	Further A Level
<p><b>Boundaries:</b> A=240-300 B=210-239 C=180-209 D=150-179 E=121-149 U=0-119</p> <p><b>(3 papers - 75 marks, and 100 UMS each)</b></p> <p>Highest grade achievable is an A</p>	<p><b>Boundaries:</b> A* = 480-600 + at least (180/200) 90% across A2 units P3 and P4 Note: P1, P2, S1, M1 and D1 are NOT A* modules A = 480-600 B=420-479 C=360-419 D=300-359 E=240-299 U=0-239</p> <p><b>(6 papers - 75 marks AND 100 UMS marks each)</b></p>	<p><b>Boundaries:</b> A=240-300 B=210-239 C=180-209 D=150-179 E=121-149 U=0-119</p> <p><b>(3 papers - 75 marks and 100 UMS each)</b></p> <p>Highest grade achievable is an A</p>	<p><b>Boundaries:</b> A* = 480-600 + at least (270/300) 90% across best 3 A2 units out of FP2, FP3, M2, M3, S2, S3 Note: FP1, S1, M1 and D1 are NOT A* modules A = 480-600 B=420-479 C=360-419 D=300-359 E=240-299 U=0-239</p> <p><b>(6 papers - 75 marks AND 100 UMS marks each)</b></p>

**AQA Raw Marks**

AS	A Level	Further AS	Further A Level
<p><b>Boundaries:</b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:160</p> <p><b>(2 papers - 80 marks each)</b></p> <p>Highest grade achievable is an A</p>	<p><b>Boundaries:</b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:300</p> <p><b>(3 papers - 100 marks each)</b></p>	<p><b>Boundaries:</b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:160</p> <p><b>(2 papers – 80 marks each)</b> <b>Note: one paper contains 2 modules</b></p> <p>Highest grade achievable is an A</p>	<p><b>Boundaries:</b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:300</p> <p><b>(3 papers - 100 marks each)</b> <b>Note: one paper contains 2 modules</b></p>

**OCR (A) Raw Marks**

AS	A Level	Further AS	Further A Level
<p><b>Boundaries:</b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:150</p> <p><b>(2 papers - 75 marks each)</b></p> <p>Highest grade achievable is an A</p>	<p><b>Boundaries:</b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:300</p> <p><b>(3 papers – 100 marks each)</b></p>	<p><b>Boundaries:</b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:180</p> <p><b>(3 papers –60 marks each)</b></p> <p>Highest grade achievable is an A</p>	<p><b>Boundaries:</b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:3000</p> <p><b>(4 papers – 75 marks each)</b></p>

OCR MEI (B) Raw Marks

AS	A Level	Further AS	Further A Level
<p><b>Boundaries:</b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:140</p> <p><b>(2 papers - 70 marks each)</b></p> <p>Highest grade achievable is an A</p>	<p><b>Boundaries:</b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:275</p> <p><b>(3 papers - 100 marks, 100 marks and 75 marks)</b></p>	<p><b>Boundaries:</b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:180</p> <p><b>(3 papers - 60 marks each)</b></p> <p>Highest grade achievable is an A</p>	<p><b>Boundaries:</b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:360</p> <p><b>(3 papers - 180, 120, 60 marks which are scaled)</b></p>

Cambridge Raw Marks

AS	A Level	Further AS	Further A Level
<p><b>Boundaries:</b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:125</p> <p><b>(2 papers - 75 and 50 marks)</b></p> <p>Highest grade achievable is an A</p>	<p><b>Boundaries:</b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:250</p> <p><b>(4 papers - 75,75,50 and 50 marks)</b></p>	<p><b>Boundaries:</b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:125</p> <p><b>(2 papers - 75 and 50 marks)</b></p> <p>Highest grade achievable is an A</p>	<p><b>Boundaries:</b> Raw mark boundaries are subject to how the students did for that year Maximum Raw Marks:250</p> <p><b>(4 papers - 75,75,50 and 50 marks)</b></p>