



## A Level Maths AQA Predicted Papers - How we created these papers

### **Overview**

We have created 4 sets of predicted papers for A level Mathematics, with mark and topic coverage based on the [AQA A Level Mathematics Past Papers](#) provided on their website, along with the content specified in the [AQA A Level Mathematics Specification](#).

Each physical paper has been designed to look like the AQA paper based exams, with the mark schemes formatted and broken down to be easy to follow.

### **Format and Marks**

Our sets of predicted papers are split up into three papers, resembling that of the AQA format:

- Paper 1 - 100 marks - Calculator
- Paper 2 - 100 marks (50 marks for each section) - Calculator
- Paper 3 - 100 marks (50 marks for each section) - Calculator

Further, each paper contains a mix of question types, including short answer questions, single mark questions and multi-step problems, as well as some multiple choice questions.

Some questions are standalone questions, whereas other questions consist of multiple parts and can require using the answer to a previous part of a question, or not. These part questions may vary in the level of demand.

This corresponds to what is seen on the AQA past papers.

Across each paper, we have aimed to have a similar coverage of questions with different numbers of marks of that of the AQA past papers. Therefore, in each paper, there are a range of 1-12 mark single questions (i.e. not the total of a question containing multiple parts).

## **Distribution of Topics and Skills**

The breakdown of topics on each paper has been designed to match that of the AQA past papers.

Paper 1 may contain contain questions from any topic from the following:

- A: Proof
- B: Algebra and functions
- C: Coordinate geometry
- D: Sequences and series
- E: Trigonometry
- F: Exponentials and logarithms
- G: Differentiation
- H: Integration
- I: Numerical methods

Paper 2 may contain contain questions from any topic from the following:

- Section A:
  - Any content from Paper 1
- Section B:
  - J: Vectors
  - K: Kinematics
  - L: Forces and Newton's laws
  - M: Moments

Paper 3 may contain contain questions from any topic from the following:

- Section A:
  - Any content from Paper 1
- Section B:
  - N: Data presentation and interpretation
  - O: Probability
  - P: Statistical distributions
  - Q: Statistical hypothesis testing
  - R: Correlation and Regression

Additionally, each set has been designed to match the approximate percentage breakdown of Assessment Objectives (AO):

Assessment Objectives	Component Weightings (~%)			Total (%)
	Paper 1	Paper 2	Paper 3	
AO1	50	50	50	50
AO2	25	25	25	25
AO3	25	25	25	25
<b>Overall weighting</b>	33.3	33.3	33.3	100

For each paper, we have aimed to increase the mathematical demand as the student progresses through the paper.

### **Assessment Difficulty**

Each of the sets of papers have been designed to match the difficulty of a corresponding AQA A Level Maths Exam series, based off of the following grade boundaries:

Level	A*	A	B	C	D	E	U
Mark	231	185	151	118	85	52	0