



## **GCSE Equivalency Maths Exams - How we created these papers**

### **Overview**

We have created 4 sets of Exams for GCSE Mathematics Equivalency Foundation as well as 1 set of sample papers, and 3 sets for higher with 1 set of sample papers, based on the [Edexcel GCSE Mathematics Past and Sample Papers](#) provided on their website, along with the content specified in the [Edexcel GCSE Mathematics \(9-1\) \(1MA1\) Specification](#).

You can view our simplified version of the specification [here](#).

The table below summarises the key points relevant to your A Star GCSE Mathematics Equivalency Exam.

<b>Format</b>	<b>Description</b>
Exam type	Online or paper based
Exam location	Sat at home/work - invigilated online
Exam availability	All year round
Exam structure	2 papers: <ul style="list-style-type: none"><li>• Paper 1 non-calculator</li><li>• Paper 2 calculator</li></ul>
Exam timing	2 hours (1 hour per paper)
Number of marks	100 marks total (50 marks per paper)
Tiers	Foundation or Higher
Level	9-1 (5-1 for foundation and 9-1 for higher)
Exam specification based on	<a href="#">Edexcel GCSE Mathematics (9-1) (1MA1)</a>
Exam content coverage	Foundation - content identified by the standard and <u>underlined</u> type. Higher - all content.
Question types	Short answer questions, single mark questions and multi-step problems
Additional equipment needed	Calculator, paper, pen, mathematical equipment

## **Format and Marks**

Our exams consist of only 2 papers, instead of 3. Paper 1 is a non-calculator paper, with paper 2 being a calculator paper. These 2 papers are sat back to back in a 2 hour time slot. The exam is sat online, but answers are written on paper and then scanned in at the end. You may choose to sit a paper based version, where we will send the papers out to you and you will complete them whilst being invigilated.

Each paper consists of 50 marks, meaning that the total marks has been reduced from 240 marks, as seen on the Edexcel GCSE Maths past papers, to 100 marks. However all assessment objectives are maintained from the full specification, as well as topic coverage.

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

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 Edexcel past papers and sample papers.

Across each paper, we have aimed to a similar coverage of questions with different numbers of marks of that of the Edexcel past papers and sample papers:

- on foundation, there are a mixture of 1-5 mark single questions (i.e. not the total of a question containing multiple parts)
- on higher, there are a mixture of 1-6 mark single questions (i.e. not the total of a question containing multiple parts).

## **Distribution of Topics and Skills**

Content from any part of the specification can be assessed in each higher paper, and content identified by the standard and underlined type in each foundation paper. Across each set of exams, the approximate weighting of the marks assigned to each of the 5 topic areas has been allocated to match Edexcel exams:

<b>Tier</b>	<b>Topic Area</b>	<b>Weighting</b>
Foundation	Number	22 - 28%
	Algebra	17 - 23%
	Ratio, Proportion and Rates of change	22 - 28%
	Geometry and Measures	12 - 18%
	Statistics & Probability	12 - 18%
Higher	Number	12 - 18%
	Algebra	27 - 33%
	Ratio, Proportion and Rates of change	17 - 23%
	Geometry and Measures	17 - 23%
	Statistics & Probability	12 - 18%

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

<b>Assessment Objectives</b>		<b>Foundation</b>	<b>Higher</b>
<b>AO1</b>	<b>Use and apply standard techniques</b>	50%	40%
<b>AO2</b>	<b>Reason, interpret and communicate mathematically</b>	25%	30%
<b>AO3</b>	<b>Solve problems within mathematics and in other contexts</b>	25%	30%
<b>Total</b>		100%	100%

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

## **Assessment Difficulty**

We closely monitor all exam results, and how these change over time, to ensure our exams match the difficulties of the specifications they are benchmarked against and so the grade boundaries are set accordingly. Below are the current grade boundaries for our GCSE Maths Equivalency exams:

### **Higher**

Level	9	8	7	6	5	4	3	2	1
Mark	83	69	55	44	35	25	N/A	N/A	N/A

### **Foundation**

Level	5	4	3	2	1
Mark	75	55	N/A	N/A	N/A