



Edexcel Functional Skills Maths Level 2 Mock exams - How we created these papers

Overview

We have created 5 mock exam papers for Functional skills mathematics Level 2, with mark weighting and topic coverage based on the [Edexcel Functional Skills Maths Level 2 Practice Papers](#) provided on the Edexcel website, along with the points specified in the [Edexcel Functional Skills Specification](#).

Each physical paper has been designed to look like the Edexcel paper based exams, with the mark schemes formatted and broken down to match the Edexcel style as well.

Tasks and Marks

Firstly, we have sectioned our mock papers into 2 sections. Across the 2 sections we have aimed to cover as many of the 28 subject content points as possible from the content area section. Furthermore, the marks for each section are broken down into the following:

- **Section A** - 16 marks - Non-Calculator
Including a mixture of 1, 2 and 3-4 mark questions and one 5-8 mark question.
- **Section B** - 48 marks - Calculator
Including a mixture of 1, 2, 3-4 and 5-8 mark questions.

Across each paper, we have aimed to have a similar coverage of 1, 2, 3-4 and 5-8 mark questions of that on the Edexcel practice papers:

- 1 mark - 7-12 questions
- 2 mark - 5-7 questions
- 3-4 mark - 5-10 questions
- 5-8 mark - 3-5 questions

Each paper includes 25% of marks allocated to tasks that assess underpinning skills, and 75% of marks are allocated to tasks that assess problem solving, as per the Edexcel specification.

We have tried to incorporate some follow-on questions in which their scenarios relate to each other, similar to what is seen on the Edexcel practice papers. This can include using the answer to a previous part of a question, or not.

Distribution of Topics and Skills

In each of the papers the distribution of the marks assigned to each of the three content areas have been allocated to match Edexcel exams. Approximately 40-50% of the total marks are marks coming from topics in Numbers and the Number System, 30-40% from Measures, Shape and Space and 20-30% from Handling Information and Data.

Further, the papers have been designed to require the learner to demonstrate their understanding of underpinning skills, and their ability to solve mathematical problems.

Underpinning questions are designed so that learners are expected to do maths when not part of a problem, and for problem solving questions, learners are expected to:

- Read, understand, and use mathematical information and mathematical terms;
- Address individual problems;
- Use knowledge and understanding to a required level of accuracy;
- Identify suitable operations and calculations to generate results;
- Analyse and interpret answers in the context of the original problem;
- Check the sense and reasonableness of answers;
- Present and explain results clearly and accurately demonstrating reasoning to support the process and show consistency with the evidence presented.

Assessment Difficulty

Each of the 5 papers have been designed to match the difficulty of an Edexcel Functional Skills Maths Level 2 assessment, based on a pass mark of 50%-60%.

Question Breakdown

For each of our 5 papers, we have shown the breakdown of topics and marks for all questions and tasks in the paper, below.

Paper 1:

P = problem solving

U = underpinning skills

Section	Section A		Section B		Total
Total marks per Section	16		48		64
Problem solving (P) marks	10		38		48
Underpinning skills (U) marks	6		10		16
Level 2 subject content	P	U	P	U	-
L2.1 - Read, write, order and compare positive and negative numbers of any size					0
L2.2 - Carry out calculations with numbers up to one million including strategies to check answers including estimation and approximation	2(4)	1(2a)	1(4b)		4
L2.3 - Evaluate expressions and make substitutions in given formulae in words and symbols			2(7)		2
L2.4 - Identify and know the equivalence between fractions, decimals and percentages					0
L2.5 - Work out percentages of amounts and express one amount as a percentage of another	1(5b)		1(11)		2
L2.6 - Calculate percentage change (any size increase and decrease), and original value after percentage change			2(9)		2
L2.7 - Order, add, subtract and compare amounts or quantities using proper and improper fractions and mixed numbers	1(5b)	2(2b)	1(10)	2(3b)	6
L2.8 - Express one number as a fraction of another				2(3a)	2
L2.9 - Order, approximate and compare decimals					0
L2.10 - Add, subtract, multiply and divide decimals up to three decimal places	1(5b)		2(10)		3
L2.11 - Understand and calculate using ratios, direct proportion and inverse proportion	2(4)		2(9)		4
L2.12 - Follow the order of precedence of operators, including indices					0
Numbers and the Number system: Total Marks					25
L2.13 - Calculate amounts of money, compound interest, percentage increases, decreases and discounts including tax and simple budgeting			3(5a) 2(9) 2(11)		7
L2.14 - Convert between metric and imperial units of length, weight and capacity using a) a conversion factor	1(5b)		1(1a) 1(5a)		3

b) a conversion graph					
L2.15 - Calculate using compound measures including speed, density and rates of pay			1(5b) 2(11)		3
L2.16 - Calculate perimeters and areas of 2-D shapes including triangles and circles and composite shapes including non-rectangular shapes (formulae given except for triangles and circles)		2(5a)	3(1a) 1(5a)		6
L2.17 - Use formulae to find volumes and surface areas of 3-D shapes including cylinders (formulae to be given for 3-D shapes other than cylinders)			3(4a)		3
L2.18 - Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements					0
L2.19 - Use coordinates in 2-D, positive and negative, to specify the positions of points				1(2a) 1(2b)	2
L2.20 - Understand and use common 2-D representations of 3-D objects					0
L2.21 - Draw 3-D shapes to include plans and elevations					0
L2.22 - Calculate values of angles and/or coordinates with 2-D and 3-D shapes				2(8)	2
Measures, Shape and Space: Total Marks					26
L2.23 - Calculate the median and mode of a set of quantities		1(3)			1
L2.24 - Estimate the mean of a grouped frequency distribution from discrete data			3(1b)		3
L2.25 - Use the mean, median, mode and range to compare two sets of data			4(6c)		4
L2.26 - Work out the probability of combined events including the use of diagrams and tables, including two-way tables					0
L2.27 - Express probabilities as fractions, decimals and percentages	2(1)				2
L2.28 - Draw and interpret scatter diagrams and recognise positive and negative correlation			1(6c)	1(6a) 1(6b)	3
Handling Information and Data: Total Marks					13

Paper 2:**P = problem solving****U = underpinning skills**

Section	Section A		Section B		Total
Total marks per Section	16		48		64
Problem solving (P) marks	12		36		48
Underpinning skills (U) marks	4		12		16
Level 2 subject content	P	U	P	U	-
L2.1 - Read, write, order and compare positive and negative numbers of any size		1 (1)			1
L2.2 - Carry out calculations with numbers up to one million including strategies to check answers including estimation and approximation	2 (4)	1 (2a)	2 (7a)		5
L2.3 - Evaluate expressions and make substitutions in given formulae in words and symbols			3 (2) 1 (8b)		4
L2.4 - Identify and know the equivalence between fractions, decimals and percentages	1 (2c)				1
L2.5 - Work out percentages of amounts and express one amount as a percentage of another					0
L2.6 - Calculate percentage change (any size increase and decrease), and original value after percentage change				1 (2)	1
L2.7 - Order, add, subtract and compare amounts or quantities using proper and improper fractions and mixed numbers	2 (2c)				2
L2.8 - Express one number as a fraction of another			3 (10b)		3
L2.9 - Order, approximate and compare decimals					0
L2.10 - Add, subtract, multiply and divide decimals up to three decimal places				1 (8a)	1
L2.11 - Understand and calculate using ratios, direct proportion and inverse proportion			3 (7b)		3
L2.12 - Follow the order of precedence of operators, including indices		2 (2b)		1 (8a)	3
Numbers and the Number system: Total Marks					24
L2.13 - Calculate amounts of money, compound interest, percentage increases, decreases and discounts including tax and simple budgeting	1 (3a) 1 (3b)		1 (3) 3 (10c)		6
L2.14 - Convert between metric and imperial units of length, weight and capacity using a) a conversion factor b) a conversion graph				1 (9)	1
L2.15 - Calculate using compound measures including speed, density and rates of pay	2 (3b)			2 (6)	4
L2.16 - Calculate perimeters and areas of 2-D shapes including triangles and circles and composite shapes including non-rectangular shapes (formulae given except					0

for triangles and circles)					
L2.17 - Use formulae to find volumes and surface areas of 3-D shapes including cylinders (formulae to be given for 3-D shapes other than cylinders)			3 (3)		3
L2.18 - Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements				2 (1a) 1 (1b)	3
L2.19 - Use coordinates in 2-D, positive and negative, to specify the positions of points			3 (4)		3
L2.20 - Understand and use common 2-D representations of 3-D objects			1 (3)		1
L2.21 - Draw 3-D shapes to include plans and elevations					0
L2.22 - Calculate values of angles and/or coordinates with 2-D and 3-D shapes	3 (4)				3
Measures, Shape and Space: Total Marks					24
L2.23 - Calculate the median and mode of a set of quantities				2 (10a)	2
L2.24 - Estimate the mean of a grouped frequency distribution from discrete data			3 (11)		3
L2.25 - Use the mean, median, mode and range to compare two sets of data			3 (7a)		3
L2.26 - Work out the probability of combined events including the use of diagrams and tables, including two-way tables			4 (7c)		4
L2.27 - Express probabilities as fractions, decimals and percentages				1 (6)	1
L2.28 - Draw and interpret scatter diagrams and recognise positive and negative correlation			3 (11)		3
Handling Information and Data: Total Marks					16

Paper 3:**P = problem solving****U = underpinning skills**

Section	Section A		Section B		Total
Total marks per Section	16		48		64
Problem solving (P) marks	5		43		48
Underpinning skills (U) marks	11		5		16
Level 2 subject content	P	U	P	U	-
L2.1 - Read, write, order and compare positive and negative numbers of any size			1(8) 1(9b) 1(11b)	1(9a)	4
L2.2 - Carry out calculations with numbers up to one million including strategies to check answers including estimation and approximation			1(2a) 1(6b) 3(9c)		5
L2.3 - Evaluate expressions and make substitutions in given formulae in words and symbols		1(4a)	1(7)		2
L2.4 - Identify and know the equivalence between fractions, decimals and percentages		1(2b)			1
L2.5 - Work out percentages of amounts and express one amount as a percentage of another			1(1) 2(9b) 2(11b)		5
L2.6 - Calculate percentage change (any size increase and decrease), and original value after percentage change			3(5)		3
L2.7 - Order, add, subtract and compare amounts or quantities using proper and improper fractions and mixed numbers		2(2a)	1(2a) 2(11a)		5
L2.8 - Express one number as a fraction of another					0
L2.9 - Order, approximate and compare decimals		1(4b)			1
L2.10 - Add, subtract, multiply and divide decimals up to three decimal places					0
L2.11 - Understand and calculate using ratios, direct proportion and inverse proportion			2(7)		2
L2.12 - Follow the order of precedence of operators, including indices					0
Numbers and the Number system: Total Marks					28
L2.13 - Calculate amounts of money, compound interest, percentage increases, decreases and discounts including tax and simple budgeting			3(1) 3(10)		6
L2.14 - Convert between metric and imperial units of length, weight and capacity using a) a conversion factor b) a conversion graph			1(6a)		1
L2.15 - Calculate using compound measures including speed, density and rates of pay			1(6a) 2(9c)		3
L2.16 - Calculate perimeters and areas of 2-D shapes			2(4)		5

including triangles and circles and composite shapes including non-rectangular shapes (formulae given except for triangles and circles)			3(10)		
L2.17 - Use formulae to find volumes and surface areas of 3-D shapes including cylinders (formulae to be given for 3-D shapes other than cylinders)			1(6a)		1
L2.18 - Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements					0
L2.19 - Use coordinates in 2-D, positive and negative, to specify the positions of points				1(2b)	1
L2.20 - Understand and use common 2-D representations of 3-D objects		1(4c)			1
L2.21 - Draw 3-D shapes to include plans and elevations					0
L2.22 - Calculate values of angles and/or coordinates with 2-D and 3-D shapes					0
Measures, Shape and Space: Total Marks					18
L2.23 - Calculate the median and mode of a set of quantities		2(1a)			2
L2.24 - Estimate the mean of a grouped frequency distribution from discrete data			3(8)		3
L2.25 - Use the mean, median, mode and range to compare two sets of data	5(3)				5
L2.26 - Work out the probability of combined events including the use of diagrams and tables, including two-way tables					0
L2.27 - Express probabilities as fractions, decimals and percentages		3(2b)			3
L2.28 - Draw and interpret scatter diagrams and recognise positive and negative correlation			2(3b)	3(3a)	5
Handling Information and Data: Total Marks					18

Paper 4:**P = problem solving****U = underpinning skills**

Section	Section A		Section B		Total
Total marks per Section	16		48		64
Problem solving (P) marks	9		39		48
Underpinning skills (U) marks	7		9		16
Level 2 subject content	P	U	P	U	-
L2.1 - Read, write, order and compare positive and negative numbers of any size				1(9a) 1(9b)	2
L2.2 - Carry out calculations with numbers up to one million including strategies to check answers including estimation and approximation	1(3)	1(2b)	2(11) 1(4b)		5
L2.3 - Evaluate expressions and make substitutions in given formulae in words and symbols			2(6)		2
L2.4 - Identify and know the equivalence between fractions, decimals and percentages	1(1)				1
L2.5 - Work out percentages of amounts and express one amount as a percentage of another	2(3)				2
L2.6 - Calculate percentage change (any size increase and decrease), and original value after percentage change			2(6) 2(12)		4
L2.7 - Order, add, subtract and compare amounts or quantities using proper and improper fractions and mixed numbers		3(2c)			3
L2.8 - Express one number as a fraction of another	1(1)				1
L2.9 - Order, approximate and compare decimals					0
L2.10 - Add, subtract, multiply and divide decimals up to three decimal places				1(7a)	1
L2.11 - Understand and calculate using ratios, direct proportion and inverse proportion	3(4)				3
L2.12 - Follow the order of precedence of operators, including indices		2(2a)			2
Numbers and the Number system: Total Marks					26
L2.13 - Calculate amounts of money, compound interest, percentage increases, decreases and discounts including tax and simple budgeting	1(3)		3(3b) 5(5) 2(11)		11
L2.14 - Convert between metric and imperial units of length, weight and capacity using a) a conversion factor b) a conversion graph			1(3a)		1
L2.15 - Calculate using compound measures including speed, density and rates of pay			4(3a)		4
L2.16 - Calculate perimeters and areas of 2-D shapes including triangles and circles and composite shapes including non-rectangular shapes (formulae given except			2(11)		2

for triangles and circles)					
L2.17 - Use formulae to find volumes and surface areas of 3-D shapes including cylinders (formulae to be given for 3-D shapes other than cylinders)			1(10)		1
L2.18 - Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements				1(1)	1
L2.19 - Use coordinates in 2-D, positive and negative, to specify the positions of points			1(10)		1
L2.20 - Understand and use common 2-D representations of 3-D objects			1(10)		1
L2.21 - Draw 3-D shapes to include plans and elevations				2(2)	2
L2.22 - Calculate values of angles and/or coordinates with 2-D and 3-D shapes				2(4a)	2
Measures, Shape and Space: Total Marks					26
L2.23 - Calculate the median and mode of a set of quantities				1(7b)	1
L2.24 - Estimate the mean of a grouped frequency distribution from discrete data			3(12)		3
L2.25 - Use the mean, median, mode and range to compare two sets of data					0
L2.26 - Work out the probability of combined events including the use of diagrams and tables, including two-way tables			4(8b)		4
L2.27 - Express probabilities as fractions, decimals and percentages		1(5)			1
L2.28 - Draw and interpret scatter diagrams and recognise positive and negative correlation			3(8a)		3
Handling Information and Data: Total Marks					12

Paper 5:**P = problem solving****U = underpinning skills**

Section	Section A		Section B		Total
Total marks per Section	16		48		64
Problem solving (P) marks	5		43		48
Underpinning skills (U) marks	11		5		16
Level 2 subject content	P	U	P	U	-
L2.1 - Read, write, order and compare positive and negative numbers of any size				1(9)	1
L2.2 - Carry out calculations with numbers up to one million including strategies to check answers including estimation and approximation	1(4)	3(5)			4
L2.3 - Evaluate expressions and make substitutions in given formulae in words and symbols				1(1b)	1
L2.4 - Identify and know the equivalence between fractions, decimals and percentages		1(3b)	1(8)		2
L2.5 - Work out percentages of amounts and express one amount as a percentage of another			1(3)		1
L2.6 - Calculate percentage change (any size increase and decrease), and original value after percentage change			2(13a)		2
L2.7 - Order, add, subtract and compare amounts or quantities using proper and improper fractions and mixed numbers		2(1c)	1(13b)		3
L2.8 - Express one number as a fraction of another		2(1b)			2
L2.9 - Order, approximate and compare decimals					0
L2.10 - Add, subtract, multiply and divide decimals up to three decimal places					0
L2.11 - Understand and calculate using ratios, direct proportion and inverse proportion			2(3) 2(5) 3(11)		7
L2.12 - Follow the order of precedence of operators, including indices					0
Numbers and the Number system: Total Marks					23
L2.13 - Calculate amounts of money, compound interest, percentage increases, decreases and discounts including tax and simple budgeting			1(3) 1(5) 1(10) 5(12)		8
L2.14 - Convert between metric and imperial units of length, weight and capacity using a) a conversion factor b) a conversion graph			1(4) 2(10)		3
L2.15 - Calculate using compound measures including speed, density and rates of pay			2(4)		2
L2.16 - Calculate perimeters and areas of 2-D shapes	2(4)	2(2)	1(10)		5

including triangles and circles and composite shapes including non-rectangular shapes (formulae given except for triangles and circles)					
L2.17 - Use formulae to find volumes and surface areas of 3-D shapes including cylinders (formulae to be given for 3-D shapes other than cylinders)	2(4)				2
L2.18 - Calculate actual dimensions from scale drawings and create a scale diagram given actual measurements			1(10)		1
L2.19 - Use coordinates in 2-D, positive and negative, to specify the positions of points			1(6b)	1(6a)	2
L2.20 - Understand and use common 2-D representations of 3-D objects					0
L2.21 - Draw 3-D shapes to include plans and elevations			1(6b)		1
L2.22 - Calculate values of angles and/or coordinates with 2-D and 3-D shapes			2(1c)	1(1a) 1(9)	4
Measures, Shape and Space: Total Marks					28
L2.23 - Calculate the median and mode of a set of quantities			1(13c)		1
L2.24 - Estimate the mean of a grouped frequency distribution from discrete data			3(7)		3
L2.25 - Use the mean, median, mode and range to compare two sets of data					
L2.26 - Work out the probability of combined events including the use of diagrams and tables, including two-way tables			1(2a) 1(2b) 3(8) 2(13b)		7
L2.27 - Express probabilities as fractions, decimals and percentages			1(8)		1
L2.28 - Draw and interpret scatter diagrams and recognise positive and negative correlation		1(3a)			1
Handling Information and Data: Total Marks					13