

GCSE Mathematics Summer 2022 Foundation Tier information

Below is a topic list for the Edexcel GCSE Mathematics Summer 2022 examinations Foundation Tier. The topics have been split into content areas of mathematics and have been separated per paper but are not in the question order they will be in for the exams. MathsWatch Clip numbers have then been added for your reference.

Some questions will also contain multiple topics, where you may need to draw on prior knowledge and/or apply this knowledge to unfamiliar contexts (problem solving). We therefore recommend that you focus your revision on the below topics, however we cannot rule out that other topics may be assessed, which has been reflected in the fact that you have now been taught the whole specification.

Foundation Topic List

1. Number

	Paper 1	Paper 2	Paper 3	MW
Arithmetic	Money	Money		22b
			Four Operations	
	Negative numbers	Negative numbers	Negative numbers	23,68a,68b
Fractions	Order fractions, decimals, percentages			85
	Fraction of an amount		Fraction of an amount	72
			One amount as a fraction of another	R3
	Fraction arithmetic	Fraction arithmetic		71, 73,74,
		Order fractions		
			Equivalent fractions	25
Properties	Place value			1
		Order integers		2
		Multiples		28
			Factors	28
			Lowest Common Multiple	80
	Product of prime factors			78
Powers and roots			Square root	81
Standard Form	Conversion			83
	Calculation			83
Approximation and Estimation		Rounding	Rounding	31,32,90
	Estimation			91
		Error Intervals		155
Other		Mathematical symbols	Calculator use	77

2. Ratio, proportion, and rates of change

	Paper 1	Paper 2	Paper 3	MW
Conversion	Length	Mass, time, area	Time	6a

			Compound units	142
		Scale drawing	Scale drawing	G15
Percentages			Percentage to fraction	85
		Decimal to percentage		85
		Percentage of an amount		87
		Percentage increase	Percentage decrease	108
		Percentage profit		109
			One quantity as a percentage of another	N39b
		Depreciation		164
		Reverse percentage	110	
Ratio	Write as a ratio	Write as a ratio	Write as a ratio	38
	Share in a ratio			106
		Use of ratio		165a, 165b
			1 : n form	38
Proportion	Direct proportion	Direct proportion	Direct proportion	R8, 39, 41,
		Currency conversion		105
Compound Measures	Speed			142
			Average speed	143
	Density			142

3. Algebra

	Paper 1	Paper 2	Paper 3	MW
Manipulation	Simplification	Simplification	Simplification	33
		Expansion of bracket	Expansion of bracket	134a
		Factorisation	Factorisation	94
	Substitute values		Substitute values	95
			Change subject of a formula	101,136
			Forming an expression	A3
			Laws of indices	29,82
Equations and inequalities			Linear equation	135a
	Linear inequality			139
		Linear simultaneous equations		162
			Form an equation	137
	Quadratic equation			160
Graphs		Coordinates		8
		Straight line graph		96
	Quadratic graph			98
Functions		Number machines		36
Sequences	Linear sequence		Linear sequence	37,102,103

4. Geometry and measures

	Paper 1	Paper 2	Paper 3	MW
Shape			Triangle properties	9

			Quadrilaterals	9
		Polygons		10
			Triangular prism	G12a
		Circles		G2
		Parallel and perpendicular lines		9
	Reflection			48
		Transformations		48,49,50,148
	Plan and elevation			51
Angles		Angles in a triangle	Angles in a triangle	121,122
		Vertically opposite angles	Vertically opposite angles	120
			Angle properties of parallel lines	120
	Angles in a polygon			123
			Bearings	124
Length, area and volume		Area of a rectangle		G20a
			Area of a triangle	G20c
			Area of a trapezium	G20d
	Volume of a cube			115
	Volume of a cylinder			119
Pythagoras's Theorem and Trigonometry			Pythagoras's Theorem	150
	Exact trigonometric values			173

5. Probability

	Paper 1	Paper 2	Paper 3	MW
Probability			Probability scale	14
	Probability		Probability	59
	Frequency tree			57
		Tree diagram		151
		Combined events		151

6. Statistics

	Paper 1	Paper 2	Paper 3	MW
Diagrams	Pictogram			16
	Bar chart			15
		Interpret graph		
		Two-way table		61
		Frequency table		65a
	Stem and leaf diagram			128b
			Frequency polygon	65
Measures		Mode, median, mean	Median and range	62, 130b
Population			Comparison of distributions	