

GCSE Maths – Foundation- (Edexcel)

Exam Format:

Paper: Paper 1 (Non-Calculator), Paper 2 (Calculator), Paper 3 (Calculator)

Length of Exam: 1 hour 30 mins each paper

Awarding Body: Edexcel

Revision Resource: CGP Revision guide, MathsWatch videos and revision questions

Topic	Revision Ref <i>MathsWatch Clip Number</i>	Check
Place Value	1	
Ordering Integers	2	
Ordering Decimals	3	
Reading Scales	4	
Simple Mathematical Notation	5	
Introduction to Algebraic Conventions	7	
Coordinates	8	
Simple Geometric Definitions	9	
Polygons	10	
Symmetries	11	
Names of Angles	13	
The Probability Scale	14	
Tally Charts and Bar Charts	15	
Pictograms	16	
Adding Integers and Decimals	17	
Subtracting Integers and Decimals	18	
Multiplying Integers	19	
Dividing Integers	20	
Inverse Operations	21	
Negatives in Real Life	23	
Introduction to Fractions	24	
Equivalent Fractions	25	
Simplifying Fractions	26	
Half-Way Values	27	
Factors, Multiples and Primes	28	
Introduction to Powers/Indices	29	
Multiplying and Dividing by Powers of 10	30	
Rounding to the Nearest 10, 100, 1000	31	
Rounding to Decimal places	32	
Simplifying - Addition and Subtraction	33	
Simplifying - Multiplication	34	
Simplifying - Division	35	
Function Machines	36	
Generating a Sequence - Term to Term	37	
Introduction to Ratio	38	

Using Ratio for Recipe Questions	39	
Introduction to Percentages	40	
Value for Money	41	
Simple Proportion	42	
Properties of Solids	43	
Nets	44	
Angles on a Line and at a Point	45	
Drawing a Triangle Using a Protractor	47	
Reflections	48	
Rotations	49	
Translations	50	
Plans and Elevations	51	
Perimeters	52	
Area of a Rectangle	53	
Area of a Triangle	54	
Area of a Parallelogram	55	
Area of a Trapezium	56	
Frequency Trees	57	
Listing Outcomes	58	
Calculating Probabilities	59	
Mutually Exclusive Events	60	
Two-Way Tables	61	
Averages and the Range	62	
Data - Discrete and Continuous	63	
Vertical Line Charts	64	
Frequency Tables and Diagrams	65	
Multiplying Decimals	66	
Dividing Decimals	67	
Listing Strategies	69	
Comparing Fractions	70	
Finding a Fraction of an Amount	72	
Multiplying Fractions	73	
Dividing Fractions	74	
BODMAS/BIDMAS	75	
Reciprocals	76	
Calculator Questions	77	
Product of Primes	78	
Highest Common Factor (HCF)	79	
Lowest Common Multiple (LCM)	80	
Squares, Cubes and Roots	81	
Working with Indices	82	
Standard Form	83	
Decimals and Fractions	84	
Fractions, Percentages, Decimals	85	
Percentage of an Amount (Calc.)	86	
Percentage of an Amount (Non-Calc.)	87	
Change to a Percentage (Calc.)	88	

Change to a Percentage (Non-Calc.)	89	
Rounding to Significant Figures	90	
Estimating Answers	91	
Using Place Value	92	
Expanding Brackets	93	
Simple Factorisation	94	
Substitution	95	
Straight Line Graphs	96	
The Gradient of a Line	97	
Drawing Quadratic Graphs	98	
Sketching Functions	99	
Solving Equations using Flowcharts	100	
Subject of a Formula using Flowcharts	101	
Generating a Sequence from the nth Term	102	
Finding the nth Term	103	
Special Sequences	104	
Exchanging Money	105	
Sharing using Ratio	106	
Ratios, Fractions and Graphs	107	
Increase/Decrease by a Percentage	108	
Percentage Change	109	
Reverse Percentage Problems	110	
Simple Interest	111	
Metric conversions	112	
Problems on Coordinate Axes	113	
Volume of a Cuboid	115	
Circle Definitions	116	
Area of a Circle	117	
Circumference of a Circle	118	
Volume of a Prism	119	
Angles and Parallel Lines	120	
Angles in a Triangle	121	
Properties of Special Triangles	122	
Angle Sum of Polygons	123	
Bearings	124	
Experimental Probabilities	125	
Possibility Spaces	126	
Scatter Diagrams	129	
Index Notation	131	
Introduction to Bounds	132	
Midpoint of a Line on a Graph	133	
Rearranging Simple Formulae	136	
Forming Formulae and Equations	137	
Inequalities on a Number Line	138	
Solve Linear Inequalities	139	
Simultaneous Equations Graphically	140	
Compound Units	142	

Distance-Time Graphs	143	
Similar Shapes	144	
Bisecting an Angle	145	
Draw a Triangle Using Compasses	147	
Enlargements	148	
Tangents, Arcs, Sectors and Segments	149	
Simple Tree Diagrams	151	
Sampling Populations	152	
Time Series	153	
Negative Indices	154	
Error Intervals	155	
Mathematical Reasoning	156	
Factorising and Solving Quadratics	157	
The Difference of Two Squares	158	
Roots and Turning Points of Quadratics	160	
Cubic and Reciprocal Graphs	161	
Simultaneous Equations Algebraically	162	
Geometric Progressions	163	
Compound Interest and Depreciation	164	
Loci	165	
Congruent triangles	166	
Sectors of a Circle	167	
Trigonometry	168	
Spheres	169	
Pyramids	170	
Cones	171	
Frustums	172	
Exact Trigonometric Values	173	
Introduction to Vectors	174	
Harder Tree Diagrams	175	
Stratified sampling	176	
Surface Area of a Prism - Cuboids	114a	
Surface Area of a Prism - Triangular Prisms	114b	
Venn Diagrams - Introduction	127a	
Venn Diagrams - Notation	127b	
Representing Data - Pie Charts	128a	
Representing Data - Stem and Leaf Diagrams	128b	
Tessellations and Congruency - Tessellations	12a	
Tessellations and Congruency - Congruent Shapes	12b	
Averages from a table - Basics	130a	
Averages from a table - Estimate for the Mean	130b	
Expanding and Simplifying Brackets - Single Set of Brackets	134a	
Expanding and Simplifying Brackets - Double Set of Brackets	134b	
Solving Equations - Balancing	135a	
Constructing Perpendiculars - Bisecting a Line	146a	
Constructing Perpendiculars - From any Point	146b	
Pythagoras' Theorem - A Simple Approach	150a	

Pythagoras' Theorem - An Algebraic Approach	150b	
Pythagoras' Theorem - Line on a Graph	150c	
Finding the Equation of a Straight Line - $y=mx+c$	159a	
Finding the Equation of a Straight Line - Gradient and Coordinates	159b	
Money Questions - Non-Calculator Questions	22a	
Money Questions - Calculator Questions	22b	
Measuring and drawing Angles - Measuring	46a	
Measuring and drawing Angles - Drawing	46b	
Four Rules of Negatives - Adding and Subtracting	68a	
Four Rules of Negatives - Multiplying and Dividing	68b	
Interpreting Real-Life Tables - Time	6a	
Interpreting Real-Life Tables - Timetables and Distance Tables	6b	
Adding and Subtracting Fractions - A Standard Method	71a	
Adding and Subtracting Fractions - An Alternative Method	71b	

Maths – Higher (Edexcel)

Exam Format:

Paper: Paper 1 (Non-Calculator), Paper 2 (Calculator), Paper 3 (Calculator)

Length of Exam: 1 hour 30 mins each paper

Awarding Body: Edexcel

Revision Resource: CGP Revision guide, MathsWatch videos and revision questions

Topic	Revision Ref MathsWatch Clip Number	Check
Introduction to Ratio	38	
Using Ratio for Recipe Questions	39	
Introduction to Percentages	40	
Value for Money	41	
Simple Proportion	42	
Properties of Solids	43	
Nets	44	
Angles on a Line and at a Point	45	
Drawing a Triangle Using a Protractor	47	
Reflections	48	
Rotations	49	
Translations	50	
Plans and Elevations	51	
Perimeters	52	
Area of a Rectangle	53	
Area of a Triangle	54	
Area of a Parallelogram	55	
Area of a Trapezium	56	
Frequency Trees	57	
Listing Outcomes	58	
Calculating Probabilities	59	
Mutually Exclusive Events	60	
Two-Way Tables	61	
Averages and the Range	62	
Data - Discrete and Continuous	63	
Vertical Line Charts	64	
Frequency Tables and Diagrams	65	
Multiplying Decimals	66	
Dividing Decimals	67	
Listing Strategies	69	
Comparing Fractions	70	
Finding a Fraction of an Amount	72	
Multiplying Fractions	73	
Dividing Fractions	74	
BODMAS/BIDMAS	75	
Reciprocals	76	

Calculator Questions	77	
Product of Primes	78	
Highest Common Factor (HCF)	79	
Lowest Common Multiple (LCM)	80	
Squares, Cubes and Roots	81	
Working with Indices	82	
Standard Form	83	
Decimals and Fractions	84	
Fractions, Percentages, Decimals	85	
Percentage of an Amount (Calc.)	86	
Percentage of an Amount (Non-Calc.)	87	
Change to a Percentage (Calc.)	88	
Change to a Percentage (Non-Calc.)	89	
Rounding to Significant Figures	90	
Estimating Answers	91	
Using Place Value	92	
Expanding Brackets	93	
Simple Factorisation	94	
Substitution	95	
Straight Line Graphs	96	
The Gradient of a Line	97	
Drawing Quadratic Graphs	98	
Sketching Functions	99	
Solving Equations using Flowcharts	100	
Subject of a Formula using Flowcharts	101	
Generating a Sequence from the nth Term	102	
Finding the nth Term	103	
Special Sequences	104	
Exchanging Money	105	
Sharing using Ratio	106	
Ratios, Fractions and Graphs	107	
Increase/Decrease by a Percentage	108	
Percentage Change	109	
Reverse Percentage Problems	110	
Simple Interest	111	
Metric conversions	112	
Problems on Coordinate Axes	113	
Volume of a Cuboid	115	
Circle Definitions	116	
Area of a Circle	117	
Circumference of a Circle	118	
Volume of a Prism	119	
Angles and Parallel Lines	120	
Angles in a Triangle	121	
Properties of Special Triangles	122	
Angle Sum of Polygons	123	
Bearings	124	

Experimental Probabilities	125	
Possibility Spaces	126	
Scatter Diagrams	129	
Index Notation	131	
Introduction to Bounds	132	
Midpoint of a Line on a Graph	133	
Rearranging Simple Formulae	136	
Forming Formulae and Equations	137	
Inequalities on a Number Line	138	
Solve Linear Inequalities	139	
Simultaneous Equations Graphically	140	
Fibonacci Sequences	141	
Compound Units	142	
Distance-Time Graphs	143	
Similar Shapes	144	
Bisecting an Angle	145	
Draw a Triangle Using Compasses	147	
Enlargements	148	
Tangents, Arcs, Sectors and Segments	149	
Simple Tree Diagrams	151	
Sampling Populations	152	
Time Series	153	
Negative Indices	154	
Error Intervals	155	
Mathematical Reasoning	156	
Factorising and Solving Quadratics	157	
The Difference of Two Squares	158	
Roots and Turning Points of Quadratics	160	
Cubic and Reciprocal Graphs	161	
Simultaneous Equations Algebraically	162	
Geometric Progressions	163	
Compound Interest and Depreciation	164	
Loci	165	
Congruent triangles	166	
Sectors of a Circle	167	
Trigonometry	168	
Spheres	169	
Pyramids	170	
Cones	171	
Frustums	172	
Exact Trigonometric Values	173	
Introduction to Vectors	174	
Harder Tree Diagrams	175	
Stratified sampling	176	
Recurring Decimals to Fractions	177	
Product of Three Binomials	178	
Iteration - Trial and Improvement	179	

Iterative Processes	180	
Combinations of Transformations	182	
Circle Theorems	183	
Proof of Circle Theorems	184	
Probability using Venn Diagrams	185	
Cumulative Frequency	186	
Boxplots	187	
Fractional Indices	188	
Recurring Decimals - Proof	189	
Rearranging difficult Formulae	190	
Solving Quadratics with the Formula	191	
Factorising Hard Quadratics	192	
Algebraic Proof	193	
Exponential Functions	194	
Equation of a Circle	197	
Regions	198	
Direct and Inverse Proportion	199	
Similarity - Area and Volume	200	
The Sine Rule	201	
The Cosine Rule	202	
Area of a Triangle Using Sine	203	
And and Or Probability Questions	204	
Histograms	205	
Upper and Lower Bounds	206	
Perpendicular Lines	208	
Simultaneous Equations with a Quadratic	211	
Solve Quadratic Inequalities	212	
Finding the nth Term of a Quadratic	213	
Composite Functions	215	
Velocity-Time Graphs	216	
Pythagoras in 3D	217	
Trigonometry in 3D	218	
Vectors	219	
Surface Area of a Prism - Cuboids	114a	
Surface Area of a Prism - Triangular Prisms	114b	
Venn Diagrams - Introduction	127a	
Venn Diagrams - Notation	127b	
Representing Data - Pie Charts	128a	
Representing Data - Stem and Leaf Diagrams	128b	
Tessellations and Congruency - Tessellations	12a	
Tessellations and Congruency - Congruent Shapes	12b	
Averages from a table - Basics	130a	
Averages from a table - Estimate for the Mean	130b	
Expanding and Simplifying Brackets - Single Set of Brackets	134a	
Expanding and Simplifying Brackets - Double Set of Brackets	134b	
Solving Equations - Balancing	135a	
Constructing Perpendiculars - Bisecting a Line	146a	

Constructing Perpendiculars - From any Point	146b	
Pythagoras' Theorem - A Simple Approach	150a	
Pythagoras' Theorem - An Algebraic Approach	150b	
Pythagoras' Theorem - Line on a Graph	150c	
Finding the Equation of a Straight Line - $y=mx+c$	159a	
Finding the Equation of a Straight Line - Gradient and Coordinates	159b	
Enlargement - Negative Scale Factor - Using Construction Lines	181a	
Enlargement - Negative Scale Factor - Using Column Vectors	181b	
Trigonometric Graphs - Sine and Cosine	195a	
Trigonometric Graphs - Tangent	195b	
Transformation of Functions - Polynomial Functions	196a	
Transformation of Functions - Trigonometric Functions	196b	
Surds - Introduction to Surds	207a	
Surds - Surd Expressions	207b	
Surds - Rationalising the Denominator	207c	
Completing the Square - Basics	209a	
Completing the Square - Solving	209b	
Completing the Square - Sketching	209c	
Algebraic Fractions - Simplifying	210a	
Algebraic Fractions - Solving	210b	
Inverse Functions - Introduction	214a	
Inverse Functions - Harder Questions	214b	