



HORNCHURCH  
HIGH SCHOOL  
EXCELLENCE FOR ALL

# GCSE Mathematics

## Revision List

# Higher

*Electronic copy contains links to Maths genie videos*

Dates of examinations:

**Paper 1 (Non-calculator)**

Friday 19<sup>th</sup> May 2023

**Paper 2 (Calculator)**

Wednesday 7<sup>th</sup> June 2023

**Paper 3 (Calculator)**

Wednesday 14<sup>th</sup> June 2023

Revised		Grade 4			
In Class	At Home	Videos	Exam Questions	Exam Questions Booklet	Solutions
		<a href="#">Compound Interest and Depreciation</a>	<a href="#">Exam Questions</a>	<a href="#">Compound Interest and Depreciation</a>	<a href="#">Solutions</a>
Y		<a href="#">Indices</a>	<a href="#">Exam Questions</a>	<a href="#">Indices</a>	<a href="#">Solutions</a>
		<a href="#">Prime Factors, HCF and LCM</a>	<a href="#">Exam Questions</a>	<a href="#">HCF, LCM</a>	<a href="#">Solutions</a>
		<a href="#">Real Life and Distance Time Graphs</a>		<a href="#">Real Life Graphs</a>	<a href="#">Solutions</a>
Y		<a href="#">Inequalities</a>	<a href="#">Exam Questions</a>	<a href="#">Inequalities</a>	<a href="#">Solutions</a>
		<a href="#">Forming and Solving Equations</a>	<a href="#">Exam Questions</a>	<a href="#">Forming and Solving Equations</a>	<a href="#">Solutions</a>
		<a href="#">Sequences (Nth Term)</a>	<a href="#">Exam Questions</a>	<a href="#">Sequences (nth term)</a>	<a href="#">Solutions</a>
		<a href="#">Expanding and Factorising</a>	<a href="#">Exam Questions</a>	<a href="#">Expand and Factorise</a>	<a href="#">Solutions</a>
		<a href="#">Pythagoras</a>	<a href="#">Exam Questions</a>	<a href="#">Pythagoras</a>	<a href="#">Solutions</a>
		<a href="#">Angles in Parallel Lines</a>	<a href="#">Exam Questions</a>	<a href="#">Angles in Parallel Lines</a>	<a href="#">Solutions</a>
		<a href="#">Angles in Polygons</a>	<a href="#">Exam Questions</a>	<a href="#">Angles in Polygons</a>	<a href="#">Solutions</a>
		<a href="#">Surface Area</a>	<a href="#">Exam Questions</a>	<a href="#">Surface Area</a>	<a href="#">Solutions</a>
Y		<a href="#">Volume of a Prism</a>	<a href="#">Exam Questions</a>	<a href="#">Volume of Prisms</a>	<a href="#">Solutions</a>
		<a href="#">Cylinders</a>	<a href="#">Exam Questions</a>	<a href="#">Volume and Surface Area of Cylinders</a>	<a href="#">Solutions</a>
		<a href="#">Loci and Construction</a>		<a href="#">Loci and Construction</a>	<a href="#">Solutions</a>
		<a href="#">Bearings</a>		<a href="#">Bearings</a>	<a href="#">Solutions</a>
Y		<a href="#">Plans and Elevations</a>	<a href="#">Exam Questions</a>	<a href="#">Plans and Elevations</a>	<a href="#">Solutions</a>
		<a href="#">Averages from Frequency Tables</a>	<a href="#">Exam Questions</a>	<a href="#">Averages from Frequency Tables</a>	<a href="#">Solutions</a>
		<a href="#">Probability</a>	<a href="#">Exam Questions</a>	<a href="#">Probability and Relative Frequency</a>	<a href="#">Solutions</a>
		<a href="#">Scatter Graphs</a>		<a href="#">Scatter Graphs</a>	<a href="#">Solutions</a>

Revised		Grade 5			
In Class	At Home	Videos	Exam Questions	Exam Questions Booklet	Solutions
Y		<a href="#">Writing a Ratio as a Fraction or Linear Function</a>	<a href="#">Exam Questions</a>	<a href="#">Ratio Fraction Problems</a>	<a href="#">Solutions</a>
Y			<a href="#">Exam Questions</a>	<a href="#">Ratio Problems 2</a>	<a href="#">Solutions</a>
Y		<a href="#">Direct and Inverse Proportion</a>	<a href="#">Exam Questions</a>	<a href="#">Direct and Inverse Proportion</a>	<a href="#">Solutions</a>
		<a href="#">Reverse Percentages</a>	<a href="#">Exam Questions</a>	<a href="#">Reverse Percentages</a>	<a href="#">Solutions</a>
		<a href="#">Standard Form</a>	<a href="#">Exam Questions</a>	<a href="#">Standard Form</a>	<a href="#">Solutions</a>
Y		<a href="#">Speed and Density</a>	<a href="#">Exam Questions</a>	<a href="#">Compound Measures</a>	<a href="#">Solutions</a>
Y		<a href="#">Changing the Subject of a Formula</a>	<a href="#">Exam Questions</a>	<a href="#">Changing the Subject of a Formula</a>	<a href="#">Solutions</a>
Y		<a href="#">Expanding and Factorising Quadratics</a>	<a href="#">Exam Questions</a>	<a href="#">Expanding and Factorising Quadratics</a>	<a href="#">Solutions</a>
		<a href="#">Solving Quadratics</a>	<a href="#">Exam Questions</a>	<a href="#">Solving Quadratics</a>	<a href="#">Solutions</a>
		<a href="#">Drawing Quadratic Graphs</a>		<a href="#">Quadratic Graphs</a>	<a href="#">Solutions</a>
		<a href="#">Drawing Other Graphs: Cubic/Reciprocal</a>		<a href="#">Cubic/Reciprocal Graphs</a>	<a href="#">Solutions</a>
		<a href="#">Simultaneous Equations</a>	<a href="#">Exam Questions</a>	<a href="#">Simultaneous Equations</a>	<a href="#">Solutions</a>
		<a href="#">Solving Simultaneous Equations Graphically</a>	<a href="#">Exam Questions</a>	<a href="#">Solving Simultaneous Equations Graphically</a>	<a href="#">Solutions</a>
		<a href="#">Midpoint of a Line Segment</a>			
		<a href="#">Gradient of a Line</a>	<a href="#">Exam Questions</a>	<a href="#">Gradient of a Line</a>	<a href="#">Solutions</a>
		<a href="#">Equation of a Line</a>	<a href="#">Exam Questions</a>	<a href="#">Equation of a Line</a>	<a href="#">Solutions</a>
Y		<a href="#">Spheres and Cones</a>	<a href="#">Exam Questions</a>	<a href="#">Spheres and Cones</a>	<a href="#">Solutions</a>
		<a href="#">Sector Areas and Arc Lengths</a>	<a href="#">Exam Questions</a>	<a href="#">Sectors and Arcs</a>	<a href="#">Solutions</a>
Y		<a href="#">Similar Shapes (Lengths)</a>	<a href="#">Exam Questions</a>	<a href="#">Similar Shapes (Lengths)</a>	<a href="#">Solutions</a>
Y		<a href="#">SOHCAHTOA (Trigonometry)</a>	<a href="#">Exam Questions</a>	<a href="#">SOHCAHTOA</a>	<a href="#">Solutions</a>
Y		<a href="#">Exact trig values</a>	<a href="#">Exam Questions</a>	<a href="#">Exact trig values</a>	<a href="#">Solutions</a>
Y		<a href="#">Vectors</a>		<a href="#">Vectors</a>	<a href="#">Solutions</a>
Y		<a href="#">Probability Trees</a>	<a href="#">Exam Questions</a>	<a href="#">Probability Trees</a>	<a href="#">Solutions</a>
		<a href="#">Venn Diagrams</a>	<a href="#">Exam Questions</a>	<a href="#">Venn Diagrams</a>	<a href="#">Solutions</a>

**Higher content only (not cross over)**

Revised		Grade 6			
In Class	At Home	Videos	Exam Questions	Exam Questions Booklet	Solutions
		<a href="#">Recurring Decimals to Fractions</a>	<a href="#">Exam Questions</a>	<a href="#">Converting Recurring Decimals to Fractions</a>	<a href="#">Solutions</a>
Y		<a href="#">Fractional and Negative Indices</a>	<a href="#">Exam Questions</a>	<a href="#">Fractional and Negative Indices</a>	<a href="#">Solutions</a>
Y		<a href="#">The Product Rule for Counting</a>	<a href="#">Exam Questions</a>	<a href="#">The Product Rule for Counting</a>	<a href="#">Solutions</a>
		<a href="#">Repeated Percentage Change</a>	<a href="#">Exam Questions</a>	<a href="#">Repeated Percentage Change</a>	<a href="#">Solutions</a>
		<a href="#">Expanding Triple Brackets</a>	<a href="#">Exam Questions</a>	<a href="#">Expanding Triple Brackets</a>	<a href="#">Solutions</a>
Y		<a href="#">Parallel and Perpendicular Lines</a>	<a href="#">Exam Questions</a>	<a href="#">Parallel and Perpendicular Lines</a>	<a href="#">Solutions</a>
Y		<a href="#">Inequalities on Graphs</a>		<a href="#">Inequalities on Graphs</a>	<a href="#">Solutions</a>
Y		<a href="#">Similar Shapes (Area and Volume)</a>	<a href="#">Exam Questions</a>	<a href="#">Similar Shapes (Area and Volume)</a>	<a href="#">Solutions</a>
Y		<a href="#">Enlarging with Negative Scale Factors</a>		<a href="#">Enlarging with Negative Scale Factors</a>	<a href="#">Solutions</a>
		<a href="#">Circle Theorems</a>	<a href="#">Exam Questions</a>	<a href="#">Circle Theorems</a>	<a href="#">Solutions</a>
		<a href="#">Cumulative Frequency</a>		<a href="#">Cumulative Frequency</a>	<a href="#">Solutions</a>
		<a href="#">Box Plots</a>	<a href="#">Exam Questions</a>	<a href="#">Box Plots</a>	<a href="#">Solutions</a>
		<a href="#">Capture Recapture</a>	<a href="#">Exam Questions</a>	<a href="#">Capture Recapture</a>	<a href="#">Solutions</a>

Revised		Grade 7			
In Class	At Home	Videos	Exam Questions	Exam Questions Booklet	Solutions
Y		<a href="#">Surds</a>	<a href="#">Exam Questions</a>	<a href="#">Surds</a>	<a href="#">Solutions</a>
Y		<a href="#">Bounds</a>	<a href="#">Exam Questions</a>	<a href="#">Bounds</a>	<a href="#">Solutions</a>
		<a href="#">Direct and Inverse Proportion</a>	<a href="#">Exam Questions</a>	<a href="#">Direct and Inverse Proportion</a>	<a href="#">Solutions</a>
		<a href="#">Quadratic Formula</a>	<a href="#">Exam Questions</a>	<a href="#">Quadratic Formula</a>	<a href="#">Solutions</a>
Y		<a href="#">Factorising Harder Quadratics</a>	<a href="#">Exam Questions</a>	<a href="#">Factorising Harder Quadratics</a>	<a href="#">Solutions</a>
Y		<a href="#">Algebraic Fractions</a>	<a href="#">Exam Questions</a>	<a href="#">Algebraic Fractions</a>	<a href="#">Solutions</a>
Y		<a href="#">Rearranging Harder Formulae</a>	<a href="#">Exam Questions</a>	<a href="#">Rearranging Harder Formulae</a>	<a href="#">Solutions</a>
		<a href="#">Trigonometric and Exponential Graphs</a>		<a href="#">Harder Graphs: Trig/Exponential</a>	<a href="#">Solutions</a>
		<a href="#">Inverse and Composite Functions</a>	<a href="#">Exam Questions</a>	<a href="#">Inverse and Composite Functions</a>	<a href="#">Solutions</a>
Y		<a href="#">Iteration</a>	<a href="#">Exam Questions</a>	<a href="#">Solving Equations using Iteration</a>	<a href="#">Solutions</a>
		<a href="#">Finding the Area of Any Triangle</a>	<a href="#">Exam Questions</a>	<a href="#">Finding the Area of Any Triangle</a>	<a href="#">Solutions</a>
Y		<a href="#">The Sine Rule</a>	<a href="#">Exam Questions</a>	<a href="#">The Sine Rule</a>	<a href="#">Solutions</a>
Y		<a href="#">The Cosine Rule</a>	<a href="#">Exam Questions</a>	<a href="#">The Cosine Rule</a>	<a href="#">Solutions</a>
Y		<a href="#">Congruent Triangles</a>	<a href="#">Exam Questions</a>	<a href="#">Congruent Triangles</a>	<a href="#">Solutions</a>
		<a href="#">3d Pythagoras and Trigonometry</a>	<a href="#">Exam Questions</a>	<a href="#">3d Pythagoras and Trigonometry</a>	<a href="#">Solutions</a>
Y		<a href="#">Histograms</a>		<a href="#">Histograms</a>	<a href="#">Solutions</a>
Y		<a href="#">Conditional Probability</a>	<a href="#">Exam Questions</a>	<a href="#">Conditional Probability</a>	<a href="#">Solutions</a>

Revised		Grade 8/9			
In Class	At Home	Videos	Exam Questions	Exam Questions Booklet	Solutions
		<a href="#">Quadratic Simultaneous Equations</a>	<a href="#">Exam Questions</a>	<a href="#">Quadratic Simultaneous Equations</a>	<a href="#">Solutions</a>
Y		<a href="#">Transforming Graphs <math>y=f(x)</math></a>		<a href="#">Transforming Graphs <math>y=f(x)</math></a>	<a href="#">Solutions</a>
Y		<a href="#">Proof</a>	<a href="#">Exam Questions</a>	<a href="#">Proof</a>	<a href="#">Solutions</a>
		<a href="#">Completing the Square</a>	<a href="#">Exam Questions</a>	<a href="#">Completing the Square</a>	<a href="#">Solutions</a>
		<a href="#">The Nth Term of a Quadratic Sequence</a>	<a href="#">Exam Questions</a>	<a href="#">Quadratic Sequences</a>	<a href="#">Solutions</a>
		<a href="#">Quadratic Inequalities</a>	<a href="#">Exam Questions</a>	<a href="#">Quadratic Inequalities</a>	<a href="#">Solutions</a>
		<a href="#">Velocity Time Graphs</a>		<a href="#">Velocity Time Graphs</a>	<a href="#">Solutions</a>
		<a href="#">Proof of the Circle Theorems</a>	<a href="#">Exam Questions</a>	<a href="#">Proof of the Circle Theorems</a>	<a href="#">Solutions</a>
Y		<a href="#">Perpendicular Lines and the equation of a tangent</a>	<a href="#">Exam Questions</a>	<a href="#">Perpendicular Lines</a>	<a href="#">Solutions</a>
Y		<a href="#">Vectors Proof Questions</a>	<a href="#">Exam Questions</a>	<a href="#">Vectors</a>	<a href="#">Solutions</a>
		<a href="#">Probability Equation Questions</a>	<a href="#">Exam Questions</a>	<a href="#">Probability Equation Questions</a>	<a href="#">Solutions</a>