THIRD SPACE LEARNING

Revision Lists 2025 Foundation & Higher

GCSE Maths
Edexcel
Paper 2 & 3

The resource in a nutshell

This resource provides revision lists for the Edexcel GCSE Maths papers 2 and 3 for 2025

It is not possible to accurately predict the content of exams. These revision recommendations use analysis of past exam papers; there is no guarantee that this year's papers will follow a similar pattern. We recommend that students continue to cover the full syllabus in their revision for Papers 2 and 3.

- There is a dedicated revision list for Foundation tier and Higher tier
- Each topic links to the Third Space Learning GCSE revision guides where you will find step by step examples, practice questions and exam questions.
- The revision lists provide quick links to our collection of free downloadable resources including worksheets, exam questions, diagnostic questions, revision mats and much more!

GCSE maths revision support from Third Space Learning

GCSE maths revision resources written by secondary maths teachers and examiners including:

GCSE Maths Revision Guides

Topic-based online revision guides with worked examples, common misconceptions and practice GCSE questions.

GCSE Maths Worksheets

Designed to work along side revision guides containing functional and applied reasoning questions, practice GCSE questions and word problems.

Revision PowerPoints

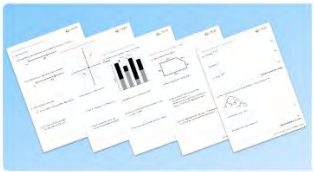
Hundreds of questions covering all of the key skills needed for the GCSE mathematics papers.

Revision Cards

An excellent way to practice the essential topics required for the GCSE examinations.

Revision Mats

Topic-based revision mats to help students to practice the key skills from the main six topic areas and identify any areas of development.



Exam Papers

Full sets of exam papers for higher and foundation Edexcel, AQA and OCR exam boards.

GCSE Maths Formula Sheets

Formula sheets listing all of the useful formulas at GCSE.

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Number

- Rounding
- Error Intervals
- Estimation
- Truncation
- Percentage change
- Compound Interest and Depreciation
- Simple interest
- Reverse percentages
- One number as a percentage of another
- Converting to and from standard form
- Arithmetic with standard form
- Powers and roots
- HCF and LCM
- Prime factor decomposition
- Negative numbers
- Negative powers and Reciprocals
- Percentage of an amount
- Converting between fractions, decimals and percentages
- Fractions of amounts
- Adding and subtracting fractions
- Multiplying fractions
- Dividing fractions
- Converting between Improper fractions and mixed numbers
- Comparing and ordering fractions
- Multiplying decimals
- Dividing decimals
- Adding and subtracting decimals
- Types of numbers
- Factors, multiples and prime numbers
- Order of operations (BIDMAS)
- Sequences
- Money problems
- Using a calculator
- Equivalent fractions

Ratio

- Best buys
- Compound measures
- Direct and inverse proportion
- Ratio
- Scale
- Metric units of measurement
- Scale drawing
- Converting units of area and volume
- Exchange rates
- Unitary method
- Distance time graphs
- Speed time graphs
- Rates of change
- Converting units of time

Algebra

- Simultaneous equations
- Factorising single bracket
- Factorising quadratics
- Expanding brackets
- Rearranging formulae
- Substitution
- Solving equations
- Solving quadratic equations by factorising
- Arithmetic sequences
- Nth term
- Geometric sequences
- Laws of indices
- Negative indices
- Solving simultaneous equations graphically
- Collecting like terms
- Straight line graphs
- Cubic graphs
- Reciprocal graphs
- Parallel lines
- Function machines
- Solving inequalities
- Quadratic graphs
- Coordinates
- Recognising types of graphs
- Finding the midpoint
- Simplifying expressions
- Distance between two coordinates
- Formulae, expressions and identities

Geometry

- Pythagoras' theorem
- Area
- Types of angles
- Angles in polygons
- Exact trig values
- Trigonometry SOHCAHTOA
- Area and circumference of a circle
- Sector area and arc length
- 2D shapes
- Symmetry
- Loci and construction
- Bearings
- Congruence and similarity
- Transformations
- Vectors
- Volume of prisms and cylinders
- Cones, pyramids and spheres
- Surface area of prisms and cylinders
- 3D shapes
- Plans and elevations
- Perimeter of 2D shapes

Probability

- Simple probability
- Relative frequency
- Venn diagrams and set notation
- Tree diagrams
- Sample space diagram
- Frequency trees
- Expected frequency
- Systematic listing strategies

Statistics

- Line graphs
- Averages and range
- Pie charts
- Frequency polygon
- Scatter graphs
- Bar chart
- Two way tables
- Averages from frequency tables
- Frequency polygon and frequency diagrams
- Stem and leaf diagram
- Time series graph
- Tally chart
- Types of data
- Pictograms

Key

- These topics are very likely to appear on the next two papers in some form.
- These topics could still come up, although less likely. Some have already appeared on Paper 1 but could be re-assessed in a different form.
- These topics appeared on Paper 1 - but remember, these **could still** come up again!

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Number

- Rounding
- Error intervals
- Estimation
- Upper and lower bounds
- Truncation
- Percentage change
- Compound interest and depreciation
- Simple interest
- Reverse percentages
- One number as a percentage of another
- Converting to and from standard form
- Arithmetic with standard form
- HCF and LCM
- Prime factor decomposition
- Fractional powers
- Negative powers and reciprocals
- Percentage of an amount
- Dividing fractions
- Adding and subtracting fractions
- Multiplying fractions
- Recurring decimals to fractions
- Converting between improper fractions and mixed numbers
- Multiplying decimals
- Dividing decimals
- Adding and subtracting surds
- Surds
- Multiplying and dividing surds
- Types of sequences
- Money problems
- Using a calculator

Ratio

- Best buys
- Compound measures
- Direct and inverse proportion
- Ratio
- Scale drawing
- Exchange rates
- Unitary method
- Converting units of area and volume
- Distance time graphs
- Speed time graphs
- Rates of change

Algebra

- Simultaneous equations
- Factorising single bracket
- Factorising quadratics
- Expanding brackets
- Rearranging formulae
- Substitution
- Solving equations
- Solving quadratic equations by factorising
- Solving quadratic equations using the quadratic formula
- Completing the square
- Quadratic simultaneous equations
- Arithmetic sequences and nth term
- Geometric sequences
- Laws of indices
- Negative indices
- Fractional indices
- Quadratic nth term
- Algebraic fractions
- Solving simultaneous equations graphically
- Straight line graphs
- Cubic graphs
- Exponential graphs
- Reciprocal graphs
- Circle graphs
- Parallel and perpendicular lines
- Functions
- Solving inequalities
- Quadratic inequalities
- Quadratic graphs
- Recognising types of graphs
- Iteration and recurrence formulae
- Graph transformations
- Algebraic proof
- Inequality regions
- Finding the midpoint
- Simplifying expressions
- Distance between two coordinates
- Formulae, expressions and identities
- Exponential functions

Geometry

- Pythagoras' theorem
- Angles in polygons
- Angles
- Exact trig values
- Trigonometry SOHCAHTOA
- The Sine Rule
- The Cosine Rule
- Area of a triangle using 1/2abSinC
- 3D trigonometry
- Area
- Area and circumference of a circle
- 3D Pythagoras
- Trigonometric graphs
- Sector area and arc length
- Circle theorems
- Loci and construction
- Bearings
- Congruence and similarity
- Transformations
- Vectors
- Volume of prisms and cylinders
- Cones, pyramids and spheres
- Surface area of prisms and cylinders
- Plans and elevations
- Equation of tangent to a circle
- Perimeter of 2D shapes

Probability

- Product rule for counting
- Conditional probability (without replacement)
- Relative frequency
- Venn diagrams and set notation
- Tree diagrams
- Sample space diagram
- Frequency trees
- Expected frequency
- Systematic listing strategies

Statistics

- Line graphs
- Pie charts
- Frequency polygon
- Scatter graphs
- Histograms
- Two way tables
- Cumulative frequency and box plots
- Averages from frequency tables
- Frequency diagrams
- Time series graph
- Types of data
- Capture recapture
- Stem and leaf diagram

Key

- These topics are very likely to appear on the next two papers in some form.
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Help ease the pressure with a personal GCSE maths tutor for each of your target KS4 students

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