

<https://www.aqa.org.uk/subjects/mathematics/gcse/mathematics-8300/specification-at-a-glance>

Revision List to cover both papers. Two 90-minute papers.

Paper 1 is the Non-Calculator Paper. Paper 2 is the Calculator Paper

- Algebraic fractions
- Adding, subtracting, multiplying, dividing and simplifying surds
- Angles in polygons
- Angles on a line, about a point and on parallel lines
- Calculate with speed
- Calculating Mean, Median, Mode and Range
- Changing the subjects of formulae
- Circle theorems
- Completing the square
- Compound interest calculations
- Congruent triangles
- Constructing and solving equations
- Converting between mixed numbers and improper fractions
- Converting recurring decimals to fractions
- Equation of a line from a gradient and a point
- Equations of parallel and perpendicular lines
- Estimating roots and powers
- Expanding brackets
- Expected results from repeated experiments
- Find fractions of amounts without a calculator
- Finding the circumference of circles
- Finding angles in right-angled triangles
- Finding averages from grouped data
- Finding bounds for calculations
- Finding original values in percentage calculations (sometimes called reverse percentages)
- Finding prime numbers
- Finding sides in right-angled triangles
- Frequency tables with grouped data
- Function machines with letters
- Graphs of reciprocal functions
- Interpreting equations of straight lines
- Interpreting frequency tables with grouped data
- Multiplying and dividing fractions
- Numbers as percentages of other numbers
- Position-to-term rules for quadratic sequences
- Prime factor decomposition
- Rates of change
- Reading, converting and calculating with time
- Reflecting graphs
- Sample space diagrams
- Share amounts in a given ratio
- Simplifying fractions
- Solving equations
- Solving shape problems involving coordinates
- Solving simultaneous equations using substitution
- Solving single inequalities
- Special sequences
- Substituting into functions
- Substituting into iterative formulae and finding approximate solutions to equations using iteration
- Surface area of cylinders and spheres
- Transforming graphs
- Translation
- Tree diagrams
- Understanding similarity
- Use Pythagoras' theorem in 2D
- Use standard form with negative and positive indices
- Using a written method to multiply and divide decimals
- Using the exact values of trigonometric ratios
- Using the product rule for counting
- Venn diagrams with set notation
- Volume of spheres
- Write numbers as percentages of other numbers
- Writing and simplifying ratios

Useful revision resources

Websites

- Sparx Maths Independent Learning – <https://www.sparxmaths.uk>
- Corbett Maths – <https://corbettmaths.com/>
- GCSEPod - <https://www.gcsepod.com/>
- Seneca Learning - <https://senecalearning.com/en-GB/>
- BBC Bitesize Learning - <https://www.bbc.co.uk/bitesize/examspecs/z8sg6fr>
- Oak National Academy - <https://classroom.thenational.academy/subjects-by-key-stage/key-stage-4/subjects/math>
- Third Space Learning - <https://thirdspacelearning.com/secondary-resources/>

Recommended Revision Guides

- Collins GCSE AQA revision guides and Corbett Maths revision cards – Available on Wisepay

Recommended Calculators

Casio fx-83 CW, fx-85 CW, Casio Classwiz EX-991 CW (recommended if continuing onto A-Level Mathematics) – underlined models available on Wisepay

Maths Sets

We have a Maths Sets available on Wisepay and are priced at £2, these come in an exam-friendly transparent pencil case

Revision Tips

Revision for Mathematics is based upon practice (and more practice). You need to be confident at the skills and concepts that make up the course in order to be able to work through the more challenging problems. Revision should be interactive, not just reading notes

Students can work through the Independent Study Sections on Sparx Maths and use the revision list to identify areas that they are good at, alongside areas they are struggling with and need to work on

A potential plan of action would be

- Work through the list given using Sparx (remember that they have a video with each question)
- Work through maths problems and past papers.
- Do not just read your notes/revision guides as you need to practice your Maths skills.