

Revision checklist

Grade 6

Number

- ☐ Surds: simplifying, adding and multiplying
- ☐ Rationalising denominators in accessible cases
- ☐ Fractional indices
- ☐ Complex bounds problems
- ☐ Standard form in multi-step calculations
- ☐ Upper and lower bounds in calculations involving formulae

Algebra

- ☐ Factorising (ax^2+bx+c)
- ☐ Quadratic equations requiring rearrangement
- ☐ Completing the square in straightforward cases
- ☐ Quadratic formula
- ☐ Simultaneous equations involving linear and quadratic equations
- ☐ Algebraic fractions: simplifying and manipulating
- ☐ Composite and inverse functions
- ☐ Algebraic proof involving identities
- ☐ Quadratic inequalities in straightforward cases
- ☐ Finding the n th term of quadratic sequences
- ☐ Graphs of quadratic and cubic functions
- ☐ Translating and reflecting graphs

Ratio and proportion

- ☐ Algebraic direct and inverse proportion
- ☐ Compound growth and decay
- ☐ Repeated percentage change and compound interest
- ☐ Similarity involving area and volume scale factors
- ☐ Gradients as rates of change

Geometry

- ☐ Sine rule and cosine rule in multi-step problems
- ☐ 3D Pythagoras and trigonometry
- ☐ Circle theorems with reasoning
- ☐ Tangents to circles
- ☐ Sector arc lengths and areas in compound problems
- ☐ Surface area and volume of cones, spheres and composite solids
- ☐ Vector calculations and geometric arguments
- ☐ Proof using congruence and similarity

Probability

- ☐ Conditional probability using tables, trees and Venn diagrams
- ☐ Dependent events
- ☐ Combined events requiring more than one method

Statistics

- ☐ Histograms with unequal class widths
- ☐ Cumulative frequency and box plots together
- ☐ Estimating medians, quartiles and interquartile range
- ☐ Comparing distributions and interpreting data critically

Disclaimer: The grade groupings (Grades 1–3, 4–6 and 7–9) are intended as a general guide only. They are approximate and are not fixed boundaries, as the difficulty of a topic can vary depending on the question and the skills required. Some topics may overlap between grade groups, and students may need to revisit earlier skills before progressing to more challenging material. The actual GCSE grade achieved will depend on overall performance across the full exam, not on individual topics alone