

AQA Math - Foundation

Paper 1: Non-Calculator		
Spec Ref	Learning Outcome (I can...)	Revision Links
Number	• Perform calculations without a calculator (integers, decimals, fractions). • Round to decimal places/ significant figures. • Work with factors, multiples, and primes. • Calculate percentages and fractions of amounts mentally/with written methods. • Use error intervals and bounds.	Revision Link
Algebra	• Simplify, expand and factorise expressions. • Solve linear equations and inequalities (no calculator). • Work with simple sequences. • Plot straight-line graphs using substitution.	Revision Link
Ratio, Proportion & Rates	• Divide amounts in a ratio. • Use proportion in recipe-style problems. • Work out speed, density, pressure with unit conversions (non-calc).	Revision Link
Geometry & Measures	• Solve angle problems in triangles, polygons, and parallel lines. • Use Pythagoras and trigonometry (exact values often expected). • Calculate perimeter/area of shapes (without pi button). • Constructions & loci using compass/ruler.	Revision Link
Probability	• Work with probability fractions. • Complete sample space diagrams. • Calculate probabilities without using a calculator.	Revision Link
Statistics	• Draw and interpret bar charts, pie charts, and line graphs by hand. • Calculate mean, median, mode and range manually. • Use data tables without calculator support.	Revision Link

Paper 2: Calculator

Number	• Use a calculator efficiently for fractions, decimals, and percentages. • Work with standard form. • Calculate with indices and roots. • Solve percentage change, compound interest, growth/decay problems.	Revision Link
Algebra	• Plot quadratic graphs using a calculator. • Substitute into expressions and formulas. • Solve equations using a calculator when needed. • Work with simultaneous equations (graphical & algebraic).	Revision Link
Ratio & Proportion	• Solve best buy problems. • Apply proportion in real-life contexts. • Solve scale drawings and conversion problems using a calculator.	Revision Link
Geometry & Measures	• Work out areas/volumes of circles, cylinders, cones, spheres with a calculator. • Apply trigonometry and Pythagoras with decimals. • Solve bearings and scale diagram problems.	Revision Link
Probability	• Solve combined probability problems. • Use probability trees. • Work with relative frequency using a calculator.	Revision Link
Statistics	• Calculate averages from grouped data. • Draw histograms using calculator support. • Interpret cumulative frequency and box plots.	Revision Link

Paper 3: Calculator

Number	• Apply calculator skills for complex fraction/decimal/percentage questions. • Solve multi-step problems involving standard form and bounds.	Revision Link
Algebra	• Work with the nth term of sequences. • Plot and interpret graphs of equations, including quadratics. • Solve real-life word problems with algebra.	Revision Link
Ratio & Proportion	• Apply percentages in context (interest, growth, decay). • Solve inverse proportion problems. • Work with real-life proportion questions (recipes, maps).	Revision Link
Geometry & Measures	• Work with volume and surface area of pyramids, cones, and spheres. • Apply trigonometry in 3D contexts. • Solve vector problems.	Revision Link
Probability	• Solve complex tree diagram questions. • Calculate probabilities of combined events. • Use conditional probability (simple Foundation level).	Revision Link
Statistics	• Interpret scatter graphs & lines of best fit. • Compare data sets using averages and spreads. • Work with probability distributions in context.	Revision Link