

Year 9	
Trigonometry (SOH CAH TOA)	Finding a side in a right-angled triangle. Finding an angle in a right-angled triangle. Bearings. Angles of elevation and depression.
Algebra	Expressions, equations, identities. Expanding 3 brackets. Factorising expressions (not quadratic). Linear equations.
Test 1	
Handling data	2-way tables. Trends (including moving averages). Mean averages for grouped data. Interquartile range. Sampling methods (including stratified sampling). Cumulative frequency, including box plots. Histograms, including finding frequencies. Comparing sets of data.
Ratio	Ratio revision. Ratio problem solving. Ratio hard GCSE two way table.
Test 2	
Transformations	Recap of translation, reflection, rotation and enlargement. Negative scale factors (enlargement). Combinations of transformations.
Test 3	
Graphs	Graphs of straight lines. Graphs of quadratic curves. Graphs of cubics and reciprocals (includes matching graphs to equations) Real-life graphs. Exponential functions (growth/decay).
$y=mx+c$	Gradient of a straight line. $y=mx+c$ (drawing straight line graphs). $y=mx+c$ (finding gradient and y-intercept from given equation, finding equation of a line). Gradients of perpendicular lines. Finding equation of perpendicular line.
Factorising	Factorising - quadratics. Factorising – the difference of 2 squares. Factorising completely. Factorising by grouping. Factorising – quadratics with coefficient of $x^2 > 1$.
Test 4	
Sequences	Finding subsequent terms. Geometric progressions and, Fibonacci sequences. Arithmetic sequence rules (nth term). Subscript notation. Quadratic sequence rules (nth term). Mixed sequences.
Changing the subject of a formula	Changing the subject of simple formulae. Changing the subject of formulae involving fractions, powers and roots.
Quadratic equations	Solving quadratic equations by factorising. Problems leading to quadratic equations.
Iteration	Trial and improvement. Fixed point iteration.
Probability	Relative frequency. Finding basic probabilities. Expectation. Listing possible outcomes. Product rule for counting. Independent events (the AND rule). Mutually exclusive events (the OR rule). Probability trees.
Summer Exam	
Inequalities	Linear inequalities. Set notation for inequalities. Shading regions.
Circle properties	Angle in semi-circle. Angle at the centre. Angles at the circumference. Cyclic quadrilaterals. Tangent to a circle. Alternate segment theorem.

Assessment Procedure

- Autumn grade will be based on the results of the Year 8 exam and Test 1
- Spring grade will be based on the results of the Year 8 exam and Tests 1, 2 and 3
- Summer grade will be based on the summer exam (Paper 1 = non-calc Paper 2 = calc)