

# Year 11

Students in Year 11 take their GCSE Mathematics exams in the summer term. These consist of one non-calculator paper and two calculator papers. The exam board is AQA.

In Year 11, alongside revision of Year 7-10 topics, we cover the following topics (bold topics are higher tier only):

<b>Half Term 1</b>
<b>Addition &amp; subtraction of algebraic fractions</b>
<b>Solving equations which include algebraic fractions</b>
Linear simultaneous equations
<b>Iteration</b>
<b>Linear inequalities in two variables</b>
Trigonometry in right-angled triangles (finding lengths)
Sector area
Volume of pyramids, cones, spheres & composite solids
<b>Half Term 2</b>
<b>Solve two simultaneous equations (one linear, one quadratic)</b>
Find approximate solutions to simultaneous equations using a graph
<b>Quadratic inequalities</b>
<b>Representing the solution set from an inequality on a number line or with set notation</b>
<b>Inverse functions</b>
<b>Composite functions</b>
<b>Algebraic proof</b>
Trigonometry in right-angled triangles (finding angles)
<b>Trigonometry in 3D</b>
<b>Graphs of the trigonometric functions</b>
<b>Circle theorems</b>
<b>Half Term 3</b>
<b>Transformations of functions</b>
<b>Equation of a circle</b>
<b>Equation of a tangent to a circle</b>

<b>Circle theorems</b>
<b>The sine rule</b>
<b>The cosine rule</b>
<b>Vector proof</b>
Revision for GCSE Maths exam
<b>Half Term 4</b>
Quadratic sequences <b>and their nth term</b>
<b>Other sequences</b>
<b>Area = <math>\frac{1}{2} ab \sin C</math> to calculate the area of a triangle</b>
Simple geometric progressions
Revision for GCSE Maths exam
<b>Half Terms 5 &amp; 6</b>
Revision for GCSE Maths exam