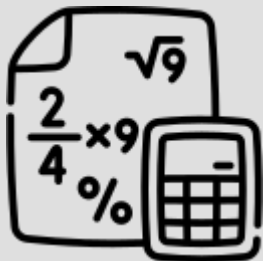


## A Level Mathematics - Year 12



**Summer Term 2**  
Algebraic methods, Binomial Expansion  
2

**Summer Term 1**  
Integration  
Normal distribution hypothesis testing

**Spring Term 2**  
Integration, Exponentials and Logs  
Hypothesis testing, Normal Distributions,  
Regression and Correlation

**Spring Term 1**  
Vectors, Differentiation  
Probability, Statistical Distributions

**Autumn Term 2**  
Circles, Trigonometry, Binomial expansion  
Data Collection, Measures of location and  
spread, Representations of data, Correlation

**Autumn Term 1**  
Algebraic expressions, Graphs and  
transformations, Trigonometry



Knowledge	Attributes / Character	Skills	Experiences
<ul style="list-style-type: none"> <li>• Algebraic Expressions</li> <li>• Quadratics</li> <li>• Equations and Inequalities</li> <li>• Binomial expansion</li> <li>• Graphs and transformations</li> <li>• Circles</li> <li>• Algebraic methods</li> <li>• Trigonometric ratios, identities and equations</li> <li>• Vectors</li> <li>• Exponentials and logarithms</li> <li>• Differentiation</li> <li>• integration</li> </ul>	<ul style="list-style-type: none"> <li>• Data collection</li> <li>• Measures of location and spread</li> <li>• Correlation</li> <li>• Representations of data</li> <li>• Probability</li> <li>• Conditional probability</li> <li>• Statistical distributions</li> <li>• Normal distribution</li> <li>• Regression, correlation and hypothesis testing</li> </ul>	<ul style="list-style-type: none"> <li>• Confidence - students are encouraged to work through the problems which they have struggled on prior to A Level and build the confidence in that before moving forward. They are encouraged to model their work to their peers which develops their presentation skills and confidence in public speaking</li> <li>• Organisation - students are given week by week schedules to ensure they are organised and ready for learning. Students need to manage their time efficiently and ensure they are organised when coming into lesson with the correct resources</li> <li>• Resilience - students develop resilience by working on challenging problems where they need to try and try again to get to the solution</li> <li>• Empathy - students are encouraged to work in peers and support each other when they are stuck</li> </ul>	<p>Algebraic manipulation</p> <p>Analysis - to be able to identify and analyse skills needed in each question</p> <p>Application of mathematical processes in problem solving situations</p> <p>Interpretation of large data sets</p>