

## Year 13 Mathematics

Students in Year 13 continue to have two teachers (A and B). Teacher A teaches Pure and Statistics and Teacher B teaches Pure and Mechanics. Students will develop strong subject knowledge across a range of specialisms, learning how to apply mathematical skills in a variety of contexts, including mathematical modelling, formal proofs and interpreting data in real-life situations using the 'large data set'. Teachers encourage, through their own enjoyment, interest in mathematical based post-18 courses.

Year 13 Curriculum	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Topic(s)	<p><b>Teacher A</b> Chapter 4: Sequences and Series</p> <p>Chapter 5: Rational Functions and Partial Fractions</p> <p>Chapter 6: General Binomial Expansion</p> <p>Chapter 9: Calculus of Exponential and Trigonometric Functions</p> <p>Chapter 10: Further Differentiation</p> <p><b>Teacher B</b> Chapter 7: Radian Measure</p>	<p><b>Teacher A</b> Chapter 12: Further Applications of Calculus</p> <p>Chapter 11: Further Integration Techniques</p> <p><b>Teacher B</b> Chapter 8: Further Trigonometry</p> <p>Chapter 14: Numerical Solution of Equations</p> <p>Chapter 15: Numerical Integration</p> <p>Chapter 1: Proof and Mathematical Communication</p>	<p><b>Teacher A</b> Chapter 13: Differential Equations</p> <p><b>Teacher B</b> Chapter 16: Application of Vectors</p> <p>Chapter 17: Projectiles</p>	<p><b>Teacher A</b> Chapter 20: Conditional Probability</p> <p>Chapter 21: Normal Distribution</p> <p>Chapter 22: Further Hypothesis Testing</p> <p><b>Teacher B</b> Chapter 18: Forces in Context</p> <p>Chapter 19: Moments</p>		

<b>Assessment</b>	Chapter 2: Functions					
	Chapter 3: Further Transformations of Graphs					
	Diagnostic Test 9  Diagnostic Test 10	Diagnostic Test 11  Diagnostic Test 12	<b>Internal Year 13 Spring Examination</b>  These internal examinations take place in the Main Hall. There will be three papers: Paper 1 – Pure and Mechanics Paper 2 – Pure and Statistics		<b>Internal Year 13 Summer Examination</b>  These internal examinations take place in the Main Hall. There will be three papers: Paper 1 – Pure Paper 2 – Pure and Mechanics Paper 3 – Pure and Statistics	

### Independent Work

Students are expected to complete Chapter Review questions (CRQs) following each chapter studied. Additionally, practice questions must be completed to demonstrate knowledge and understanding of the content covered. Students should be spending approximately 3 hours per week doing private study – revising and practicing questions from the textbook and past papers.