

## Year 13 Pure Learning Programme 4

<p>The LORIC skill focus for his LP is: INITIATIVE. The Moral Virtues focus for this LP are: INTEGRITY and GRATITUDE.</p>		<p><b>Literacy:</b></p> <ul style="list-style-type: none"> <li>Capital letters must be used at the start of sentences and for the first letter of proper nouns</li> <li>Full stops must be used at the end of a sentence</li> <li>Question marks must be used at the end of a question</li> <li>Apostrophes should only be used for possession or omission</li> <li>Days of the week and months must be spelled correctly</li> <li>Key words must be spelled correctly</li> </ul>
<p>Integrity - Having strong moral principles. Gratitude - Feeling and expressing thanks.</p>		
<p><b>What will I be learning about in this Learning Programme?</b> In LP4 I will be learning about numerical methods for solving algebraic problems and 3D vectors.</p> <p><b>Where have I seen this learning before?</b> Yr12: algebraic manipulation and 2D vectors.</p> <p><b>What could I use it for?</b> The knowledge and skills I will learn in this learning programme will allow me to solve geometrical problems using vectors. This will later be applied to mechanics and this knowledge is vital in careers such as engineering.</p>		

<b>In LP4.1, I will know:</b>	<b>10/03/25 - (WK 2)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to use partial fractions with Binomial expansion.		Binomial	Targeted Exam Paper Practice

<b>In LP4.2, I will know:</b>	<b>17/03/25 - (WK 1)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to locate roots of equations; how to use iteration.		Iteration	Targeted Exam Paper Practice

<b>In LP4.3, I will know:</b>	<b>24/03/25 - (WK 2)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to solve Newton-Raphson problems.		Roots	Targeted Exam Paper Practice
Extended Task.			

<b>In LP4.4, I will know:</b>	<b>31/03/25 - (WK 1)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to work with vectors in 3D; how to solve geometrical problems with vectors.		Magnitude	Targeted Exam Paper Practice

<b>In LP4.5, I will know:</b>	<b>21/04/25 - (WK 2)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to apply all knowledge acquired so far to exam questions		Revision	Targeted Exam Paper Practice

<b>In LP4.6, I will know:</b>	<b>28/04/25 - (WK 1)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to apply all knowledge acquired so far to exam questions		Revision	Targeted Exam Paper Practice
Extended Task.			

<b>In LP4.7, I will know:</b>	<b>05/05/25 - (WK 2)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to apply all knowledge acquired so far to exam questions		Revision	Targeted Exam Paper Practice

**Resources to support learning:**  
Use your knowledge organisers to support with revision and recall. Here are some online resources to further support you in your Mathematics revision beyond the classroom. All weekly homework tasks area based on the exercises from the book. In addition to homework, Pupils should use questions not used in class plus the review exercises to help support learning from outside the classroom. Online Resource for homework and exam practice: <https://www.drfostrmaths.com/>. Topic based exam questions - <https://www.mathsgenie.co.uk/>

**FFET Award Challenge for this Learning Programme:**  
Create a revision mind/map or poster of any of the Pure Maths chapters.

