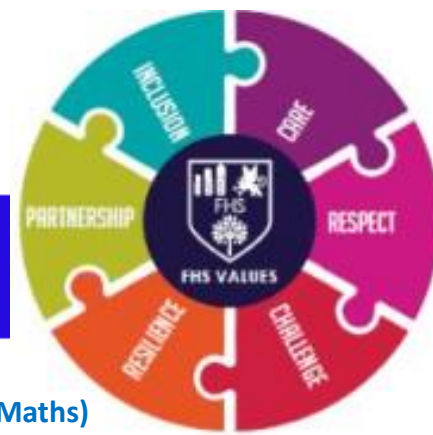


Year 12 Further Maths

LEARNING JOURNEY



Trigonometry and modelling (Y2 A-Level Maths)

Differentiation (Y2 A-Level Maths)

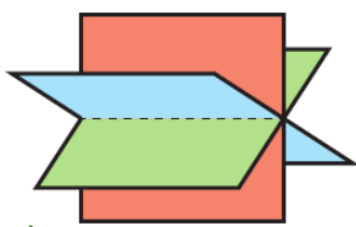
Integration (Y2 A-Level Maths)

Trigonometric Functions (Y2 A-Level Maths)

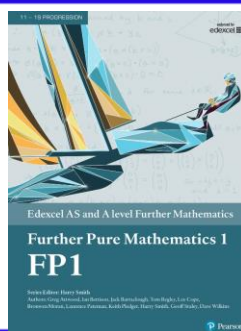
Radians (Year 2 A-Level Maths)

Revision/review

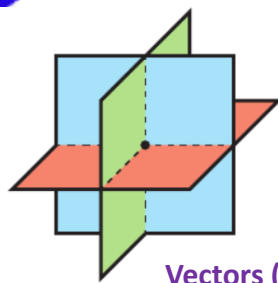
Elastic Collisions in One Dimension (FM1)



t-formulae (FP1)



Conic Sections



Vectors (FP1)

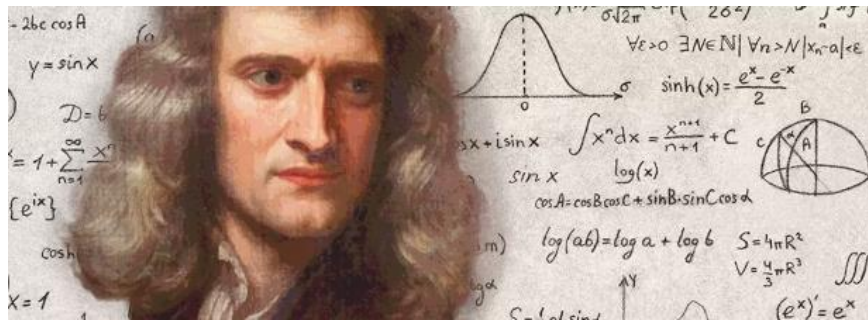
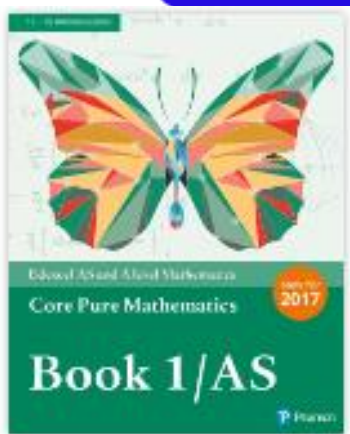
Inequalities (FP1)

Numerical Methods (FP1)

Work, Energy and Power (FM1)

Momentum and Impulse (FM1)

Vectors



Linear Transformations

Series

Roots of Polynomials

Proof by Induction

Matrices

Argand diagrams

Complex Numbers



Year 12 Further Maths learning summary:

During the Further Maths course we will:

- understand mathematics and mathematical processes in a way that promotes our confidence, fosters enjoyment and provides a strong foundation for progress to further study.
- extend our range of mathematical skills and techniques over and above the A-Level Maths syllabus, giving us a deep insight into the processes used in mathematics.
- approach very complex multi-step problems with tenacity, producing solutions which require manipulating very complex algebra over many steps
- understand coherence and progression in mathematics and how different areas of mathematics are connected
- apply mathematics in other fields of study and be aware of the relevance of mathematics to the world of work and to situations in society in general
- use our mathematical knowledge to make logical and reasoned decisions in solving problems both within pure mathematics and in a variety of contexts, and communicate the mathematical rationale for these decisions clearly
- reason logically and recognise incorrect reasoning
- generalise mathematically
- construct mathematical proofs using a variety of approaches
- use our mathematical skills and techniques to solve challenging problems that require us to decide on the solution strategy
- make deductions and inferences and draw conclusions by using mathematical reasoning