Mathematics

Curriculum Journey

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$y = 2x + 3$$

$$(x + a)^n = \sum_{k=0}^{n} \binom{n}{k} x^k a^{n-k}$$

$$\int_a^b y\,dx$$

$e^{-i\omega t}$

$$\frac{dy}{dx}$$

$$a^2 + b^2 = c^2$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Year 13

Series and Proof
Trigonometry

Further Calculus
Functions & Series

Polar Co-ordinates
Vectors

Hyperbolic Functions
Kinematics & Projectiles

Differential equations
Normal distribution

Probability generating functions
Proof

University

Apprenticeship

Calculus
De Moivre's Theorem

Moments & Forces
Elastic Strings & Springs

Bivariate data
Statistical distributions

Probability
2D Elastic Collisions

Numerical Methods
Linear Programming

Kinematics variable acceleration
Hypothesis Testing

Year 12

Correlation and regression

Normal distribution

Analyse and represent data

Core Maths

Critical analysis

Personal Finance

Estimation

Exponentials
Logarithms — Vectors

Resolving Forces
Work & Energy

Kinematics
Momentum and Collisions

Algebraic Graphs
Matrices

Algebraic Manipulation
Complex Numbers

Probability and Statistical distributions
Hypothesis Testing

Analyse and Represent Data,
Discrete Distributions

Trigonometry
Volumes of Revolution

Coordinate Geometry
Series

Calculus

A Level Maths

A Level Further Maths

Year 11

GCSE Further Maths

Expressions and Surds
Algebraic Manipulation

Functions and Graphs
Simultaneous equations, sequences and proof

Coordinate geometry
Circle Theorems and trigonometry

Calculus
Matrices

Solving equations inc simultaneous and quadratic

Probability, tree diagrams, relative frequency

Loci, Constructions and conversions

Proportional changes and rates of change

Iterative solutions and error intervals

Circle Theorems Proof and Transformations

Surds and Indices

Composite Functions, Inverses and Trigonometry graphs

Interpreting Histograms, Cumulative frequency and box plots

Trigonometry and Pythagoras

Understanding Fractions
Fractional Operations

Algebraic Manipulation
Solving Equations
Further Simultaneous Equations

Understanding the number system
Indices and Standard Form
Fractions

Year 10

Data Handling
Probability

Linear Graphs
Geometry

FDP & Percentages
Ratio
Further Sequences

Year 9

Graphs & Understanding Equations
Probability

Further Fractional Thinking
Further Percentages

Further Number

Transformations
Further Working with Data

Further Area & Volume
Further Solving Equations

Further Ratio

Year 8

Understanding Capacity
Fractional Operations

Sequences & Order
Algebraic Manipulation

The Cartesian Plane
Ratio

Angle Reasoning
Constructions

Further Algebraic
Shape Applications

Compound Units
Direct and Inverse Proportion

Year 7

KS2

Applying Multiplication & Division
Multiplication & Division

Percentages
Geometric Calculations

Angles and Straight Lines
Constructions & Polygons

Reasoning with Numbers
Applying Addition and Subtraction

Understanding Fractions
Fractional Operations

Algebraic Expressions
Algebraic Equations

Representing Data

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