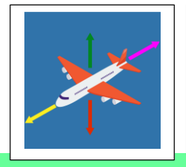
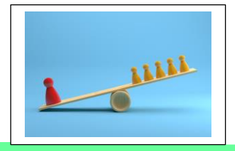
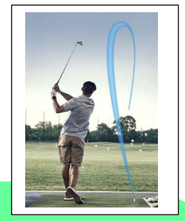
Gordon's School Mathematics Department

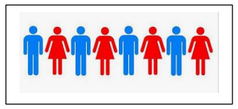
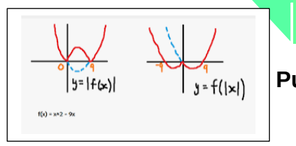
A-Level - Curriculum Map



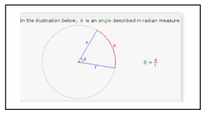
Mechanics

- Moments
- Forces and Friction
- Projectiles
- Applications of forces
- Further kinematics

Pure Mathematics

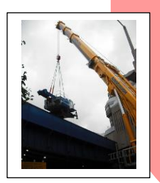
- Algebraic methods
- Functions and graphs
- Sequences and series
- Binomial expansion
- Radian measure
- Trigonometric functions and modelling
- Parametric equations
- Numerical methods
- Differentiation
- Integration
- Vectors



Statistics

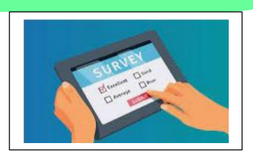
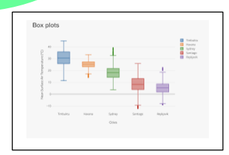
- Regression and correlation
- Conditional probability
- Normal distributions

Year 13



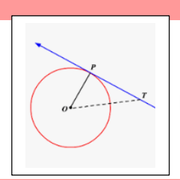
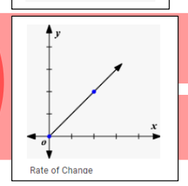
Mechanics

- Modelling in mechanics
- Constant acceleration
- Forces
- Variable acceleration


Statistics

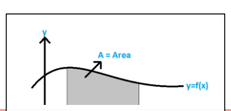
- Data collection
- Averages and standard deviation
- Representations of data
- Probability
- Correlation
- Statistical distributions
- Hypothesis testing

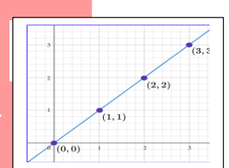
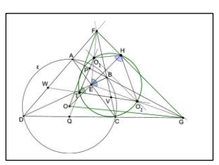
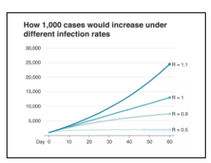



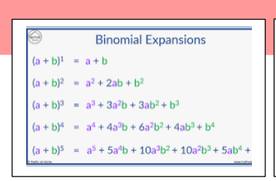
Year 12

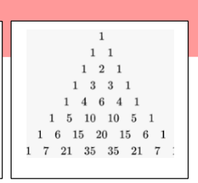
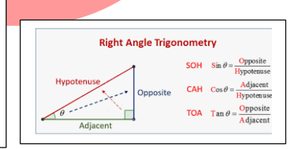
Pure Mathematics

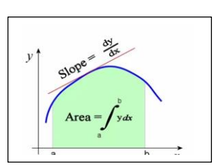
- Algebra, surds and indices
- Quadratics
- Co-ordinate geometry
- Binomial expansion
- Trigonometry
- Vectors
- Differentiation
- Integration
- Exponentials and logarithms

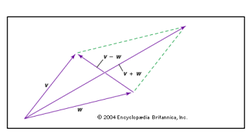








Exam Specification:

Should this QR code not work, please click here to view the relevant specification.

Key Words / Skills:

Command words

Show that - Show a result is true. Because you are given the result, your explanation has to be sufficiently detailed to cover every step of your working.

Hence - An indication that the next step should be based on what has gone before.

Prove - Provide a formal mathematical argument to demonstrate validity.

Exact - An exact answer is one where numbers are not given in rounded form.

Verify - Substitute given values to demonstrate the truth of a statement.

Sketch - Draw a diagram, not necessarily to scale, showing the main features of a curve.

Determine - Justification should be given for any results found, including working where appropriate.

Find, Solve, Calculate - While working may be necessary to answer the question, no justification needs to be given for any results found.