

## Regression, correlation and hypothesis testing

Exponential models, measuring correlation, hypothesis testing for zero correlation.



## Conditional probability

Set notation, conditional probability, conditional probabilities in Venn diagrams, probability formulae, tree diagrams.



## Further Algebraic Methods

Cubic graphs, quartic graphs, reciprocal graphs, points of intersection, translating graphs, stretching graphs, transforming functions.



## Normal distribution

The normal distribution, finding probabilities for normal distribution, the inverse normal distribution function, the standard normal distribution, finding the mean and standard deviation, approximating a binomial distribution, hypothesis testing with the normal distribution.



## Moments

Moments, resultant moments, equilibrium, centres of mass, tilting.



## Forces and friction

Resolving forces, inclined planes, friction.



## Projectiles

Horizontal projection, horizontal and vertical components, projection at any angle, projectile motion formulae.



## Applications of forces

Static particles, modelling with statics, friction and static particles, static rigid bodies, dynamics of inclined planes, connected particles.



## Further Kinematics

Vectors in kinematics, vector methods with projectiles, variable acceleration in one dimension.



## Revision

Exam questions.

