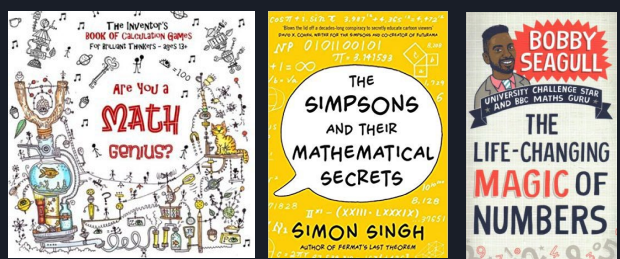# Year 11-H 1ab
Mathematics & Statistics

Properties of Circles

Circle theorems, cyclic quadrilaterals, tangent and chords, Alternate Segment Theorem

Graphs

Distance-time graphs, velocity-time graphs, estimating and interpreting the area under a curve, rates of change, work out and interpret a gradient at a point on a curve, equation of a circle, cubic, reciprocal and exponential graphs, transformations of the graph $y = f(x)$.

Algebraic fractions and functions

Simplify algebraic fractions, solve equations involving algebraic fractions, change the subject of a formula, inverse and composite functions, using iteration to find an approximate solution for an equation.

Probability Distributions

Binomial distribution, Normal distribution, standardised scores, quality assurance

Problem Solving, Revision and Exam Practice

Reading Books

Triangles

Using trigonometric ratios to solve further 2D and 3D problems, trigonometric ratios of angles between 0° and 360°, graphs and exact values, sine and cosine rules to solve problems involving non right-angled triangles, area of a triangle.

Index Numbers

Simple index numbers, RPI, CPI, GDP, chain base, index numbers and rates of change

November Mock Exams

1 x Non-Calculator Paper
2 x Calculator Papers

Vector Geometry

Add and subtract vectors, properties of vectors, using vectors to solve geometric problems, proving geometric results.

Spring Mock Exams

1 x Non-Calculator Paper
2 x Calculator Papers

DID YOU KNOW?
Sergey Brin, co-founder of Google studied maths (and computer science) at university.

GCSE Exams

1 x Non-Calculator Paper
2 x Calculator Papers

DID YOU KNOW?
The human brain is made up of more neurons than there are stars in the galaxy – over 100 billion. Pathways in your brain are rewired second to second as you learn to do new things.

2024-25