Year 9 Mathematics Overview (Sets: AA,AB,BA)

Autumn 1

Calculating: four operations with roots and integer indices, calculations with standard form, bounds of numbers

Visualising and Constructing: constructing bisectors, loci, constructing plans and elevations

Autumn 2

Algebraic Proficiency: Understanding equations, identities, expressions, simplify and manipulate quadratic expressions

Proportional Reasoning: direct and inverse proportion, congruence and similarity, compound units **Termly assessments**

Spring 1

Pattern Sniffing: Fibonacci Sequences, nth terms for quadratic sequences **Solving Equations and Inequalities I:** solve linear inequalities and represent solutions on a number line

Spring 2

Calculating Space: circle definitions, arc lengths and area of circles, Pythagoras Theorem **Conjecturing:** explore congruence of triangles, create mathematical proofs, and investigate geometrical situations **Termly assessments**

Summer 1

Algebraic Proficiency: interpret gradients and intercepts of linear functions, sketch and interpret graphs of quadratic functions, sketch and interpret graphs of cubic and reciprocal functions **Solving equations and inequalities:** set and solve simultaneous equations, solve problems involving simultaneous equations

Summer 2

Understanding Risk: understand and use tree diagrams, understand probability in situations involving combined events

Presentation of Data: construct and interpret graphs of time series, interpret scatter diagrams and understand correlation **End of year assessments**