

Year 10 & 11 (F)

KS4 Maths Curriculum

Equations & Inequalities

How do we generate terms in a sequence? What is a linear sequence? How can we solve equations two step equations involving brackets? What are compound inequalities and how can we show them?

Ratio

How can we divide quantities when given one amount? How do you combine two ratios? What does direct proportion look like on a graph?

Right Angled Triangles

What is the hypotenuse of a right angles triangle? How do we use sine, cosine and tangent ratios to find missing sides? How would you use these ratios to find a missing angle?

Equations & Graphs

How can we expand a pair of double brackets to form a quadratic expression? What will a linear and quadratic function look like on a graph?

Constructions

Can you identify a shapes vertices and edges? What is the plan and elevation of a 3D shape? How do you make accurate drawings of a triangle? Can I bisect an angle or a line?

Probability

How do we complete two-way tables? What is relative frequency? How do you complete a Venn Diagram? What is an independent event?

Multiplicative Reasoning

Describe the difference between simple and compound interest? How do we calculate average speed?

Averages

What are the mean, mode, median and range from a list of data? What is a grouped frequency table? Why is the mean from a group ed frequency table only an estimate of the actual mean?

Further Algebra

What is a simultaneous equation? What is represented by the point of intersection of two simultaneous equations?

Loci and Bearings

Can I draw loci for a path of points that follow a given rule? Can I find and use 3 figure bearings and use angles in parallel lines to find missing bearings?



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Vectors

What is a vector? How do I draw a vector on a grid? Can I write one vector in terms of \underline{a} and \underline{b} ? How would I identify a parallel vector?

Perimeter, Area & Volume

Can I calculate the circumference of a circle and apply it to solve problems? How do you calculate the area of a circle? What is volume? Can I use volume to work out surface area?

• Straight Lines & Coordinate Geometry

• Can I recognise a linear graph from its function? How do I find the midpoint of a line segment? Can I find the gradient of a line? How do I know if two lines are parallel/perpendicular? Can I find the equation of a line?

Standard Form

Can I multiply and divide numbers in standard form? Can I add and subtract numbers in standard form? Am I able to solve standard form worded problems in context?

Similarity & Congruence

Can I describe the differences between similarity and congruence? Can I find the missing side lengths on various similar shapes?

