Year 9

KS3 Maths Curriculum

Powers, Roots and standard form

How many roots does a positive square integer have? Can a root be a decimal? What do we call numbers that don't have an integer square root and how do we write this?

Further Algebra and solving

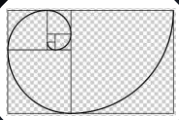
What are indices – can these be negative or fractional? How does expanding brackets relate to calculating areas? What are the similarities and differences between equations and inequalities?

Further perimeter, area and volume

What are error intervals and how can these be used to find minimum and maximum areas/perimeters? What is the difference between surface area and volume?

Further FDP and Ratio

How can we apply the four operations to algebraic fractions? How is a recurring decimal converted into a fraction? What is direct proportion?



Complex angles and shape

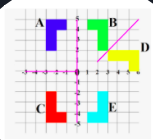
How can we calculate the sum of interior angles of any polygon? What are the similarities and differences between Pythagoras' Theorem and Trigonometry?

Representing and comparing data

How many types of average are there? What is the difference between a comparative and a composite bar chart? How does a histogram differ from a bar chart?

Further transformations

What are the four transformations? Can scale factors be negative or fractional? Can transformations be combined?



Further graphs and sequences

What are the similarities and differences between linear and quadratic graphs? What does *nth* term mean and how do we use it?