

Year 10

1. Number: Calculations and Number Equivalence

- understand and use BIDMAS
- understand and calculate square roots
- recognise and use relationships between operations, including inverse operations
- recognise that recurring decimals are exact fractions and that some exact fractions are recurring decimals

2. Algebra: Equations

- set up and solve linear equations in one unknown, including those with the unknown on both sides of the equation and equations of the form $\frac{x}{4} + 3 = 7$
- use trial and improvement to find approximate solutions of equations where there is no simple method of solving them

3. Shape, Space and Measures: Angles and Shapes

- measure line segments and angles in geometric figures
- use the sum of angles in a triangle for example, to deduce the angle sum in any polygon
- calculate and use the sums of the interior and exterior angles of polygons

4. Handling Data: Statistical Planning and Data Collection

- design and plan a statistical enquiry; collect, tabulate and represent the primary data; analyse and present findings

5. Shape, Space and Measures: Pythagoras' Theorem

- use Pythagoras' Theorem to find the missing side in a right-angled triangle
- use Pythagoras' theorem in 2D problems

6. Handling Data: Probability

- use probabilities to calculate expectation
- use 3 circle Venn diagrams to sort data
- understand and use estimates or measures of probability from relative frequency
 - understand and use relative frequency as an estimate of probability and calculate expected frequency
 - apply knowledge of the rules of probability to calculate an outcome or combination of outcomes
- compare experimental data and theoretical probabilities
- understand that increasing sample size generally leads to better estimates of probability