

Mathematics

Calculations, order of operations
Fractions and decimals
Percentages
Ratio and proportion
The unitary method
Number systems, rational and irrational numbers
Rounding and estimation
Standard form of numbers
Radicals – definitions, laws of radicals
Prime and composite numbers, HCF, LCM
Sets, operations with sets
Number line, intervals
Expanding brackets and factorisation
Operations with algebraic fractions
Solving linear and quadratic equations
Simultaneous linear and quadratic equations
Solving linear and quadratic inequalities
Exponential expressions – integer exponents, laws of exponents
Functions – linear, absolute value, quadratic, square root, rational and their properties
The Pythagorean theorem and its converse
Geometric transformations – reflection, rotation, translation, enlargement
Congruence and similarity of plane figures
Properties of triangles, quadrilaterals, polygons and the circle
Area and perimeter of plane figures (triangles, quadrilaterals, regular polygons, compound shapes, circle)
Trigonometry – use of sine, cosine and tangent in right triangles
Statistics – diagrams, mean, median, mode