




Year 11 PPE#1

Foundation Nov/Dec 2025




Paper 1 (non calc)

Topic	Sparx Code	R 	A 	G 
Using a written method to multiply and divide integers	U127, U453			
Substituting into real-life formulae	U144			
Substituting into expressions	U201			
Finding factors and using divisibility tests	U211			
Term-to-term rules	U213			
Estimating calculations	U225			
Factorising to solve quadratic equations	U228			
Finding prime numbers	U236			
Multiplying and dividing numbers in standard form	U264			
Frequency trees	U280			
Angles on a line and about a point	U390			
Writing probabilities as fractions	U408			
Drawing and interpreting pictograms	U506			
Using standard form with negative indices	U534			
Dividing fractions	U544			
Multiplying and dividing with negative numbers	U548			
Sharing amounts in a given ratio	U577			
Finding the volume of spheres	U617			
Using the exact values of trigonometric ratios	U627			
Using a pair of compasses	U678			
Writing and simplifying ratios	U687			
Choosing suitable averages and solving problems	U717			
Properties of 3D shapes	U719			
Solving direct proportion word problems	U721			
Adding and subtracting fractions	U736			
Ordering fractions,	U746			
Finding the lowest common multiple (LCM)	U751			
Nets of 3D shapes	U761			
Identifying parts of circles	U767			
Expanding double brackets	U768			
Calculating with roots and powers	U851			
Using and finding equations of linear real-life graphs	U862			
Finding fractions of amounts without a calculator	U881			
Calculating with density	U910			
Reciprocals	M216			

Paper 2 (calc)

Topic	Sparx Code	R 	A 	G 
Simplifying algebraic fractions by cancelling common factors	U103			
Simplifying expressions by collecting like terms	U105			
Using lines of best fit	U128			
Constructing fractions	U163			
Converting between ratios, fractions and percentages	U176			
Expanding single brackets	U179			
Drawing and interpreting scale diagrams	U257			
Finding unknown sides in right-angled triangles	U283			
Calculating the mean	U291			
Solving equations with two or more steps	U325			
Finding percentages of amounts with a calculator	U349			
Drawing bar charts	U363			
Factorising into one bracket	U365			
Finding the area of sectors	U373			
Converting units of length, mass and capacity	U388			
Measuring and drawing bearings	U525			
Calculating the range	U526			
Understanding similarity	U551			
Interpreting bar charts	U557			
Tree diagrams for independent events	U558			
Finding unknown sides in similar shapes	U578			
Drawing line graphs	U590			
Finding the circumference of circles,	U604			
Using algebraic notation	U613			
Simplifying fractions	U646			
Finding error intervals	U657			
Changing the subjects of formulae with one step	U675			
Calculating with ratios and algebra	U676			
Writing and simplifying ratios	U687			
Solving direct proportion word problems	U721			
Using equivalent ratios to find unknown amounts	U753			
Solving equations with one step	U755			
Reading, converting and calculating with time	U902			
Finding fractions of amounts with a calculator	U916			
Mixed problems: Finding the area and perimeter of simple shapes	U993			

Paper 3 (calc)

Topic	Sparx Code	R 	A 	G 
Function machines with numbers	M175			
Sample space diagrams	U104			
Using lines of best fit	U128			
Substituting into real-life formulae	U144			
Expected results from repeated experiments	U166			
Interpreting pie charts	U172			
Drawing and interpreting scale diagrams	U257			
Finding the mode	U260			
Interpreting scatter graphs	U277			
Equations of parallel lines	U377			
Using Pythagoras' theorem in 2D	U385			
Calculating the median	U456			
Venn diagrams	U476			
Finding the equation of a straight line from its gradient and a point	U477			
Using appropriate units	U497			
Position-to-term rules for arithmetic sequences	U498			
Measuring and drawing bearings	U525			
Calculating experimental probabilities	U580			
Constructing and solving equations	U599			
Percentage change with a calculator	U671			
Probabilities of mutually exclusive events	U683			
Writing and simplifying ratios	U687			
Solving direct proportion word problems	U721			
Using equivalent ratios to find unknown amounts	U753			
Reading and plotting coordinates	U789			
Understanding congruence	U790			
Calculating with roots and powers	U851			
Congruent triangles	U866			
Converting between fractions, decimals and percentages	U888			
Finding fractions of amounts	U916			
Calculating midpoints	U933			
Position-to-term rules for sequences of patterns	U978			
Area and perimeter of simple shapes,	U993			