

# Year 11 PPE#2

## Higher March 2026

### **Paper 1 (non calc)**

Topic	Spax Code	R	A	G
				
Function machines with letters	M428			
Using lines of best fit	U128			
Interpreting pie charts	U172			
Drawing cumulative frequency graphs	U182			
Position-to-term rules for quadratic sequences	U206			
Conditional probabilities from tables	U246			
Interpreting scatter graphs	U277			
Using standard form with positive indices	U330			
Expanding brackets with surds	U499			
Enlargement by a positive scale factor	U519			
Using standard form with negative indices	U534			
Solving simultaneous quadratic equations	U547			
Converting fractions to recurring decimals	U550			
Finding percentages of amounts	U554			
Writing algebraic proofs	U582			
Substituting into algebraic formulae	U585			
Solving by completing the square	U589			
The cosine rule	U591			
Problem solving: Sharing amounts in a given ratio (Higher)	U595			
Finding the circumference of circles	U604			
Interpreting cumulative frequency graphs	U642			
Using a pair of compasses	U678			
Writing and simplifying ratios	U687			
Converting recurring decimals to fractions	U689			
Rationalising denominators containing a single term	U707			

Adding and subtracting fractions	U736			
Plotting straight line graphs	U741			
Solving simultaneous equations using elimination	U760			
Applying Pythagoras' theorem in 2D	U828			
Finding fractions of amounts	U881			
Converting between fractions, decimals and percentages	U888			
Combining ratios	U921			
Finding the surface area of cubes and cuboids	U929			
Finding the area of circles	U950			
Factorising to solve quadratic equations	U960			
Interpreting two-way tables	U981			

## Paper 2 (calc)

Topic	Sparx Code	R	A	G
Using lines of best fit	U128			
Substituting into real-life formulae	U144			
Solving double inequalities	U145			
Calculating with speed	U151			
Sampling and bias	U162			
Trigonometry in 3D shapes	U170			
Finding the volume of prisms,	U174			
Factorising quadratic expressions of the form $x^2+bx+c$	U178			
Interpreting line graphs	U193			
Translation	U196			
Term-to-term rules	U213			
Finding primes	U236			
Constructing perpendicular bisectors and lines	U245			
Factorising into one bracket	U365			
Finding the area of sectors	U373			
Converting units	U388			

Completing the square	U397			
Transforming graphs	U455			
Position-to-term rules for arithmetic sequences	U498			
Substituting into position-to-term rules	U530			
Finding averages from frequency tables	U569			
Sharing amounts in a given ratio	U577			
Finding bounds for calculations	U587			
Constructing and solving equation,	U599			
Finding the circumference of circles,	U604			
Multiplying and dividing surds	U633			
Simplifying expressions using index laws	U662			
Percentage change with a calculator	U671			
Rotation	U696			
Plans and elevations	U743			
Using equivalent ratios to find unknown amounts	U753			
Combining transformations	U766			
Expanding double brackets	U768			
Finding the turning point of a quadratic graph by completing the square	U769			
Estimating gradients of non-linear graphs using tangents	U800			
Solving simultaneous equations graphically	U836			
Calculating with roots and powers	U851			
Congruent triangles	U866			
Drawing box plots	U879			
Substituting into composite functions	U895			
Finding fractions of amounts	U916			
Writing percentages	U925			
The sine rule	U952			
Finding inverse functions	U996			

## Paper 3 (calc)

Topic	Sparx Code	R	A	G
Sample space diagrams	U104			
Constructing inverse proportion equations	U138			
Speed	U151			
Expected results from repeated experiments	U166			
Finding approximate solutions to equations using iteration	U168			
Term-to-term rules	U213			
Graphs of exponential functions	U229			
Graphs of direct and inverse proportion	U238			
Angles in segments and cyclic quadrilaterals	U251			
Finding unknown sides in right-angled triangles	U283			
Solving equations with two or more steps	U325			
Finding percentages of amounts with a calculator	U349			
Angles in polygons	U427			
Substituting into iterative formulae	U434			
Venn diagrams	U476			
Equations of circles and tangents	U567			
Sharing amounts in a given ratio	U577			
Calculating experimental probabilities	U580			
Sharing amounts in a given ratio	U595			
Velocity-time graphs	U611			
Percentage change with a calculator	U671			
Solving direct proportion word problems	U721			
Tree diagrams for dependent events	U729			
Angles in quadrilaterals	U732			
Drawing histograms with unequal class widths	U814			
Angles on parallel lines	U826			
Estimating areas under non-linear graphs	U882			
Shape problems involving coordinates	U889			
Parallel and perpendicular lines	U898			
Calculating with density	U910			
Finding the volume of cylinders	U915			
Finding fractions of amounts with a calculator	U916			

Calculating midpoints	U933			
Factorising the difference of two squares	U963			
Interpreting histograms	U983			