	Paper 1	Paper 2	Paper 3

Number (*see Ratio – some overlap of topic areas)

	Paper 1	Paper 2	Paper 3
Arithmetic		Money	
	Multiplication of decimals		
Fractions	Fraction arithmetic		
	One amount as a fraction of another		
		Recurring decimal to fraction	
Properties	Multiples		
	Highest common factor		
	Product of prime factors		
Powers and roots	Laws of indices		
	Fractional indices		
	Simplification of surds		
	Calculate exactly with surds		
Standard Form			Conversion
			Calculation
Approximation and Estimation		Bounds	
			Error interval
Other			Mathematical symbols
			Product rule for counting

Algebra

	Paper 1	Paper 2	Paper 3
Manipulation	Simplification		Simplification
	Substitute values	Substitute values	
	Factorise		
			Change subject of a formula
			Laws of indices
			Expand brackets
			Completing the square
	Difference of two squares		
	Algebraic fractions		Algebraic fractions
Equations and inequalities	Linear simultaneous equations		
		Equations of parallel lines	
	Quadratic equation	Quadratic equation	
		Equation of a circle	
		Equation of a tangent to a circle	
Graphs		Coordinates	
		Quadratic graph	
	Graph of cubic function		
		Region defined by linear inequalities	
		Gradient of a curve	
	Graph of trigonometric functions		
			Transformations of functions
			Turning point
Functions		Composite and inverse functions	
Sequences		nth term of a linear sequence	
	Geometric sequence		

Ratio, proportion, and rates of change (*see Number – some overlap of topic areas)

	Paper 1	Paper 2	Paper 3
Conversion			Volume, speed
Percentages		Percentage profit	
	One quantity as a percentage of another		One quantity as a percentage of another
		Depreciation	
		Reverse percentage	
Ratio	Write as a ratio		Write as a ratio
			Share in a ratio
	Use of ratio		Use of ratio
Proportion		Direct proportion	
	Inverse proportion		
Compound Measures		Compound interest	
	Pressure		
			Density

	Paper 1	Paper 2	Paper 3
Growth and decay		General iterative processes	

Geometry and measures

	Paper 1	Paper 2	Paper 3
Shape		Plan and elevation	
	Transformations		Combined transformations
			Congruent triangles
			Similar triangles
		Areas and volumes of similar figures	
Angles			Angles on a straight line
	Angles in a triangle		Angles in a triangle
			Angles of a polygon
	Circle theorems		Circle theorems
Length, area and volume	Area of a rectangle	Area of a rectangle	
		Area of a triangle	Area of a triangle
		Area of a sector	
	Arc length		
			Volume of a cylinder
	Volume and surface area of a cone		
	Volume and surface area of a sphere		
Pythagoras's Theorem and Trigonometry		Trigonometry	
		Pythagoras's Theorem	
		Trigonometry in 3-D	
	Sine rule		Cosine rule
	Exact trigonometric values		
Vectors			Vector geometry

Probability

	Paper 1	Paper 2	Paper 3
Probability			Frequency tree
	Expected frequency		Expected frequency
			Tree diagram
			Combined events
	Combined dependent events		
	Combined independent events		

Statistics

	Paper 1	Paper 2	Paper 3
Diagrams		Scatter graph	
		Cumulative frequency graph	Cumulative frequency graph
		Box Plot	
	Histogram		
Measures		Median, upper and lower quartiles	
			Mean
Population	Infer properties of population		
		Capture-recapture method	

General advice

- In addition to covering the content outlined in the advance information, students and teachers should consider how to:
- manage their revision of parts of the specification which may be assessed in areas not covered by the advance information
- manage their revision of other parts of the specification which may provide knowledge which helps with understanding the areas being tested in 2022.

Subject specific section

- Advance information will be provided for each paper and for each tier of entry.
- The information is presented in approximate specification order and does not reflect the order of the questions.
- Questions may be answerable using one or more of the indicated areas of specification content.
- The areas of content listed are suggested as key areas of focus for revision and final preparation, in relation to the NOV 2022 examinations.
- The aim should still be to cover all specification content in teaching and learning.
- Students may need to draw on prior knowledge and skills.
- Students will still be expected to apply their knowledge to unfamiliar contexts.
- Students responses to questions may draw upon knowledge, skills and understanding from across the content listed when responding to questions.
- Students will be credited for using any relevant knowledge from any other topic areas when answering questions.

This information is the same as the Pearson provided information except that it has been reduced in size to only include information for this specific tier of entry … any queries to support@justmaths.co.uk … www.justmaths.co.uk