

HIGHER TIER - OCR - NOV 22 ONLY

	Paper 1	Paper 2	Paper 3
Number			
Calculations with integers		Non-calculator methods	
Whole number theory	Highest Common Factor (HCF) & Lowest Common Multiple (LCM)		Highest Common Factor (HCF) and Lowest Common Multiple (LCM)
		Definitions and terms	
Fractions		Calculations with fractions	
Decimals		Recurring decimals	
		Calculations with decimals	
Percentages		Convert between fractions, decimals and percentages	
	Percentage calculations	Percentage calculations	Percentage calculations
		Percentage change	Percentage change
Ordering fractions, decimals & percentages		Listing in order	
Powers and roots		Index notation	Index notation
	Calculate powers and roots	Calculation and estimation of powers and roots	Calculate powers and roots
			Laws of indices
Standard Form	Standard form notation		Standard form notation
			Standard form calculation
Exact calculations		Use surds in exact calculations	Use surds in exact calculations
		Manipulate surds	
Approximation and estimation	Rounding		Rounding
	Estimation		
			Upper and lower bounds

Ratio, proportion, and rates of change

Calculations with ratio	Share a quantity in a given ratio	Share a quantity in a given ratio	
		Ratios and fractions	
Direct and inverse proportion	Solve ratio problems	Solve ratio and proportion problems	Solve ratio and proportion problems
	Direct proportion		Direct proportion
			Inverse proportion
Growth and decay	Growth and decay problems	Growth and decay problems	

Algebra

Algebraic expressions		Show two algebraic expressions are equivalent	
			Simplify algebraic expressions
		Multiply out brackets	
		Complete the square	
			Factorise algebraic expressions
Algebraic formulae	Formulate algebraic expressions	Formulate algebraic expressions	Formulate algebraic expressions
	Substitute into formulae		
	Rearrange formulae		
	Use kinematics formulae		
Algebraic equations	Linear equations	Linear equations	Linear equations
	Quadratic equations	Quadratic equations	Quadratic equations
		Approximate solutions using a graph	
	Simultaneous equations		Simultaneous equations
Sequences	Quadratic and special sequences		
Algebraic inequalities		Inequalities in one variable	Inequalities in two variables
Functions			Function machines
Graphs of equations and functions		Polynomial functions	
		Exponential functions	
		Trigonometric functions	
			Equations of circles
Straight line graphs		Find and draw equations of straight lines	Find the equation of a line
	Parallel and perpendicular lines		
			Identify solution sets of linear inequalities
Interpreting graphs		Graphs of real-world contexts	Graphs of real-world contexts
		Gradients	Gradients
			Areas
Transformations of curves and their equations	Translations and reflections		

Geometry

Conventions, notation and terms	Draw a diagram from a written description		
Ruler and compass constructions	Perpendicular bisector		
	Angle bisector		
	Perpendicular from a point to a line		
	Loci		
Angles	Angles in a triangle		
		Angles on a line	
		Angles between intersecting and parallel lines	
Circles		Standard circle theorems	
Three-dimensional shapes		Plans and elevations	
Transformations			Identify, describe and perform transformations
Similarity		Similar triangles	Similar triangles
	Apply similarity to calculate unknown lengths		Apply similarity to calculate unknown lengths
Use and convert standard units of measurement	Area, distance, mass, time, volume	Distance, length, time	Distance, length, time
Compound units	Acceleration, density, velocity	Unit pricing, speed	Acceleration, speed
Maps and scale drawings	Bearings and compass points		
		Construct and interpret scale drawings	
Perimeter calculations			Perimeters of rectilinear shapes
Area calculations		Triangle, parallelogram, trapezium	
Volume and surface area calculations	Cuboid, sphere, cone		Cuboid
Triangle mensuration	Pythagoras' Theorem	Pythagoras' theorem	
	Trigonometry in right-angled triangles		
		Exact trigonometric ratios	
			Sine rule and cosine rule

Probability

Basic probability and experiments	Relative frequency and probability		
		Equally likely outcomes and probability	
Combined events & probability diagrams	Product rule for counting outcomes		
		Sample spaces	
			Tree diagrams
		Calculations using the laws of probability	Calculations using the laws of probability
	Venn diagrams		

Statistics

Interpreting and representing data		Time series	
	Cumulative frequency graphs		Box plots
	Histograms		Scatter diagrams, correlation and outliers
		Graphical misrepresentation	
Analysing data	Summary statistics of grouped data		Summary statistics of grouped data

Advice

- The information is presented in approximate specification order and not in question order. Any given question may require content from more than one description.
- Topics not explicitly given in the list may appear in low tariff items or via synoptic questions.
- It is advised that teaching and learning should still cover the entire subject content in the specification.
- You should consider how you revise other parts of the specification, for example to review whether other topics may provide knowledge which helps your understanding in relation to the areas being tested in NOV 2022.
- Students and teachers can discuss this notice.

This information is the same as the OCR 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