

	Number	Ratio	Algebra	Geometry	Probability	Statistics
Paper 1	<ul style="list-style-type: none"> • Fraction of an amount • Fraction arithmetic • Recurring decimal to fraction • Product of prime factors • Negative and fractional indices • Simplification of surds • Standard Form conversion and calculation 	<ul style="list-style-type: none"> • Percentage of an amount • Write as a ratio, share in a ratio, use of ratio, ratio to fraction • Equations of proportion • Density 	<ul style="list-style-type: none"> • Simplification • Expansion of brackets • Algebraic fractions • Linear inequality • Form an equation • Quadratic equation • Equation of a tangent to a circle • Quadratic graph • Speed-time graph • Gradients of parallel and perpendicular lines • Gradient of a curve 	<ul style="list-style-type: none"> • Angles in a polygon • Area of a triangle • Volume of a cube • Surface area of a cuboid • Area of a sector • Pythagoras's Theorem • Exact trig. values • Vector geometry 	<ul style="list-style-type: none"> • Probability • Independent combined events 	<ul style="list-style-type: none"> • Cumulative frequency • Mean • Interquartile range
Paper 2	<ul style="list-style-type: none"> • Error interval • Calculator use 	<ul style="list-style-type: none"> • Area • Depreciation • Use of ratio • Direct proportion • Currency conversion • Inverse proportion • Pressure 	<ul style="list-style-type: none"> • Simplification • Expansion of bracket • Factorisation • Laws of indices • Linear equation • Equations of parallel lines • Form an equation • Quadratic inequality • Coordinates • Transformations of functions • Graphs of trigonometric functions • Inverse and composite functions 	<ul style="list-style-type: none"> • Transformations • Circle theorems • Area of a rectangle • Volume of composite solid • Sine and Cosine Rules 	<ul style="list-style-type: none"> • Venn diagram • Probability from a Venn diagram 	<ul style="list-style-type: none"> • Box plot • Lower and upper quartiles • Compare distributions • Capture-recapture method
Paper 3	<ul style="list-style-type: none"> • Negative number • Laws of indices • Bounds • Product rule for counting 	<ul style="list-style-type: none"> • Time • Percentage decrease • Depreciation • Reverse percentage • Write as a ratio • 1 : n form • Share in a ratio • Direct proportion • Average speed • General iterative processes 	<ul style="list-style-type: none"> • Simplification • Expansion of bracket • Substitute values • Difference of two squares • Expansion of brackets • Change subject of a formula • Forming an expression • Algebraic fractions • Set up and solve equation • Simultaneous equations linear/quadratic • Gradient of a straight line graph 	<ul style="list-style-type: none"> • Circle theorems • Area of a trapezium • Similar triangles • Pythagoras theorem • Trigonometry • Trigonometry in 3-D • Column vectors 	<ul style="list-style-type: none"> • Dependent combined events 	<ul style="list-style-type: none"> • Frequency polygon • Histogram