

Paper 4, calculator allowed, 90 minutes, 100 marks		Paper 5, no calculator allowed, 90 minutes, 100 marks		Paper 6, calculator allowed, 90 minutes, 100 marks	
Question	Description	Question	Description	Question	Description
1ai	Standard form	1	Find product of prime numbers	1a	Complete a scatter diagram
1aii	Standard form	2a	Solve linear equation in one unknown	1b	Identify an outlier
1b	Standard form calculation	2b	Multiply out and simplify brackets	1ci	Draw a line of best fit
2	Number and proportion problem	3a	Write a ratio in the form $1 : n$	1cii	Use a line of best fit
3	Proportion problem	3b	Ratio and percentage problem	1d	Understand limitations of extrapolating from data
4	Algebra and Venn diagram problem	4a	Complete a sample space	2	Solve linear inequality in 1 variable & express on number line
5a	Construct angle bisector	4bi	Interpret a sample space	3a	Use a conversion graph
5b	Construct perpendicular bisector	4bii	Interpret a sample space	3b	Compare two conversion graphs
5c	Loci construction	5	Fractions problem	4a	Estimation using rounding to 1 significant figure
6	Volume and surface area problem	6	LCM problem	4b	Calculate error as a percentage
7a	Gradient of a line	7	Geometry problem	5a	Calculate exterior angle of a polygon
7b	Write down equation of a line	8	Identify tree diagram errors	5b	Calculate interior angle of a polygon
8	Percentage profit problem	9	Angle proof	6	Use density = mass \div volume in a problem
9a	Complete time series graph	10	Proportion problem	7a	Write a column vector
9b	Interpret time series graph	11a	Calculate fractional powers	7b	Find a column vector
9c	Interpret time series graph	11b	Calculate with roots	8	Probability problem
9d	Interpret time series graph	12a	Interpret answer in growth and decay problem	9	Direct proportion
10	Number and geometry problem	12b	Express exponential decay as a formula	10	Calculate a percentage multiplier
11a	Complete error interval	12c	Identify graph showing depreciation	11ai	Function machines
11b	Bounds problem	13a	Sketch a trigonometric graph	11aii	Function machines
12a	Translation using a vector	13b	Sketch a trigonometric graph	11b	Function machines
12b	Describe a single transformation involving translations	14a	Laws of indices	12	Product rule and probability
13a	Draw a box plot	14b	Laws of indices	13	Calculate area of similar triangles
13b	Find interquartile range from a box plot	15	Solve linear equation in one unknown	14	Volume problem involving algebra
13c	Understand how to interpret a box plot	16a	Explain why frequency table is inappropriate	15	Calculate a probability
14	Find a length using sine rule	16bi	Interpret a histogram	16a	Angle in a semicircle
15a	Factorise a quadratic equation	16bii	Calculate an estimate of mean from histogram	16b	Use trigonometry ratios
15b	Use quadratic formula	17	Identify region on graph that satisfies three inequalities	17a	Generate term in a sequence
16	Inverse proportion	18a	Use area of a triangle = $\frac{1}{2} ab \sin C$ in a problem	17b	Find n th term of a sequence
17	Expand and simplify algebra	18b	Evaluate answer in terms of reliability	18	Write a recurring decimal as a fraction
18a	Find gradient of the tangent to a circle at a given point	19a	Complete the square	19a	Use graph to solve equation
18b	Find equation of the tangent to a circle at a given point	19b	Sketch graph, show turning points and y intercept	19bi	Approximate solutions using a graph
19a	Calculate distance from a speed-time graph	20	Area and ratio problem	19bii	Approximate solutions using a graph
19bi	Use a distance-time graph to find average speed			20	Parallel vectors problem
19bii	Estimate a speed from a distance-time graph			21	Simplify and manipulate algebraic fractions
20	Solve simultaneous equations				