



## A Star Equivalency Test – Maths Higher Exam Content Guide

<b>Number</b>	<b>Graphs</b>
Types of Number and BODMAS	Coordinates and Midpoints
Multiples, Factors and Prime Numbers	Using $y = mx + c$
LCM and HCF	Drawing Straight-Line Graphs
Fractions	Coordinates and Ratio
Fractions, Decimals and Percentages	Parallel and Perpendicular Lines
Fractions and Recurring Decimals	Quadratic Graphs
Rounding Numbers	Solving Equations with Graphs
Estimating	Graph Transformations
Bounds	Distance–Time Graphs
Standard Form	Velocity – Time Graphs
Fraction Problems	
<b>Algebra</b>	<b>Ratio, Proportion and Rates of Change</b>
Powers and Roots	Ratios
Multiplying out Brackets	Direct & Inverse Proportion
Factorising	Percentages
Manipulating Surds	Compound Growth and Decay
Solving Equations	Unit Conversations
Rearranging Formulas	Speed, Density and Pressure
Factorising Quadratics	
The Quadratic Formula	<b>Geometry and Measures</b>
Completing the Square	Geometry
Algebraic Fractions	Parallel Lines
Sequences	Polygons
Inequalities	Triangles and Quadrilaterals
Iterative Methods	Circle Geometry
Simultaneous Solutions	Congruent Shapes
Proof	Similar Shapes
Functions	The Four Transformations
	Area – Triangles, Quadrilateral and Circles
	3D Shapes - Surface Area and Volume
	Enlargement and Projections
	Loci and Constructions
	Bearings



<b>Pythagoras' Theorem &amp; Trigonometry</b>	<b>Probability and Statistics</b>
Pythagoras' Theorem	Probability Basics
Trigonometry – Sin, Cos, Tan	Probability Experiments
Trigonometry – Common Values	The AND / OR Rules
3D Trigonometry	Tree Diagrams
3D Pythagoras	Conditional Probability
Vectors	Sets and Venn Diagrams
	Sampling and Data Collection
	Mean, Median, Mode and Range
	Frequency / Grouped Frequency
	Box Plots
	Cumulative Frequency
	Histograms and Frequency Density
	Scatter Graphs
	Comparing Data Sets



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