KS4 MATHEMATICS
Edexcel

HIGHER:
NON CALCULATOR

PERSONAL LEARNING CHECKLISTS

2022

Mathematics - Higher: Non Calculator

RAG Rate each section in the first column

Red = Not at all confident – needs major revision focus, Amber = requires more revision until confident. Green = Confident.

Use remaining columns to colour code when you have revised and tested your knowledge and understanding over several weeks.

Key Idea	Key Knowledge to understand	Hegarty Maths Clip Number	RAG					
Number								
Fractions	Fraction of an amount	77						
	Fraction arithmetic	65 – 70, 80						
	Recurring decimal to fraction	53, 54						
Properties	Product of prime factors	29, 30, 32, 35						
	Negative and fractional indices	104 – 110						
Powers and roots	Simplification of surds	113 – 119						
Standard form	Conversion	122, 123, 124						
	Calculation	125, 126, 127						
Algebra								
Manipulation	Simplification	156 – 159, 173, 174, 175						
	Expansion of brackets	160 – 166						
	Algebraic fractions	159, 170, 172, 229						
Equations and inequalities	Linear inequality	265 – 272						
	Form an equation	176						
	Quadratic equation	230 – 234, 238 – 242, 244, 245						

Graphs	Equation of a tangent to a circle	320							
	Quadratic graph	251 – 257, 260							
	Speed-time graph	880 – 886							
	Gradients of parallel and perpendicular lines	214, 215							
	Gradient of a curve	887 – 890							
Ratio, proportion, and rates of change									
Percentages	Percentage of an amount	84, 85, 86							
Ratio	Write as a ratio	328, 329							
	Use of ratio	335 – 338							
	Share in a ratio	332 – 335							
	Ratio to fraction	330							
Proportion	Equations of proportion	343 – 347							
Compound Measures	Density	725 – 733							
Geometry and measures									
Angles	Angles in a polygon	560 – 565							
Length, area and volume	Area of a triangle	557, 558							
	Volume of a cube	568, 569, 583							
	Surface area of a cuboid	584, 589, 590							
	Area of a sector	546, 547							
Pythagoras's Theorem and Trigonometry	Pythagoras's Theorem	497 – 507							
	Exact trigonometric values	845							
Vectors	Vector geometry	628 – 636							
Probability									
Probability	Probability	351 – 359							
	Independent combined events	360 – 363							
Statistics									
Diagrams	Cumulative frequency graph	437 – 440							
Measures	Mean	405 – 408, 417 – 421							
	Inter-quartile range	412							