Drayton Manor High School **Mathematics Department**

Year 10 Higher PLC

Linear Equations & Inequalities	R	Α	G
Substitute			
Expand			
Factorise			
Expressions, equations, formulae, identities,			
inequalities and terms		-	
Form & solve linear equations including with algebraic fractions			
Solve linear inequalities			
Representing linear inequalities as a region on a			
graph			
Solve simultaneous equations algebraically			
Solve simultaneous equations graphically			
Quadratic Functions			
Expand binomials			
Factorise quadratic expressions			
Simplify algebraic fractions			
Form and solve quadratic equations			
Factorise quadratic expressions			
Quadratic formula			
Completing the square			
Graphs of quadratic functions and approximate			
solutions		-	-
Nth term of a quadratic sequence		-	
Quadratic inequalities Simultaneous equations with quadratic equation			
Length, Area, Volume			
Use standard units of measure		T	
Properties of different type of triangle			
Formulae for area & volume			
Area & Circumference of circle including arc			
length & sectors			
Calculate exactly using pi			
Advanced volumes & surface area (pyramid,			
sphere & frustum) Similarity; length, area & volume			
Pythagoras' Theorem & Trigonometry			
Pythagoras' Theorem	T	T	
Similarity with trigonometry		+	
Trigonometric ratios		+	
Exact trigonometric values		+	+
Area of non-right angled triangle		+	
Sine rule		+	
		+	
Cosine rule		+	1
3D Pythagoras & Trigonometry			

Analyse, represent & interpret data	R	Α	G
Sampling			
Tables, charts, diagrams including pie charts			
Measure of central tendency: averages, spread and quartiles			
Scatter diagrams			
Box-plots and cumulative frequency graphs			
Capture & recapture			
Histograms			
Independent events & conditional probability			
Probability notation and scales, including bias			
Relative frequency			
Mutually exclusive events			
Sample space diagrams, including frequency trees and probability trees			
Independent events			
Venn diagrams			
Conditional probability			