

<b>Equations &amp; inequalities</b>	
Systems of linear equations	Core HL 1D
Quadratic equations and inequalities	Core HL 2C, 14H
Exponential and logarithmic equation	AA HL 2C, AA HL 3E
<b>Functions</b>	
Domain, range, inverse of a function, composition of functions	Core HL 15
Transformations of functions	Core HL 16
Linear functions	Core HL 1
Quadratic functions	Core HL 14
Exponential and logarithmic functions	AA HL 2, AA HL 3
<b>Sequences</b>	
Arithmetic sequences: definition, n-th term, sum of the first n terms	Core HL 5
Geometric sequences: definition, n-th term, sum of the first n terms	
Application of sequences, including modelling population growth and finances	
<b>Trigonometry</b>	
Right angled trigonometry, including application to 3d shapes	Core HL 7, Core HL 9, Core HL 10
Sine and cosine rule	
Applications, including bearings and angles of elevation/depression	
<b>Sets, Probability &amp; Statistics</b>	
Operations on sets: union, intersection, difference, complement,	Core HL 2
Venn diagrams	Core HL 11
Basic definitions, including independent events and mutually exclusive events	
Use of tables of outcomes, Venn diagrams and tree diagrams to solve probability problems,	
Conditional probability	
Measures of central tendency and measures of dispersion	Core HL 13
Bivariate statistics	AA HL 26
Chi squared test for goodness of fit and for independence	AI SL 16 D, E
<b>Vectors and Matrices</b>	
Basic operations on vectors,	AA HL 12, AA HL 13
Dot product of two vectors, angle between vectors	
Geometrical proofs using vectors	
Operations on matrices, including finding inverse of a 2x2 matrix	AI HL 12
Applications of matrices to solving systems of equations and linear transformations	AI HL 14