

Year 12 A Level Mathematics Scheme of Work					
Date	Week	Teacher 1 Pure and Statistics	Teacher 2 Pure and Mechanics	Written Assessment	Online Assessment
05/09/2022	1A	Introductions and Surds	Introduction and Index laws	Kerboodle Year 12 Diagnostic Assessment	
12/09/2022	2B	Surds	Index laws	T1 GCSE Review	
19/09/2022	3A	Expanding and factorising	Simultaneous equations - Linear	Quadratic Functions FH1	mymaths A level - factorising quadratics
26/09/2022	4B	Quadratic functions	Simultaneous equations - Quadratic	Lines and Circles FH2	mymaths A level - quadratic equations
03/10/2022	5A	Curve sketching	Lines and circles	Inequalities FH3	mymaths A level - simultaneous equations
10/10/2022	6B	Inequalities	Lines and circles	Curve Sketching algebraic division FH4	mymaths A level - equations of circles
17/10/2022	7A	Differentiation from first principles	Algebraic division		mymaths A level - properties of quadratics
24/10/2022	Half Term				
31/10/2022	8B	Differentiating ax^n and Leibniz notation	Remainder theorem and Factor theorem		Chapter 1 - Online Skills Test
07/11/2022	9A	Tangents and normals	The binomial theorem	T2 & Review	mymaths A Level - Revise algebra 1, 2 & 3
14/11/2022	10B	Tangents and normals	The binomial theorem	Differentiation FH5	Chapter 2 - Online Skills Test
21/11/2022	11A	Rates of change	Sine, cosine and tangent	Binomial Theorem FH6	mymaths A level - Revise functions 1
28/11/2022	12B	Turning points	Sine, cosine and tangent	Integration FH7	mymaths A level - Revise coordinate geometry
05/12/2022	13A	Integration	The sine and cosine rules	Sine, Cosine & Tangent FH8	Chapter 3 - Online Skills Test
12/12/2022	14B	Area under a curve	The sine and cosine rules		mymaths A Level - Revise trigonometry 1 & 2 - Revise differentiation 1 - Revise integration 1
19/12/2022	Christmas				
26/12/2022					
02/01/2023	15A	Argument and proof	Definitions and properties		
09/01/2023	16B	Argument and proof	Components of a vector	T3 & Review	
16/01/2023	17A	The laws of logarithms	Standard units and basic dimensions	Laws of logs FH9	Chapter 4 - Online Skills Test
23/01/2023	18B	Exponential functions	Motion in a straight line – definitions and graphs	Components of a vector FH10	mymaths A level - Proof by deduction OH - Proof by exhaustion OH
30/01/2023	19A	Exponential processes	Motion in a straight line – definitions and graphs	Exponential processes FH11	mymaths A level - Revise vectors

06/02/2023	20B	Curve fitting	Equations of motion for constant acceleration (horizontal)	Constant acceleration FH12	Chapter 5 - Online Skills Test
13/02/2023	Half Term				
20/02/2023	21A	Sampling	Equations of motion for constant acceleration (vertical)		mymaths A Level - Revise exponentials and logarithms 1 & 2
27/02/2023	22B	Central tendency and spread	Motion under gravity	T4 & review	
06/03/2023	23A	Single-variable data	Motion with variable acceleration	Central Tendency FH13	Chapter 6 - Online Skills Test
13/03/2023	24B	Bivariate data	Forces	Motion under gravity FH14	mymaths A level - Revise mechanics vectors
20/03/2023	25A	Bivariate data	Forces	bivariate data FH15	mymaths A level - Revise data presentation and interpretation 1
27/03/2023	26B	Probability	Dynamics	forces FH16	Chapter 9 - Online Skills Test
03/04/2023	Easter				
10/04/2023					
17/04/2023	27A	Probability	Dynamics		mymaths A Level - Revise kinematics 1 - Revise data presentation and interpretation 2 & 3
24/04/2023	28B	Binomial distribution	Systems of forces	T5 & review	
01/05/2023	29A	Binomial distribution	Systems of forces	probability FH17	Chapter 7 - Online Skills Test
08/05/2023	30B	Formulating a test	Systems of forces	dynamics FH18	mymaths A level - Revise forces and Newton's laws 1
15/05/2023	31A	Formulating a test	Systems of forces with Friction	binomial distribution FH19	mymaths A level - Revise probability 1
22/05/2023	32B	The critical region	Systems of forces with Friction	systems of forces FH20	Chapter 10 - Online Skills Test
29/05/2023	Half Term				
05/06/2023	33A	END OF YEAR EXAMS	END OF YEAR EXAMS	EOY Paper 1 Pure and Mechanics	mymaths A Level - Revise statistical distributions 1 & 2
12/06/2023	34B	END OF YEAR EXAMS	END OF YEAR EXAMS	EOY Paper 2 Pure and Statistics	
19/06/2023	35A	Sequences	Radians		Chapter 8 - Online Skills Test
26/06/2023	36B	Sequences	Radians		
03/07/2023	37A	Arithmetic Sequences	Reciprocal trig functions and identities		
10/07/2023	38B	Geometric Sequences	Compound angles and identities		Chapter 11 - Online Skills Test
17/07/2023	39A	Binomial Series	Compound angles and identities		

Year 13 A Level Mathematics Scheme of Work					
Date	Week	Teacher 1 [5 hours] Pure and Statistics	Teacher 2 [4 hours] Pure and Mechanics	Written Assessment	Online Assessment
05/09/2022	1A	Sequences review	Compound angles and identities review		
12/09/2022	2B	Functions & Inverse functions	Double angles and identities	Sequences & Functions FH1	mymaths A Level - Revise Trigonometry 1 - Revise algebra 2 - Revise functions 1
19/09/2022	3A	Algebraic & partial Fractions	Inverse trig functions and graphs	Radians and Trigonometry FH2	mymaths A Level - Revise algebra 3 - Revise trigonometry 2 - revise Algebra 4
26/09/2022	4B	Binomial Series	Equivalent forms: $\cos \theta + b \sin \theta$	Partial Fractions & Binomial Series FH3	mymaths A Level - Revise differentiation 1 - Revise integration 1
03/10/2022	5A	Parametric equations	Simple, iterative and Newton-Raphson root finding	Numerical Methods FH4	mymaths A Level - Revise functions 2 - Revise trigonometry 3 - Revise sequences and series
10/10/2022	6B	Standard integrals	Derivatives and the shape of functions	T1 & Review	mymaths A Level - Revise trigonometry 4 - Revise coordinate geometry 2
17/10/2022	7A	Integration by substitution	Differentiate Trigonometric, exponential and logarithmic functions		Chapter 12 - online skills test Chapter 13 - online skills test
24/10/2022	Half Term				
31/10/2022	8B	Integration by substitution	Product and quotient rules	Parametric equations & Standard integrals FH5	Chapter 14 - online skills test
07/11/2022	9A	Integration by parts	Chain rule	Differentiation Rules FH6	
14/11/2022	10B	Integration by parts	Inverse functions, Implicit and Parametric differentiation	Integration Methods FH7	mymaths A Level - Revise integration 2
21/11/2022	11A	Integration using partial fractions	Inverse functions, Implicit and Parametric differentiation	Further Differentiation FH8	mymaths A Level - Revise differentiation 2
28/11/2022	12B			Year 13 Mocks	
05/12/2022	13A			Year 13 Mocks	
12/12/2022	14B	Integration using partial fractions	Inverse functions, Implicit and Parametric differentiation		mymaths A Level - Revise integration 3 - Revise kinematics 1
19/12/2022	Christmas				
26/12/2022					
02/01/2023	15A	Differential equations	Two-dimensional motion with constant acceleration		Chapter 15 - online skills test
09/01/2023	16B	Differential equations	Two-dimensional motion with variable acceleration		Chapter 16 - online skills test
16/01/2023	17A	Numerical Integration	Motion under forces (resolving)	Differential Equations FH9	
23/01/2023	18B	Further Mathematical Proof	Motion under forces (resolving)	2D Motion FH10	mymaths A Level - Revise differentiation 3 - Revise integration 4 - Revise forces and Newton's laws 1
30/01/2023	19A	Conditional probability	Motion under gravity (projectiles)	Numerical Integration FH11	mymaths A Level - Revise numerical methods - Revise Probability 1 - Revise forces and Newton's laws 2

06/02/2023	20B	Conditional probability	Motion under gravity (projectiles)	Projectile Motion FH12	mymaths A Level - Revise probability 2 Chapter 17 - online skills test
13/02/2023	Half Term				
20/02/2023	21A	Modelling with probability	Statics (Friction and resolving)	T3 Revision	mymaths A Level - Revise kinematics 2 Chapter 18 - online skills test
27/02/2023	22B	Modelling with probability	Statics (Friction and resolving)	T3 & Review	Chapter 20 - online skills test
06/03/2023	23A	Normal distribution	Dynamics (Friction and resolving)	Conditional Probability FH13	mymaths A Level - Revise statistical distributions 1 & 2
13/03/2023	24B	Normal approximation to the binomial	Dynamics (Friction and resolving)	Friction FH14	mymaths A Level - Revise forces and Newton's laws 3 - Revise mechanics vectors
20/03/2023	25A	Testing a Normal distribution	Vectors in 3D	Normal Distribution FH15	mymaths A Level - Revise statistical distributions 3 - Hypothesis testing 1
27/03/2023	26B	Testing correlation	Moments	Moments and 3D Vectors FH16	mymaths A Level - Revise moments 1 Chapter 19 - online skills test
03/04/2023	Easter				
10/04/2023					
17/04/2023	27A	Revision of ALL Pure & Statistics topics	Revision of ALL Pure & Mechanics topics	T4 Revision	mymaths A Level - Hypothesis testing 2 & 3 Chapter 21 - online skills test
24/04/2023	28B			T4 & Review	
01/05/2023	29A				
08/05/2023	30B				
15/05/2023	31A				
22/05/2023	32B				
29/05/2023	Half Term				
05/06/2023	33A				
12/06/2023	34B				
19/06/2023	35A				
26/06/2023	36B				
03/07/2023	37A				
10/07/2023	38B				
17/07/2023	39A				

Year 12 A Level Further Maths Scheme of Work					
Date	Week	Teacher 1 Further Pure and Mechanics	Teacher 2 Further Pure and Discrete	Written Assessment	Online Assessment
05/09/2022	1A	Vector Lines	Graphs and Networks		
12/09/2022	2B	Vector Lines	Traversing a Graph		mymaths GCSE booster: grades 8 and 9 - Factors, powers, roots: 8 and 9 - Algebra: 8 and 9 - Trigonometry, Pythagoras: 8 and 9
19/09/2022	3A	Scalar Product	Minimum Spanning Trees		mymaths GCSE booster: grades 8 and 9 - Transformations: 8 and 9 - Simultaneous equations: 8 and 9 - Formulae, functions: 8 and 9
26/09/2022	4B	Distances in Vector Space	Minimum Spanning Trees	T1 Higher GCSE Review	
03/10/2022	5A	Matrix Properties and Arithmetic	Route Inspection	Graphs and Networks FH1	mymaths Further Maths resources - introduction to graphs - types of graph - defining graphs
10/10/2022	6B	Systems of Linear Equations (2x2)	Travelling Salesperson	Vectors FH2	mymaths Further Maths resources - scalar product - vector equation of a line - angles between lines
17/10/2022	7A	Matrix Transformations	Travelling Salesperson	MST and Route inspection FH3	mymaths Further Maths resources - Kruskals algorithm - Prim's algorithm 1 - route inspection 1 - route inspection 2
24/10/2022	Half Term				
31/10/2022	8B	Matrix Transformations	Network Flows	Matrices FH4	mymaths Further Maths resources - matrices lessons (no H/W and not inverse of 3x3)
07/11/2022	9A	Roots of Polynomials	Network Flows	T2 Revision	
14/11/2022	10B	Complex Solutions of Equations	Critical Path Analysis	T2 & Review	
21/11/2022	11A	Complex Numbers	Summing Series	Travelling Salesperson FH5	mymaths Further Maths resources - travelling salesperson 1 - travelling salesperson 2
28/11/2022	12B	Complex Numbers	Method of Differences	Matrix Transformations FH6	mymaths Further Maths resources - transformations lessons (no H/W and not all)
05/12/2022	13A	Argand Diagrams	Proof By Induction	Network Flows FH7	mymaths Further Maths resources - solids of revolution
12/12/2022	14B	Modulus - Argument form	Proof By Induction	Roots & complex solutions of Polynomials FH8	mymaths Further Maths resources - complex numbers lessons (no H/W and no argand diagrams 2 or loci)
19/12/2022	Christmas				
26/12/2022					
02/01/2023	15A	Modulus - Argument form	Polar Coordinates	T3 Revision	
09/01/2023	16B	Solution of Rational Functions	Polar Coordinates	T3 & Review	
16/01/2023	17A	Solution of Rational Functions	Conics	CPA FH9	
23/01/2023	18B	Sketching Rational Functions	Conics	Complex numbers FH10	mymaths Further Maths resources - complex numbers lessons (no argand diagrams 2 or loci)
30/01/2023	19A	Sketching Rational Functions	Maclaurin Series	Series and proof by induction FH11	

06/02/2023	20B	Rational Inequalities	Maclaurin Series	Rational Functions and inequalities FH12	
13/02/2023	Half Term				
20/02/2023	21A	Rational Inequalities	Hyperbolic Functions	T4 Revision	
27/02/2023	22B	Conservation of Momentum	Hyperbolic Functions	T4 & Review	
06/03/2023	23A	Collisions	Mean Values	Polar coordinates FH13	
13/03/2023	24B	Newton's Law of Restitution	Volumes of Revolution	Conics FH14	mymaths Further Maths resources - circles and ellipses
20/03/2023	25A	Impulse	Linear Programming	Hyperbolic functions FH15	
27/03/2023	26B	Dimensional Analysis	Linear Programming	Collisions FH16	mymaths Further Maths resources - conservation of momentum - impulse
03/04/2023	Easter				
10/04/2023					
17/04/2023	27A	Hooke's Law	Zero Sum Games		
24/04/2023	28B	Work, Energy and Power	Mixed Strategy Games	T5 & Review	
01/05/2023	29A	Work, Energy and Power	Mixed Strategy Games	LP problems & Game theory FH17	mymaths Further Maths resources - Formulating problems - graphical solution 1 - graphical solution 2
08/05/2023	30B	Circular Motion	Binary Operations	Work, Energy and Power FH18	
15/05/2023	31A	Horizontal Circular Motion	Binary Operations	Binary ops & modular arithmetic FH19	
22/05/2023	32B	Horizontal Circular Motion	Modular Arithmetic	Circular Motion FH20	
29/05/2023	Half Term				
05/06/2023	33A	END OF YEAR EXAMS		EOY Paper 1 Further Pure	
12/06/2023	34B	END OF YEAR EXAMS		EOY Paper 2 Further Mechanics & Discrete	
19/06/2023	35A	The Exponential Form	Gantt (Cascade) Diagrams		
26/06/2023	36B	Roots of Unity	Resourcing		
03/07/2023	37A	De Moivre's Theorem	Planar Graphs & Isomorphisms		
10/07/2023	38B	De Moivre's Theorem	Network Flow 2		
17/07/2023	39A	Independent Work Experience	Independent Work Experience		

Year 13 A Level Further Maths Scheme of Work					
Date	Week	Teacher 1 Further Pure and Mechanics	Teacher 2 Further Pure and Discrete	Written Assessment	Online Assessment
05/09/2022	1A	Systems of Linear Equations (2x2) & (3x3)	The Simplex Algorithm		
12/09/2022	2B	Row and Column Operations	The Simplex Algorithm		
19/09/2022	3A	Row and Column Operations (Factorisation of a determinant)	Games as LP Problems	Complex numbers and De Moivre FH1	
26/09/2022	4B	Eigenvalues and Eigenvectors	Further Curves	Gantt Charts & network Flow FH2	
03/10/2022	5A	Diagonalisation of a Matrix	Transformations	Systems of linear equations FH3	
10/10/2022	6B	The Vector Product	Summing Partial Fractions	Simplex and Games as LP problems FH4	
17/10/2022	7A	Equation of a Plane	Hyperbolic Identities	Revision & T1	
24/10/2022	Half Term				
31/10/2022	8B	Equation of a Plane	Hyperbolic Identities	Eigenvalues and Eigenvectors & Diagonalisation FH5	
07/11/2022	9A	Distance from a Plane	McLaurin Series / L'Hôpital's Rule	Groups FH6	
14/11/2022	10B	Distance between points & Lines	Improper Integrals	Vector Product FH7	
21/11/2022	11A	Distance between skew lines	Improper Integrals	Hyperbolic identities FH8	
28/11/2022	12B			Year 13 Mocks	
05/12/2022	13A			Year 13 Mocks	
12/12/2022	14B	Moments	Integration of Hyperbolics		
19/12/2022	Christmas				
26/12/2022					
02/01/2023	15A	Centre of Mass (point masses & Simple Laminae)	Integration of Inverse Trig	Vector Geometry FH9	
09/01/2023	16B	Centre of Mass (solids)	Integration of Partial Fractions	Summations FH10	
16/01/2023	17A	Equilibrium Conditions	Polar Graphs and Areas	Centre of mass FH11	
23/01/2023	18B	2nd Order DEs Homogeneous	Polar Graphs and Areas	Further Integration FH12	
30/01/2023	19A	2nd Order Des Non-Homo	Lengths and Surface Areas	T3 Revision	

06/02/2023	20B	1st Order DEs	Lengths and Surface Areas	T3 & Review	
13/02/2023	Half Term				
20/02/2023	21A	Circular Motion (Vectors)	Numerical Integration	Polar graphs FH14	
27/02/2023	22B	Conical Pendulum	Numerical Integration	Circular motion FH13	
06/03/2023	23A	Vertical Circular Motion	Reduction Formulae	Differential Equations FH15	
13/03/2023	24B	Simple Harmonic Motion	Numerical Integration	Length and SA FH16	
20/03/2023	25A	Modelling Systems	Euler's Method	SHM FH17	
27/03/2023	26B	Coupled Equations	Euler's Method	Reduction formulae & numerical methods FH18	
03/04/2023	Easter				
10/04/2023					
17/04/2023	27A	Revision of ALL Further Pure & Further Mechanics topics	Revision of ALL Further Pure & Discrete topics	T4 Revision	
24/04/2023	28B			T4 & Review	
01/05/2023	29A				
08/05/2023	30B				
15/05/2023	31A				
22/05/2023	32B				
29/05/2023	Half Term				
05/06/2023	33A				
12/06/2023	34B				
19/06/2023	35A				
26/06/2023	36B				
03/07/2023	37A				
10/07/2023	38B				
17/07/2023	39A				