



LDS & SAMPLING	Notes	Apprentice	Expert	Master
AS: Comparing Data Sets				
AS: Survey Vs Census				
AS: Sampling Techniques				

DATA REPRESENTATION	Notes	Apprentice	Expert	Master
AS: Histograms				
AS: Quantiles & Interpolation				
AS: Standard Deviation				
A: Variance Formulae				

CORRELATION	Notes	Apprentice	Expert	Master
AS: Regression Lines				
A: The PMCC				

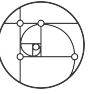
PROBABILITY	Notes	Apprentice	Expert	Master
AS: Venn Diagrams & Set Notation				
A: Conditional Probability				

BINOMIAL DISTRIBUTION	Notes	Apprentice	Expert	Master
AS: Binomial Probabilities				
AS: Binomial Inverse Problems				
AS: Current Bun Problems				

NORMAL DISTRIBUTION	Notes	Apprentice	Expert	Master
A: Mean & Variance Known				
A: Mean & Variance Not Known				
A: Key Features				
A: Approximating the Binomial				

HYPOTHESIS TESTING	Notes	Apprentice	Expert	Master
AS: Testing for Significance (Binomial)				
AS: Critical Values (Binomial)				
A: Testing for the Mean				
A: Testing for Linear Correlation				

FORCE-ACCELERATION	Notes	Apprentice	Expert	Master
AS: Forces & Newton's Laws				
A: Resolving Forces				
A: Bead Problems				
AS: Drawing Force Diagrams				
A: Friction				
AS: Pulleys without Slopes				
A: Pulleys with Slopes				
AS: Connected Particles - no Pulley				
AS: $\sum F = ma$ then suvat				



CONSTANT ACCELERATION	Notes	Apprentice	Expert	Master
AS: suvat Formulae				
AS: st, vt & at Graphs				
AS: Horizontal Problems				
AS: Vertical Motion Under Gravity				
A: Projectiles				

VARIABLE ACCELERATION	Notes	Apprentice	Expert	Master
AS: 1D Variable Acceleration				
A: 2D Variable Acceleration				

VECTOR PROBLEMS	Notes	Apprentice	Expert	Master
AS: Position & Velocity Problems				
AS: Force Problems				

MOMENTS	Notes	Apprentice	Expert	Master
A: Finding Moments				
A: Parallel Forces				
A: Non-Parallel Forces				
A: Hinge Problems				
A: Ladder Problems (not AQA)				

ALGEBRAIC TECHNIQUES	Notes	Apprentice	Expert	Master
AS: Indices Surds Fractions				
AS: Simultaneous Equations				
AS: Factorising				
AS: Factor Theorem & Division				
AS: Completing the Square				
AS: Proof of the Quadratic Formula				
AS: The Discriminant of a Quadratic				
AS: Hidden Quadratics				
A: Algebraic Fractions				
A: Partial Fractions				
A: The Binomial Expansion				
A: Using the Binomial Expansion				
AS: Linear Modelling				
AS: Quadratic Modelling				
AS: Solving Inequalities				
AS: Sketching Inequalities				

GRAPHS	Notes	Apprentice	Expert	Master
AS: Graph Transformations				
AS: Transformations of Functions				
AS: Transformations of x^3 and x^4				
AS: Sketching Factorised Polynomials				
AS: Transformations of $\frac{1}{x}$ and $\frac{1}{x^2}$				
A: Sketching $\frac{ax + b}{cx + d}$				



FUNCTIONS	Notes	Apprentice	Expert	Master
A: Domain & Range				
A: Composite Functions				
A: Inverse Functions				
A: Modulus Graphs				
A: Modulus Equations & Inequalities				
A: Parametric Functions				
A: Parametric to Cartesian				

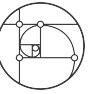
LINES CIRCLES TRIANGLES SECTORS	Notes	Apprentice	Expert	Master
AS: Line Equation				
AS: Line Geometry				
AS: Circle Geometry				
A: Triangles & Sectors				

VECTORS	Notes	Apprentice	Expert	Master
AS: Introduction to Vectors				
A: 3 Dimensional Vectors				
AS: Shape Problems				
AS: Shape Proofs				

EXPONENTIALS & LOGS	Notes	Apprentice	Expert	Master
AS: Exponential Functions				
AS: Logarithmic Functions				
AS: Laws of Logs				
AS: Exp & Log Equations				
AS: Linearising Bivariate Data				

TRIGONOMETRY	Notes	Apprentice	Expert	Master
AS: Solve 'Mini' Trig Equations				
AS: Understanding $\sin x$, $\cos x$, $\tan x$				
A: Reciprocal Trig Functions				
A: Pythagorean Identities				
A: Double/Half Angle Formulae				
A: Addition Formulae				
A: $R\cos(x+a)$				
A: Inverse Trig Functions				
A: Small Angle Approximations				

DIFFERENTIATION	Notes	Apprentice	Expert	Master
AS: Tangents & Normals				
A: The Derivatives				
AS: Stationary Points				
A: Convex & Concave				
A: Chain Rule				
A: Product & Quotient Rules				
A: Implicit Differentiation				
A: Connected Rates & Parametric				
A: Differentiating $x = f(y)$				
A: Optimisation Problems				
AS: First Principles Polynomials				
A: First Principles Trig				
A: Proofs of Derivatives				



INTEGRATION	Notes	Apprentice	Expert	Master
AS: Introduction to Integration				
AS: Area Under Curves				
A: How to Integrate				
A: Integrating Fractions & Trig				
A: Integration by Parts				
A: Substitution & Parametric				
A: Form & Solve Differential Equations				

PROOF	Notes	Apprentice	Expert	Master
AS: Disproof by Counter Example				
AS: Proof by Exhaustion				
AS: Rational/Irrational Number Proofs				
AS: Odd/Even & Consecutive Proofs				
A: Proof $\sqrt{2}$ Irrational				
A: Proof $\sqrt{3}$ Irrational				
A: Proof Infinitely Many Primes				

SEQUENCES & SERIES	Notes	Apprentice	Expert	Master
A: Language & Notation				
A: Arithmetic & Geometric Series				
A: Proof of Sum Formulae				

NUMERICAL METHODS	Notes	Apprentice	Expert	Master
A: Trapezium Rule				
A: Change of Sign				
A: Cobwebs & Staircases				
A: Newton-Raphson				
A: Proof Trap Rule & Newton-Raphson				