

| A-LEVEL (YEAR 2) KEY MATHEMATICAL VOCABULARY |                                    |                |                             |                   |                       |                         |                       |                   |                   |                            |                                 |   |
|--|------------------------------------|----------------|-----------------------------|-------------------|-----------------------|-------------------------|-----------------------|-------------------|-------------------|----------------------------|---------------------------------|---|
| Pure   |                                    |                |                             |                   |                       |                         |                       |                   |                   |                            |                                 |   |
| Proof  | Algebraic And Partial<br>Fractions | Functions      | Sequences And Series        | Binomial          | Trigonometry          | Parametric<br>Equations | Differentiation       | Numerical Methods | Integration       | Further Integration        | Vectors                         | Regression And Correlation                |
| Contradict                                   | Polynomial                         | Function       | Sequence                    | Binomial          | Pythagoras            | Parametric              | Derivative            | Roots             | Integral          | Integral                   | Vector                          | Hypotheses                                |
| Deduction                                    | Numerator                          | Mapping        | Series                      | Expansion         | Pythagorean Triple    | Cartesian               | Tangent               | Continuous        | Inverse           | Definite Integral          | Scalar                          | Significance Level                        |
| Expansion                                    | Denominator                        | Domain         | Finite                      | Theorem           | Right-Angled Triangle | Convert                 | Normal                | Function          | Differential      | Integrand                  | Column                          | One-Tailed Test                           |
| Infinity                                     | Factor                             | Range          | Infinite                    | Integer           | Opposite              | Parameter t             | Turning Point         | Positive          | Coefficient       | Limit                      | 3D Coordinates                  | Two-Tailed Test                           |
| Irrational                                   | Difference Of Two<br>Squares       | Modulus        | Summation Notation          | Rational          | Adjacent              | Identity                | Stationary Point      | Negative          | Index             | Indefinite Integral        | Vertices                        | Test Statistic                            |
| Prime  | Quadratic                          | Transformation | Σ(Sigma)                    | Power             | Hypotenuse            | Eliminate               | Maximum               | Converge          | Power             | Constant Of<br>Integration | Cartesian                       | Null Hypothesis                           |
| Pythagoras.                                  | Power                              | Composite      | Periodicity                 | Index             | Trigonometry          | Substitute              | Minimum               | Diverge           | Negative          | Trapezium                  | i                               | Alternative Hypothesis                    |
| Quadratic                                    | Index                              | Inverse        | Convergent                  | Coefficient       | Sine                  | Circle                  | Inflexion             | Interval          | Reciprocal        | Substitution               | j                               | Critical Value                            |
| Rational                                     | Coefficient                        | One To One     | Divergent                   | Validity          | Cosine                | Hyperbola               | Parametric            | Derivative        | Natural Logarithm | By Parts                   | k                               | Critical Region                           |
| Root   | Degree                             | Many To One    | Natural Numbers             | Modulus           | Tangent               | Parabola                | Implicit              | Tangent           | Ln  X             | Area                       | Magnitude                       | Acceptance Region                         |
| Square                                       | Squared                            | Mappings       | Arithmetic Series           | Factorial         | Secant                | Ellipse                 | Differential Equation | Chord             | Coefficient       | Differential Equation      | Origin                          | P-Value                                   |
| Square Number                                | Coefficients                       | F(X)           | Arithmetic Progression (Ap) | Ncr               | Cosecant              | Domain                  | Rate Of Change        | Iteration         | Exponential       | First Order                | Distance                        | Binomial Model                            |
| Trigonometry                                 | Improper                           | Fg(X)          | Common Difference           | Combinations      | Cotangent             | Modelling               | Product               | Newton-Raphson    | Identity          | Separating Variables       | Direction                       | Correlation Coefficients                  |
| Verify                                       | Identity                           | F–1X           | Geometric Series            | Pascal'S Triangle | Sohcahtoa             |                         | Quotient              | Staircase         | Sin               | Initial Conditions         | Angle                           | Product Moment Correlation<br>Coefficient |
| Proof  | Algebraic Fraction                 | Reflect        | Geometric Progression (Gp)  | Partial Fractions | Exact                 |                         | First Derivative      | Cobweb            | Cos               | General Solution.          | Position Vector                 | Population Coefficient                    |
|  | Partial Fraction                   | Translate      | Common Ratio                | Approximation     | Symmetry              |                         | Second Derivative     | Trapezium Rule.   | Tan               |                            | Unit Vector                     | Sample                                    |
|  | Rational.                          | Stretch.       | Nth Term                    | Converges         | Periodicity           |                         | Increasing Function   |                   | Sec               |                            | Orthogonal                      | Inference                                 |
|  |                                    |                | Sum To N Terms              | Diverges          | Identity              |                         | Decreasing Function.  |                   | Cosec             |                            | Vector<br>Addition/Subtraction. | Mean                                      |
|  |                                    |                | Sum To Infinity             | Root.             | Equation              |                         |                       |                   | Cot               |                            |                                 | Normal Distribution                       |
|  |                                    |                | Limit.                      |                   | Interval              |                         |                       |                   |                   |                            |                                 | Variance                                  |
|  |                                    |                |                             |                   | Quadrant              |                         |                       |                   |                   |                            |                                 | Assumed Variance                          |
|  |                                    |                |                             |                   | Degree                |                         |                       |                   |                   |                            |                                 | Linear Regression                         |
|  |                                    |                |                             |                   | Radian                |                         |                       |                   |                   |                            |                                 | Interpolation                             |
|  |                                    |                |                             |                   | Circular Measure      |                         |                       |                   |                   |                            |                                 | Extrapolation                             |
|  |                                    |                |                             |                   | Infinity              |                         |                       |                   |                   |                            |                                 | Coded Data                                |
|  |                                    |                |                             |                   | Asymptote             |                         |                       |                   |                   |                            |                                 |   |
|  |                                    |                |                             |                   | Small Angles          |                         |                       |                   |                   |                            |                                 |   |
|  |                                    |                |                             |                   | Approximation         |                         |                       |                   |                   |                            |                                 |   |
|  |                                    |                |                             |                   | Identity              |                         |                       |                   |                   |                            |                                 |   |

Proof.



Coplanar.

| Statistics                 |  |                    |                            | Mechanics              |                            |                       |
|----------------------------|--|--------------------|----------------------------|------------------------|----------------------------|-----------------------|
| Probability                | Normal Distribution                      | Moments            | Forces At An Angle         | Kinematics             | Applications Of<br>Forces  | Further Kinematics    |
| Sample Space               | Binomial                                 | Moment             | Force                      | Projectile             | Force                      | Distance              |
| Exclusive Event            | Discrete Distribution                    | Turning Effect     | Weight                     | Range                  | Resultant                  | Displacement          |
| Complementary Event        | Discrete Random Variable                 | Sense              | Tension                    | Vertical               | Component                  | Speed                 |
| Discrete Random Variable   | Uniform                                  | Newton Metre (N M) | Thrust                     | Horizontal             | Resolving                  | Velocity              |
| Continuous Random Variable | Cumulative Probabilities Normal          | Equilibrium        | Friction                   | Component              | Plane                      | Constant Acceleration |
| Mathematical Modelling     | Mean                                     | Reaction           | Coefficient Of<br>Friction | Acceleration           | Parallel                   | Constant Force        |
| Independent                | Variance                                 | Tension            | μ                          | Gravity                | Perpendicular              | Variable Force        |
| Mutually Exclusive         | Continuous Distribution                  | Rod                | Limiting                   | Initial Velocity       | Weight                     | Variable Acceleration |
| Venn Diagram               | Histogram                                | Uniform            | Reaction                   | Vector                 | Tension                    | Retardation           |
| Tree Diagram               | Inflection                               | Non-Uniform        | Resultant                  | Angle Of<br>Projection | Thrust                     | Deceleration          |
| Set Notation               | Appropriate Probability<br>Distribution. | Centre Of Mass     | Magnitude                  | Position               | Friction                   | Initial (T = 0)       |
| Conditional Probability    |  | Resolve            | Direction                  | Trajectory             | Air Resistance             | Stationary (Speed = 0 |
| Two-Way Tables             |  | Tilting            | Bearing                    | Parabola.              | Reaction                   | At Rest (Speed = 0)   |
| Critiquing Assumptions.    |  | 'On The Point'     | Force Diagram              |                        | Driving Force              | Instantaneously       |
|                            |  | Concurrent.        | Equilibrium                |                        | Braking Force              | Differentiate         |
|                            |  |                    | Inextensible               |                        | Force Diagram              | Integrate             |
|                            |  |                    | Light                      |                        | Equilibrium                | Turning Point.        |
|                            |  |                    | Negligible                 |                        | Inextensible               |                       |
|                            |  |                    | Particle                   |                        | Light                      |                       |
|                            |  |                    | Smooth                     |                        | Negligible                 |                       |
|                            |  |                    | Rough                      |                        | Particle                   |                       |
|                            |  |                    | Uniform                    |                        | Rough                      |                       |
|                            |  |                    | Perpendicular.             |                        | Smooth                     |                       |
|                            |  |                    |                            | _                      | Incline                    |                       |
|                            |  |                    |                            |                        | Uniform                    |                       |
|                            |  |                    |                            |                        | Friction                   |                       |
|                            |  |                    |                            |                        | Coefficient Of<br>Friction |                       |
|                            |  |                    |                            |                        | Concurrent                 |                       |