**Mathematical Methods Revision**

* Matrices
  + Addition, subtraction and scalar multiplication of matrices
  + Multiplication of matrices
  + Determinant of 2x2 and 3x3 matrices
  + Transpose of a matrix
  + Inverse of a 2x2 matrix
  + Solving simultaneous equations using Cramer’s rule and the inverse method
* Set Theory
  + Set union, intersection, difference
  + Universal set
  + Cardinal number of a set
  + Cartesian product, AxB
  + Subset of a set
  + Venn diagrams
  + Solving problems using Venn diagrams and cardinal number formula
* Functions
  + Finding f(3), g(-2) etc
  + Piecewise functions
  + Composite functions
  + Inverse functions
  + Linear, quadratic, exponential functions - be able to plot
  + Trigonometric functions
  + Period and amplitude
  + Sketching trigonometric curves
* Coordinate Geometry
  + Given two points a(2,4) and b(5, -2) find, using given formulae,
    - Distance between two points
    - Slope of line joining two points
    - Mid point between a and b
    - Equation of line ab
  + Given equation, such as, 2x + 4y = 9, find slope and y-intercept
  + Parallel and perpendicular slopes
  + Find point of intersection of two lines