The Year 11 (Foundation)Curriculum: Mathematics

UP HOLLAND HIGH SCHOOL
Dedicated to Excellence

Results

GCSE

You will sit 3 x 1 hour 30 minutes written exams (1 non-calculator, 2 non-calculator)

Half Term

GCSE

Revision

Revision

Half Term

Revision

Mock Exams

Half Term

Mock Exams

Simultaneous Equations

Solve Simultaneous Equations Graphically

Use Simultaneous Equations to solve real life problems

Write Simultaneous Equations

Solve Simultaneous Equations Algebraically

$y = mx + c$

gradient y-intersect

(x, y)

Calculate Equation of a Line through two given points

Graphs of Cubic and Reciprocal functions

Cubic Graphs

Reciprocal Graphs

Algebraic Proof

Changing the Subject of the Formula

$\sum = \sqrt{x}$

Rearranging Equations

Identities and Equations

Inverse Proportion

$\overrightarrow{AB} = \begin{pmatrix} 3 \\ 4 \end{pmatrix}$

Vector Notation

Scale Factors and Enlargement

Identify Similar Shapes

$\Delta ABC \sim \Delta DEF$

Use Congruency criteria (SSS, SAS, ASA, RHS)

ASA (Angle – Side – Angle)

Half Term

Vectors

Similarity and Congruence

Indices and Standard Form

Carry out the 4 operations with numbers in Standard Form

Converting to and from Standard Form

$a \times 10^n$

Fractions

Finding the reciprocal value

a/b b/a

Multiply and Divide Mixed Number Fractions

$1\frac{3}{4}$

Add and Subtract Mixed Number Fractions

magnitude head tail direction

Calculate using Column Vectors

Identify Parallel Column Vectors

Scale Diagrams

Solve angle problems involving congruence

Interpret calculator displays in Standard Form

Index Laws

$a^x \times a^y = a^{x+y}$

$a^2 - b^2 = (a+b)(a-b)$

Difference of 2 Squares

Plot graphs of Quadratic Functions

Identify and interpret roots, intercepts and turning points

Factorise Quadratic Expressions

$f(x) = ax^2 + bx + c$

Quadratic Equations

Mock Exams

Half Term

Mock Exams

Use and work out three figure bearings

Constructions and Loci

Solve quadratics

Expand Brackets

$(x+3)(x-1)$

Find the line of symmetry of a quadratic graph

Find approximate solutions to quadratics using graphs

Maps and Scale drawings

Solve Loci problems

Elevations

Faces, edges, vertices

Measure and draw lines and angles

Plans and Elevations

Retrieval and Revision

Year 11

Constructions using a straight edge and compass

Congruent Shapes

Planes of Symmetry

Sketch 3D solids

Draw circles and arcs accurately