

**HIGHER:****Possible Topics Paper 2 with Mathwatch Clip Numbers**

Significant Figures **Clip 101**

Construction using a set of compasses, protractor **Clip 80**

Bisection of lines & Angles **Clip 127**

Nets of 3D shapes **Clip 82**

Graphs of Functions **Clip 145/146/170**

Graphs of Trig Functions **Clip 168**, Transformation of Trig Functions **Clip 169**

Trial & Improvement (at least 4 trials) **Clip 110**

Trigonometry **Clip 147**

Pythagoras' Theorem **Clip 118**

Using Sine Rule, Cosine Rule for Angles, Sides and Area of a Triangle **Clip 173; Clip 176**

Scale Drawings (Comparing a small object to a large one like a building)

Volume of a Cuboid, convert to millilitres, litres **Clip 34**, Volume of a Prism **Clip 122**

Circumference and Area of a circle **Clip 72**

Lengths of Circular Arcs; Area of Sectors; Areas of Segments using Trig **Clip 178**

Mean, Median, Mode from tables **Clip 133**

Tree Diagrams **Clip 154**; Probability AND/OR questions **Clip 182**

% Increase/Decrease **Clip 93, 136**, Reverse % **138**

Compound Interest/Depreciation **Clip 137**

Product of Prime Factors **Clip 95**

HCF & LCM from Prime Factors (**Venn Diagram helps!**)

Standard Form **Clip 135**

Solving inequalities **Clip 109**

Solving Quadratics using the Formula **161a**

Difference of Squares **Clip 141**

Solving quadratics by completing the square **161c**

Volume of Cones & Spheres **177**

Frequency Diagrams/Polygon **Clip 88**, Pie Charts **86**

Nets of a Shape **Clip 82**

Congruent Triangles **Clip 179**

Changing the Subject of a Formula **Clip 164**

Understanding  $y=mx+c$  **Clip 143**

Direct & Inverse Proportion **Clip 159**

Similar Shapes LSF, ASF, VSF **Clip 149**

Simultaneous Equations **142**

Ratios **Clip 61, 94**

Bounds (recognising when a question says 'rounded to...' 'to the nearest.....') **Clip 160**