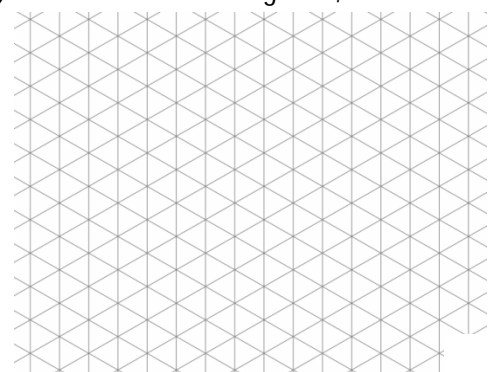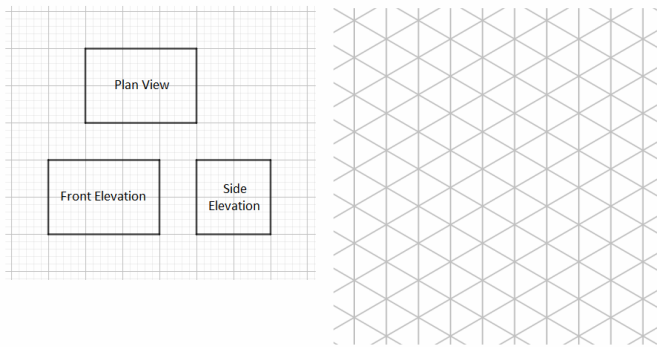**Isometric Drawings – www.m4ths.com**

Use the isometric paper below to draw
  (a) Cube with side lengths of 2 units.
 (b) Cuboid with side lengths 3, 4 and 2 units.

The plan view, side elevation and front elevation of a solid are shown below. Draw an accurate 3D diagram of the shape on the isometric paper given.
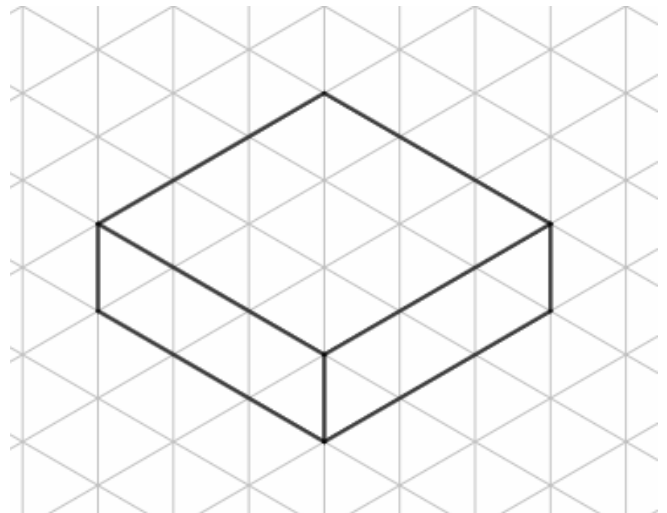

The diagram below shows a 3D solid drawn on isometric paper. Draw an accurate plan view, side elevation and front elevation on the squared paper given. The dimensions must be correct!
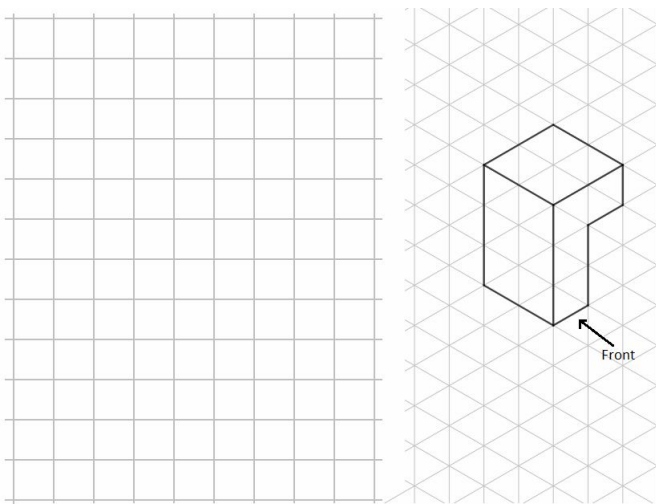
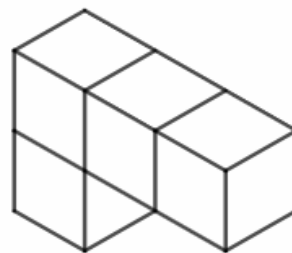Draw 4 new lines on the diagram below to give the 3D solid a volume of 5 units cubed.
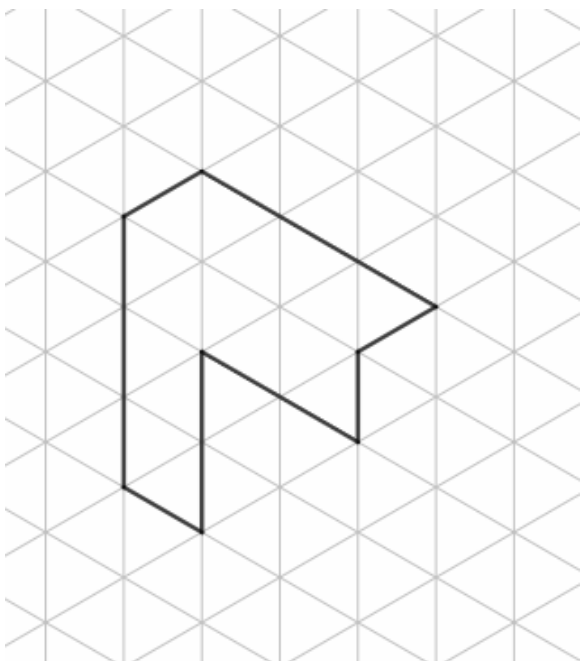
Draw 5 new lines on the diagram below to give the 3D solid a volume of 8 units cubed.

The diagram below shows a 3D solid.

(a) Find the maximum and minimum possible volume of the shape.
(b) Find the maximum and minimum possible surface area of the shape.

What are the maximum and the minimum number of small cubes you would need to add to the shape to make a 3 x 3 cube?