

2-D Representations of 3-D Shapes

Notes

Click [here](#) for printable isometric graph paper.

Using isometric paper

Make sure the isometric paper is the right way around.

The correct way is with the dots making vertical lines or the lines are vertical (see diagram).

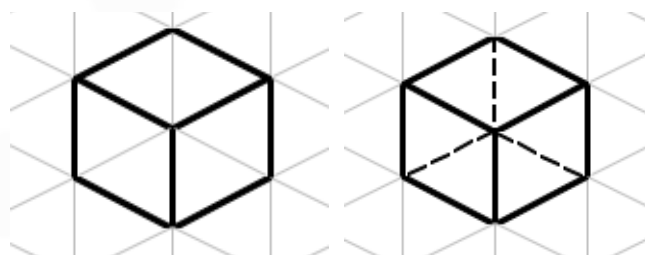


E.g. 1 Draw a 1 cm × 1 cm × 1 cm cube.

Working:

Not all edges can be seen — these are called hidden edges

We show these as dotted lines (see 2nd diagram).



Hidden edges are shown by dotted lines.

Hint: Draw the outline edges first and then fill in the dotted lines for the hidden edges

E.g. 2 Draw a 1 cm × 2 cm × 3 cm cuboid.

Hint: Draw the outline first and then the dotted lines

E.g. 3 Draw a triangular prism whose cross-sectional area is a 3, 4, 5 cm right angled-triangle and whose length is 2 cm.

Hint: The hypotenuse lengths do not follow the lines on the isometric paper.

Video: [Isometric drawings](#)

[Solutions to Starter and E.g.s](#)

Exercise

p100 Ex 6.2 Qu 1-10

Summary

Hidden edges are shown by dotted lines.

Draw the outline edges first and then fill in the dotted lines for the hidden edges.

[Textbook answers \(only available during a lockdown\)](#)