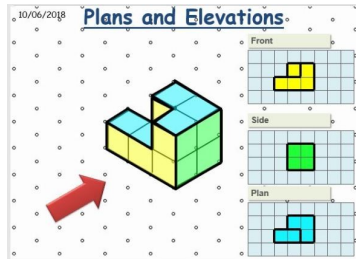


Plans and Elevations

Plan view is the view from above (birds eye view)

An elevation is a view from the front or side.

Do not focus on specifics, it is a flat shape..



Year 9 Higher Topic 8

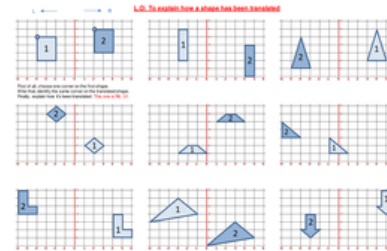
Topic title: Transformations and Constructions

What careers would use these skills?

Architecture, planning, aircraft formations, artists and scientists.

Translating a Shape

A translation is a movement, it doesn't rotate, reflect or enlarge.



Constructions

You can construct triangles using a pencil, ruler, compass and protractor.

To construct a triangle with three sides known

- 1) Draw the base,
- 2) Set the compass to the length of one side, draw an arc
- 3) Set the compass to the length of the other side, draw an arc then join the sides up.

To construct a triangle with two sides and an angle known.

- 1) Draw the base
- 2) Measure the angle from one end of the line
- 3) Set the compass to the length of the side and draw an arc
- 4) Draw the sides

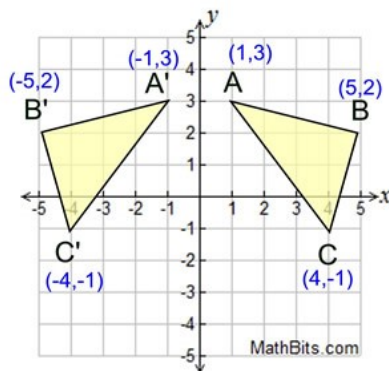
To construct a triangle with two angles and one side known

- 1) Draw the base
- 2) Measure one angle at one end of the line
- 3) Measure the other angle at the opposite end of the line
- 4) Join the lines.



Reflecting Shapes

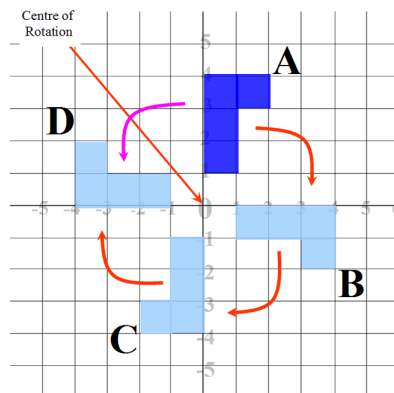
A reflection is a mirror image. The reflection is exactly the same distance away from the line of reflection as the original image.



Rotating Shapes

A shape rotates either clockwise or anti-clockwise. It must rotate around the centre of rotation.

A 90° rotation is a quarter turn, 180° a half turn and 270° a three quarter turn.



Enlarging a shape

When enlarging a shape it is the lengths that enlarge by the given scale factor.

Always enlarge from the centre of enlargement.

