**Drawing a square with no protractor**

* Mark two points on your piece of paper – at least 10cm apart
* Join these points with a straight line
* Construct the perpendicular bisector of this line. Make sure you extend this to at least 10 cm.
* Now, set the radius of your compasses to about 5cm and draw a circle centred on the point of intersection of your two straight lines. This circle should cross each of the straight lines twice.
* Join these four points of intersection to make a perfect square

**Congruent halves**

Look at the rectangle below:

A

B

Construct the perpendicular bisector of the points labelled A and B. This will split the rectangle into two congruent halves (do you know what this means?)

**Constructing a rhombus**

* Repeat the first three steps of ‘drawing a square with no protractor’
* The diagonals of a rhombus are at right angles. Use this fact to create a rhombus from your diagram – no measuring allowed, just use your compasses to help.

**Equidistant puzzling**

* Mark two points on plain paper – about 15cm apart
* Now imagine that an ant crawls over your page so that at all times it is an equal distance from both of these points. Construct this line on your page.