

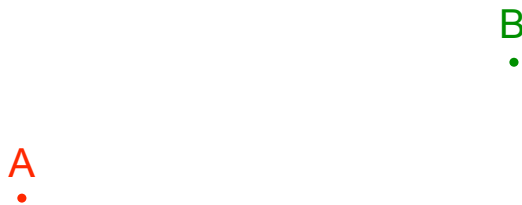
# Constructing a perpendicular bisector

## You what?

A perpendicular bisector is a line. Every point on the line is equidistant from two points.

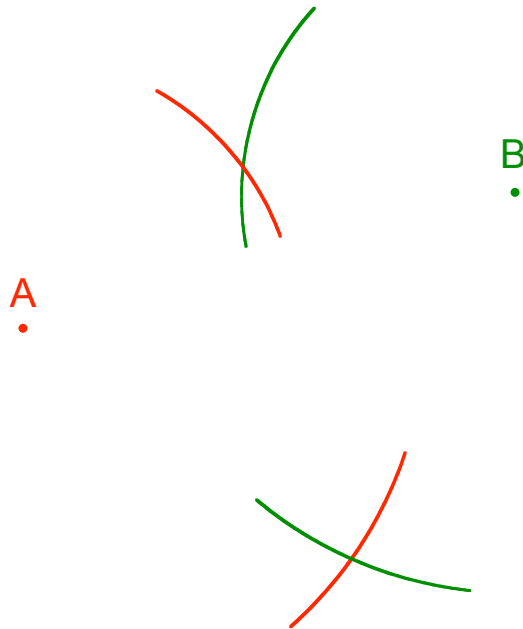
If you have two points, you often want to construct (draw) the perpendicular bisector, i.e. the line that is halfway between the two points.

Shown below is a diagram with two points, A and B. In the table below, each arc is added separately.




To construct the perpendicular bisector of the line AB, get out your compasses. Set them apart enough so that when you draw an arc from A and an arc from B the arcs overlap.

Make sure the distance is the same for the arcs that overlap – that's the whole point. Any point where the two arcs overlap is equidistant from A and B.



To construct the actual perpendicular bisector, simply join the two points where arcs overlap with a line.

