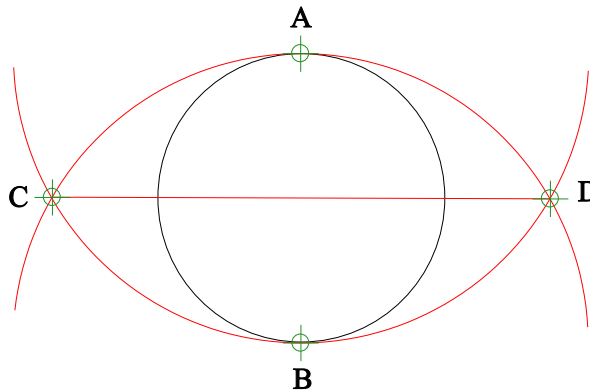


How to Draw a Pentagon Using a Compass and Ruler



1 – The first step in making a pentagon is to make a circle, with a diameter the size of the pentagon, with your compass.

2 – Next you need to find the center lines, both horizontal and vertical.

a – Using your compass, draw an arc with the center on point A and the diameter of point A to B.

b - Using your compass, draw another arc centered on point B and the diameter of point B to A.

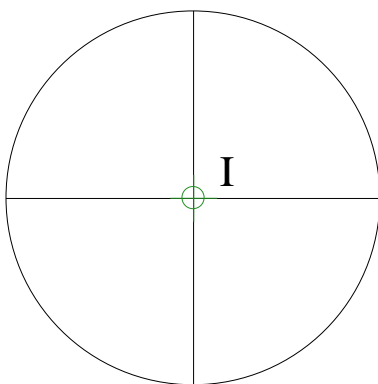
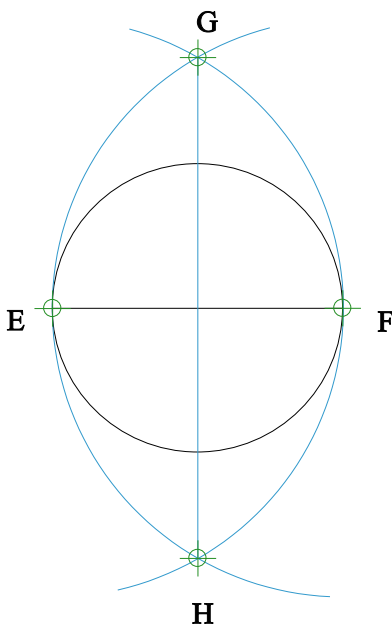
c – Draw a line between the arc intersections C & D.

d - Using your compass, draw an arc with the centered on point E and the diameter of point E to F.

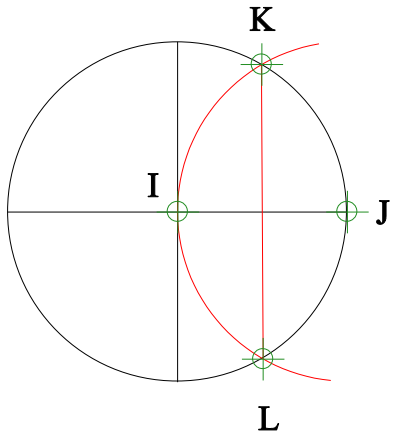
e - Using your compass, draw another arc with the centered on point F and the diameter of point E to F.

f – Draw a line between the arc intersections G & H.

G – Erase the arcs and trim the center lines to the circle.



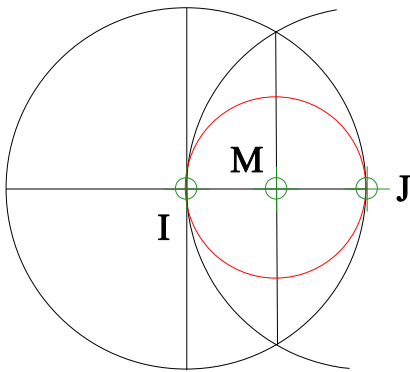
The intersection of these two lines is the center of the circle, point I.



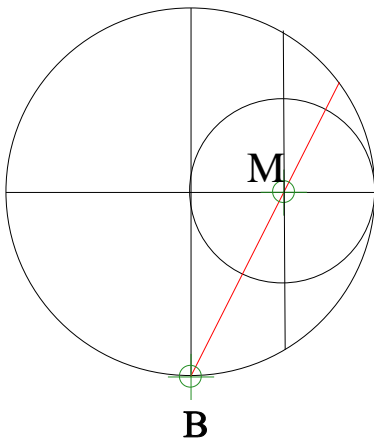
3 – Find the center of line I – J

a - Draw an arc from point J using line I – J as the radius

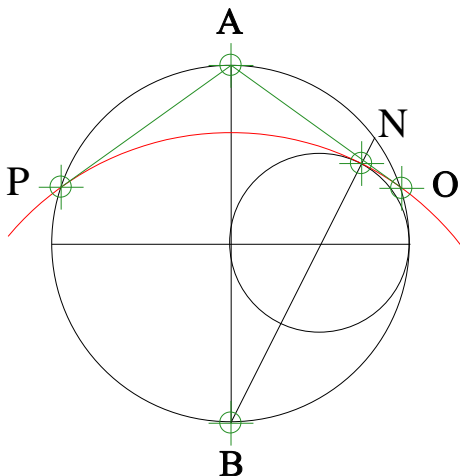
b – Draw line K – L , using intersections K & L



4 – draw a circle using point M and line I – M as the radius. Remove the arc.

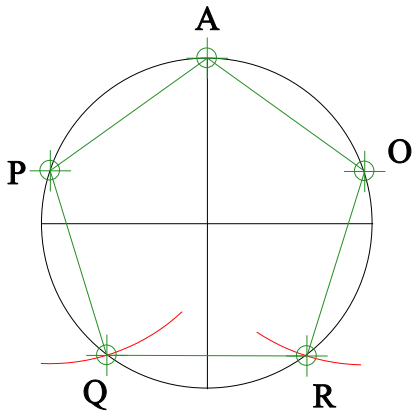


5 – draw a line starting at point B thru Point M to circle.



6 – draw an arc, using point B as center and line B – N as radius, thru the outer circle.

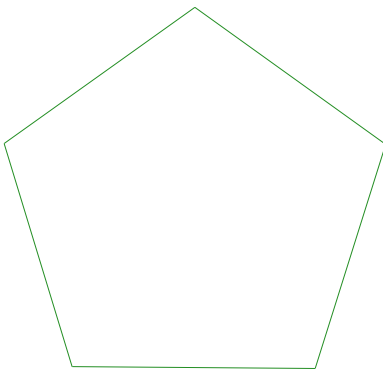
7 – draw a line from point P to Point A and a line from point A to point O. These lines are the first two sides of the pentagon.



8 – Now draw an arc thru the circle, using point P as center and line P – A as the radius.

9 – draw another arc thru the circle, using points O as center and line O – A as the radius.

10 – Now connect points P and Q, points Q and R, and points R and O.



11 – remove the construction lines and the pentagon is left.