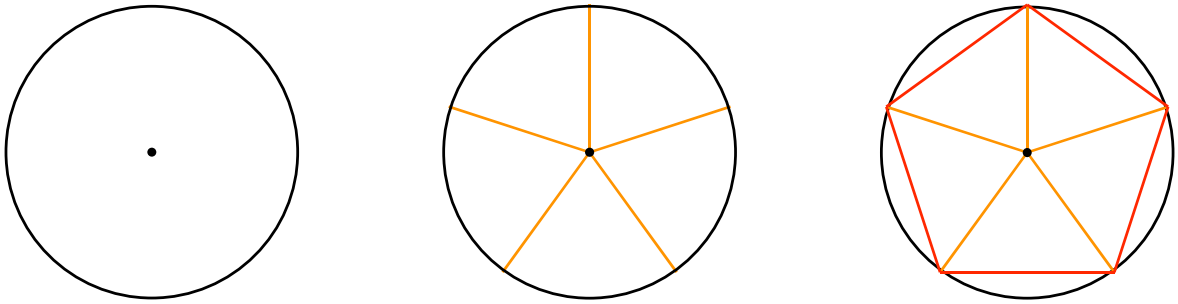
Inscribed polygons

What are inscribed polygons?
Inscribed polygons are polygons nested inside a circle.

How do I draw an inscribed regular polygon?
To make the polygon regular, you have to divide the circle into equal sectors. Then all you have to do is join the points where the sector boundaries touch the circumference.

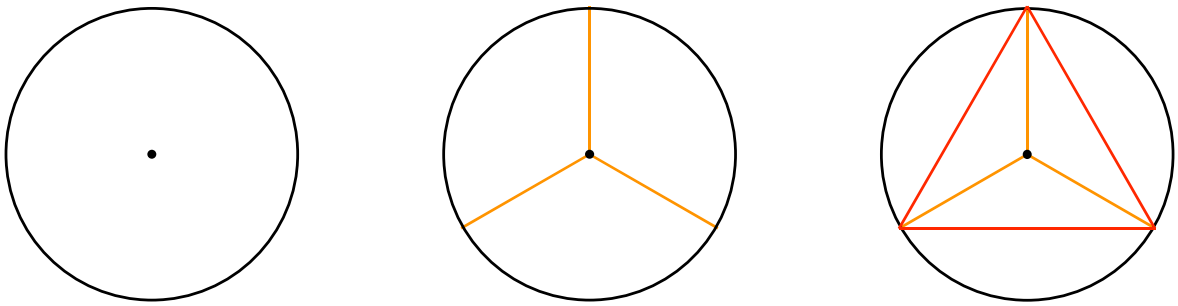
For example, to make a regular pentagon, you divide a circle into five equal sectors.



How do I divide a circle into even sectors?
To work out the angle between the sector boundaries, divide the circle's entire 360° by the number of sides you want the polygon to have.

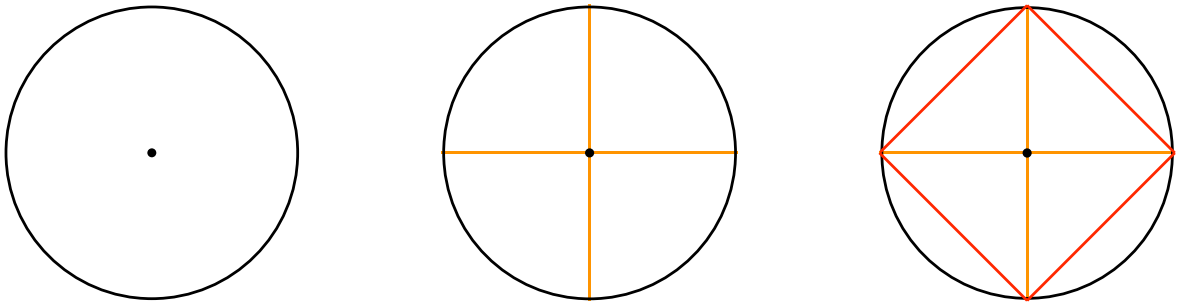
Here, I needed five sides, so I calculated that the angle between each sector boundary is 360° ÷ 5 = 72°.

Equilateral triangle
To create an equilateral triangle, the sector boundaries must have angles of 360° ÷ 3 = 120° between them.



Square

To create a square, the sector boundaries must have angles of $360° \div 4 = 90°$ between them.



Hexagon

To create a hexagon, the sector boundaries must have angles of $360° \div 6 = 60°$ between them.