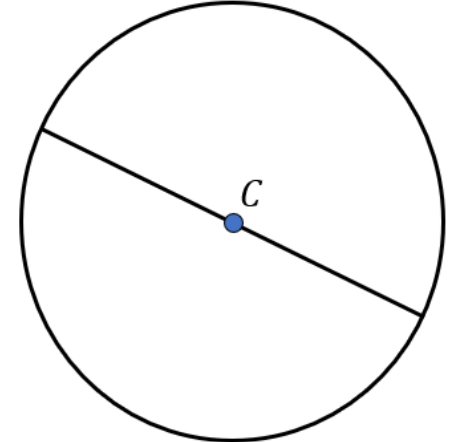
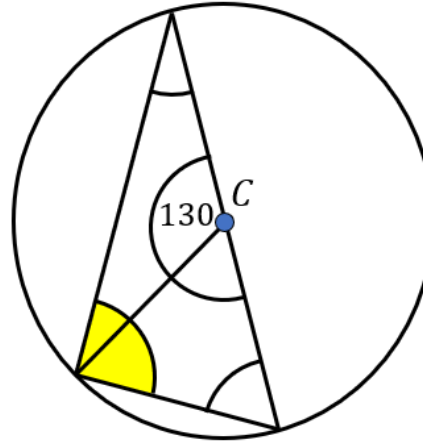
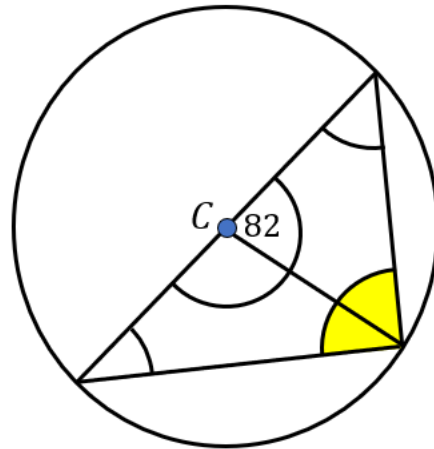
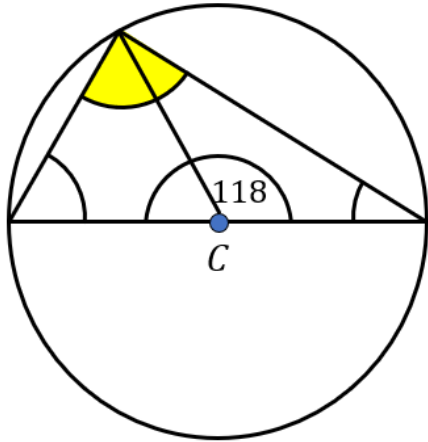


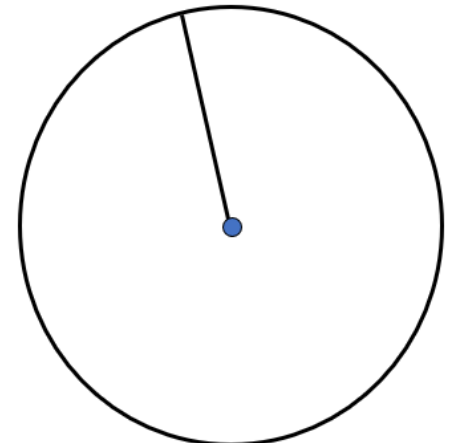
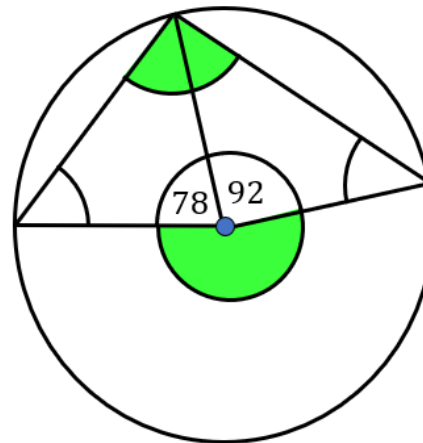
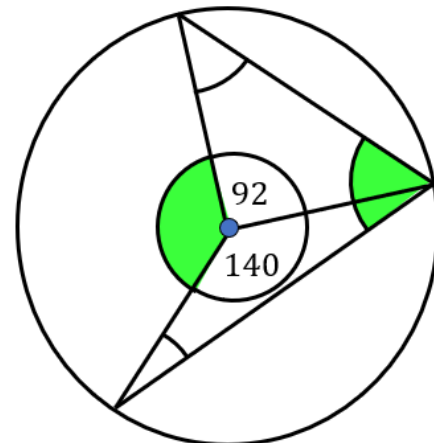
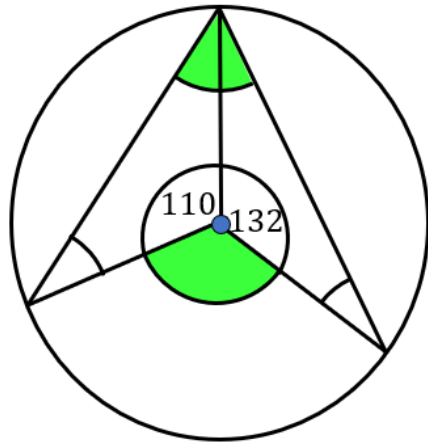
## Investigating Triangles Inside Circles

The first three diagrams show two joined isosceles triangles that fit together inside a semicircle. Calculate all marked angles and write down what you notice about the shaded angle. In the final diagram, choose your own angles and test your theory.



**What did you notice?**

The next three diagrams show two joined isosceles triangles that fit together inside a full circle. Calculate all marked angles and write down what you notice about the shaded angles. In the final diagram, choose your own angles and test your theory.



**What did you notice?**