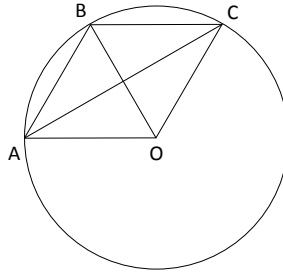


## Answer on Question #70732 – Math – Trigonometry

### Question

In a circle the centre point is 'O' and OABC is a parallelogram then find angle OAC and angle OAB.

### Solution



1. As we see,  $OA = OB = OC =$  radius of the circle.
2.  $AB = OC$  and  $BC = AO$  due to the properties of the parallelogram.
3. It follows from the previous equalities that  $AB = OB = OA$ , therefore the triangle  $\triangle AOB$  is equilateral. All angles of the equilateral triangle are equal to 60 degrees:

$$\angle OAB = 60^\circ.$$

4. Diagonal AC of the parallelogram OABC bisects  $\angle OAB$ :

$$\angle OAC = \frac{\angle OAB}{2} = \frac{60^\circ}{2} = 30^\circ.$$

### Answer:

$$\angle OAB = 60^\circ; \angle OAC = 30^\circ.$$