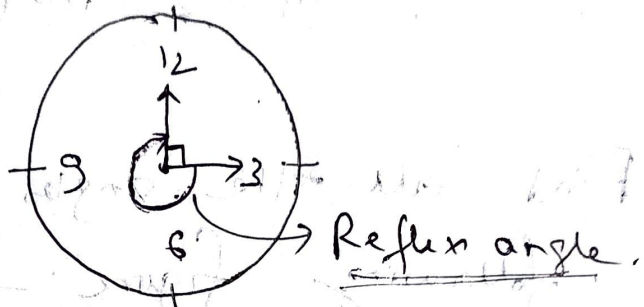


Shapes & Angles

1) Reflex Angle :- Any angle whose measure is more than 180° but less than 360° is called a reflex angle.

e.g. 185° , 270° .



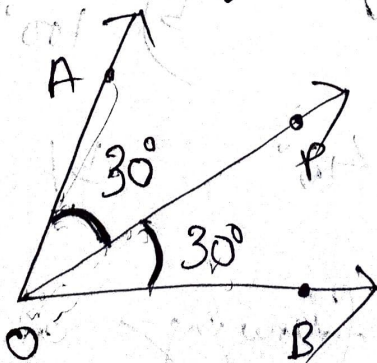
2) Whole angle / Complete angle :-

An angle whose measure is 360° is a whole / complete angle.



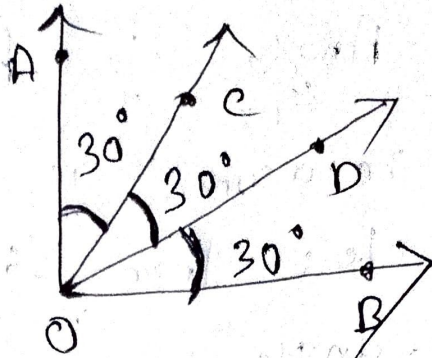
Division of angles

1) Bisector of an angle



$$\begin{aligned}\angle AOB &= 60^\circ \\ \angle AOP &= \angle POB \\ &= \frac{60^\circ}{2} = 30^\circ\end{aligned}$$

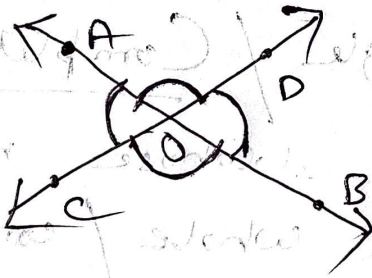
To trisect an angle!



$$\angle AOB = 90^\circ$$

$$\angle AOC = \angle COD = \angle DOB = \frac{90^\circ}{3} = 30^\circ$$

Q1 Find all the angles in the following figure :-



$\angle AOC$, $\angle COB$, $\angle BOA$, $\angle DOA$

Q) If the following angles are bisected, what will be the measure of each angle?

a) 80° b) 100°

\Rightarrow a) $\frac{80^\circ}{2} = 40^\circ$ b) $\frac{100^\circ}{2} = 50^\circ$

Q) If the following angles are trisected, what will be the

value of each angle?

a) 150° b) 135°

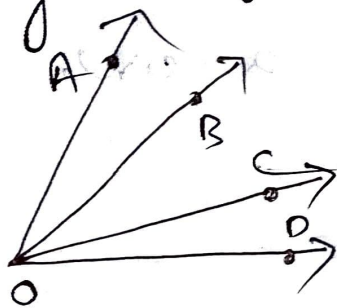
⇒ a) $\frac{150^\circ}{3} = 50^\circ$ b) $\frac{135^\circ}{3} = 45^\circ$

Questions

1) If radius of a circle is 10 cm, find the diameter.

2) If diameter of a circle is 21 cm, find the radius.

3) Find all the angles in the following angle :-

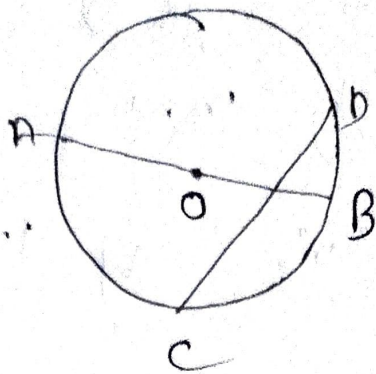


4) If 120° is bisected what will be the value of each angle?

5) If 180° is trisected what will be the value of each angle?

6) _____ is the longest chord in a circle.

3)



a) The centre is _____

b) The diameter is _____

c) _____ and _____ are the radii of the circle.

d) _____ is the chord of the circle.

e) Half of a circle is called _____.

