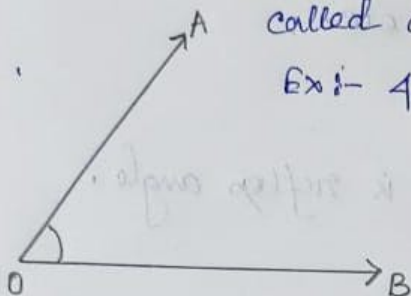


CH-2 Shapes and Angles

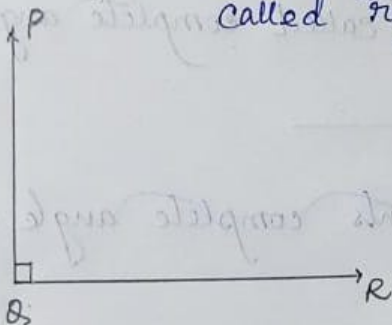
- **Acute angle** :~ The angle whose measure is greater than 0° but lesser than 90° , is called acute angle.

Ex:- 45° , 30° , 60° etc.



In the figure, $\angle AOB$ is acute angle.

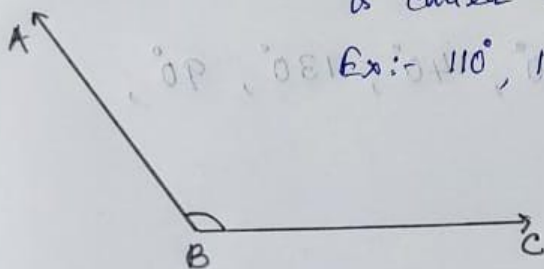
- **Right angle** :~ The angle whose measure is 90° , is called right angle.



$\angle POR$ is right angle.

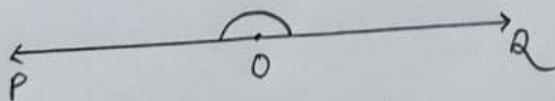
- **Obtuse angle** :~ The angle whose measure is greater than 90° but lesser than 180° , is called obtuse angle.

Ex:- 110° , 135° , 160° etc.



$\angle ABC$ is obtuse angle.

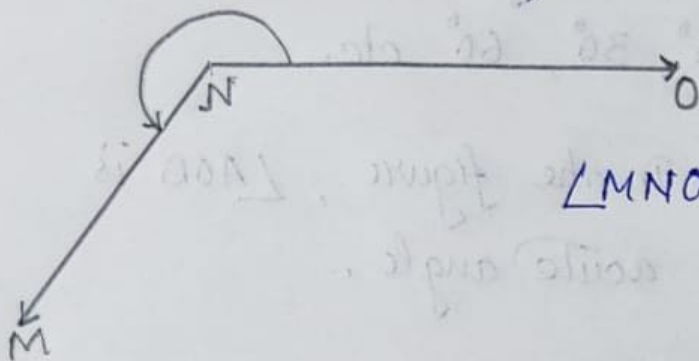
- **Straight angle** :~ The angle whose measure is 180° , is called straight angle.



$\angle POQ$ is straight angle.

■ Reflex angle :~ The angle whose measure is greater than 180° but lesser than 360° is called reflex angle.

Ex: 190° , 210° etc.



$\angle MNO$ is reflex angle.

■ Complete angle :~ The angle whose measure is 360° , is called complete angle.



The above figure represents complete angle.

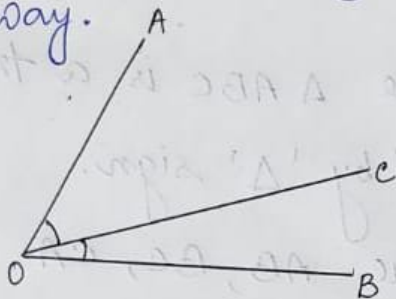
Q) Write the name of types of the following angles :—

35° , 119° , 270° , 180° , 40° , 130° , 90° ,

360° , 25° , 200°

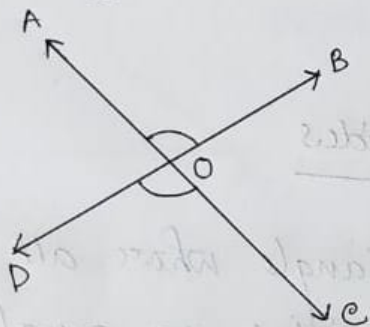
CH-2) Shapes and Angles.

- Adjacent angles :- Adjacent angles are two angles that have a common side and a common vertex but do not overlap in any way.



In the given figure, $\angle AOC$ and $\angle COB$ are adjacent angles.

- Vertically opposite angle :- When two lines intersect, the opposite angles are called vertically opposite angles and they are equal.



In the given figure, $\angle AOB$ and $\angle DOC$ are called vertically opposite angles.

- Complementary angles :- If sum of two angles is 90° , then they are called complementary angles.

Ex :- $\angle A = 30^\circ$, $\angle B = 60^\circ$

Therefore, $\angle A$ and $\angle B$ are complementary angles.

$\angle A$ is called complement of $\angle B$
and, $\angle B$ is called complement of $\angle A$.