

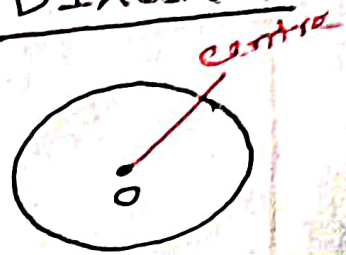
CH-8: CARTS AND WHEELS

DEFINITION

CIRCLE : A 2-D shape

- No corners no sides
- Has a fixed centre
- All points on a circle are at the same distance from the centre.

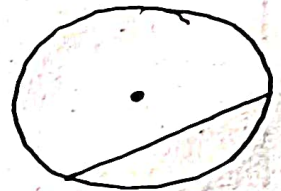
DIAGRAM



SEMI-CIRCLE : Half of a circle

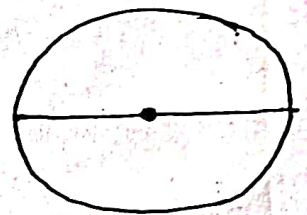


CHORD : A line segment whose end points lie on the circle.



DIAMETER : A line segment (D) whose end points lie on the circle.

- Divide the circle into two equal halves
- which passes through the centre



* A circle has infinite diameters

** LONGEST CHORD

** Twice (2 times) of RADIUS (R)

$$D = 2 \times R$$

RADIUS : Half of diameter

- Fixed distance between centre and any point on the circumference of a circle.

* Circle has infinite radii (plural of radius)

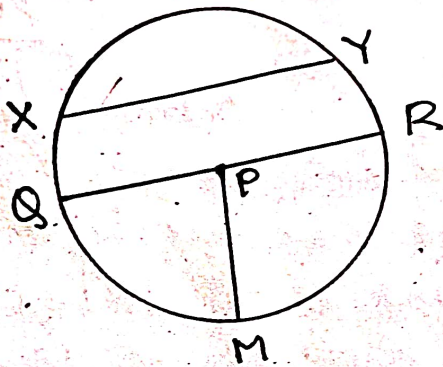


CIRCUMFERENCE

Boundary of a circle



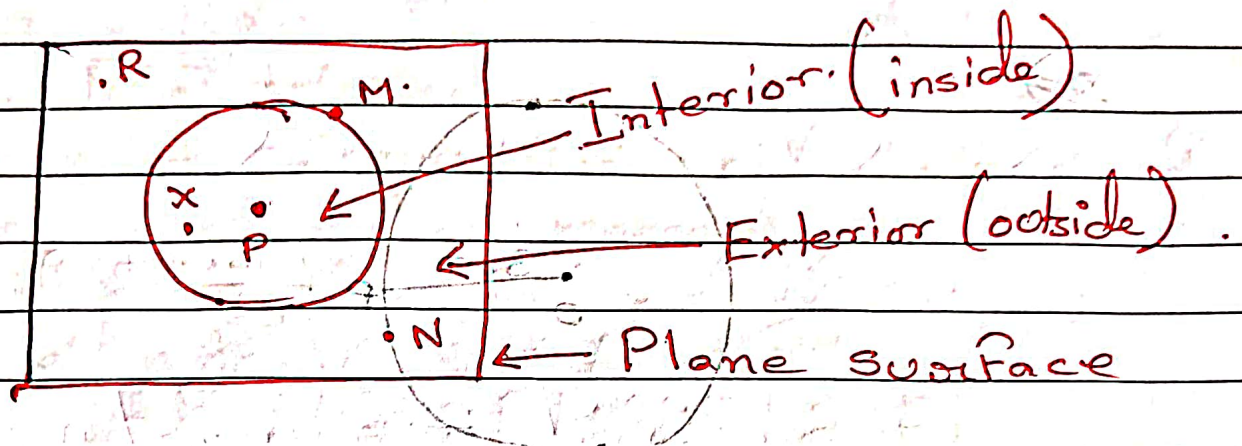
WORKSHEET-1



Name the parts of the circle

- 1) Centre → _____
- 2) Any one radius → _____
- 3) Diameter → _____
- 4) Chord (other than diameter) → _____

Chord $\rightarrow$ A line segments whose end points lie on the circle is called Chord.



Point Centre of the circle $\rightarrow$ P (a)
 Point on the circle $\rightarrow$ M
 Point in the interior $\rightarrow$ X; P
 Point in the exterior $\rightarrow$ R; N
 Plane surface

— / — / —

D) Find the radius of the following :-

1) $10 \text{ cm} \times 2 = 20 \text{ cm}$

2) $24 \text{ cm} \div 2 = 12 \text{ cm}$

E) Find the diameter of the following :-

1) $6 \text{ cm} \times 2 = 12 \text{ cm}$

2) $7 \text{ cm} \times 2 = 14 \text{ cm}$