Access NCERT Solutions for Class 6 Chapter 4: Basic Geometrical Ideas Exercise 4.6

1. From the figure, identify:

(a) the centre of circle

(b) three radii

(c) a diameter

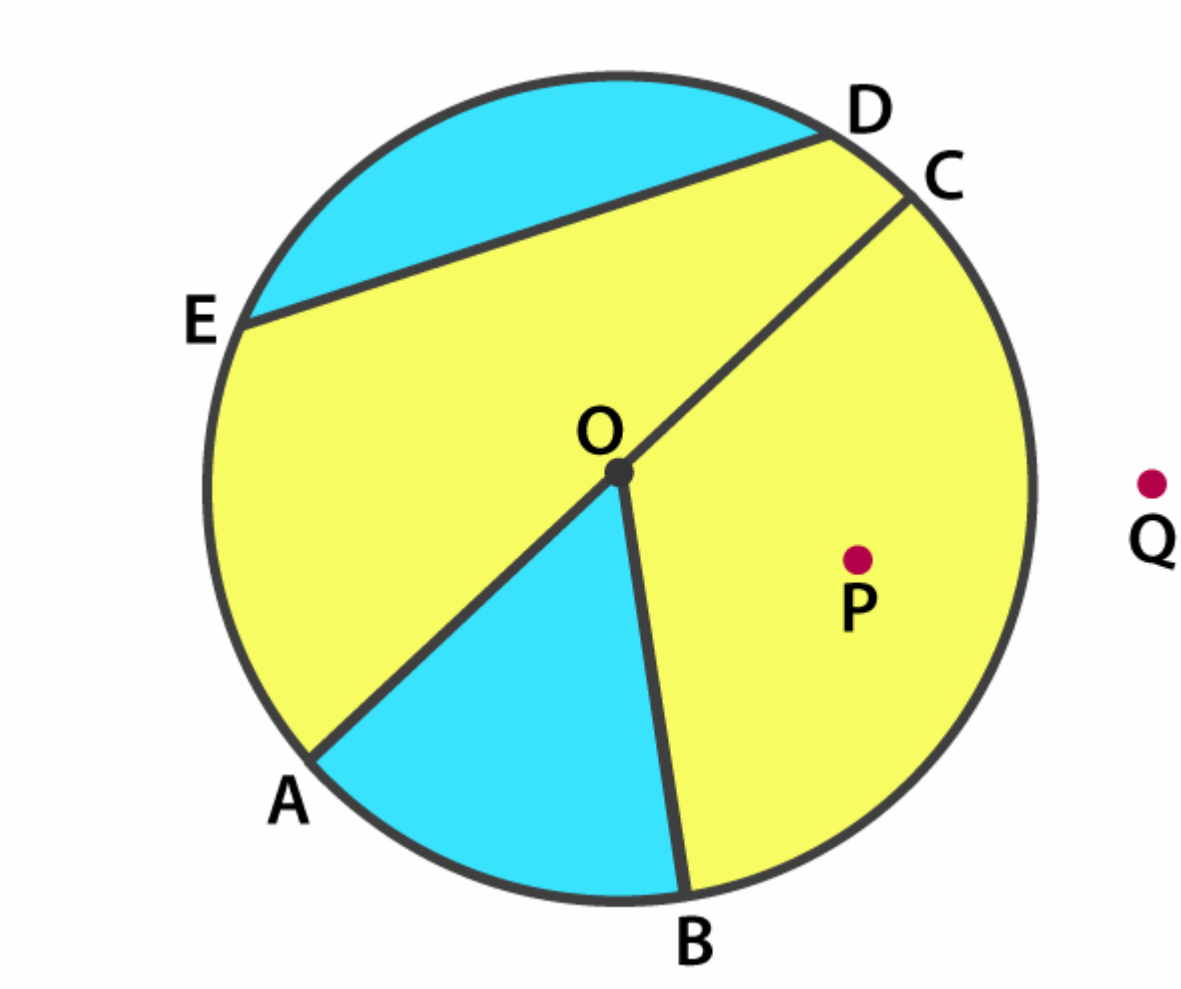
(d) a chord

(e) two points in the interior

(f) a point in the exterior

(g) a sector

(h) a segment



Solutions:

(a) The centre of circle is O

(b) Three radii are
$\overline{OA}$,

$\overline{OB}$,
$\overline{OC}$
(c) A diameter is
$\overline{AC}$
(d) A chord is
$\overline{ED}$
(e) Two points in the interior are O and P

(f) A point in the exterior is Q

(g) A sector is AOB i.e shaded region

(h) A segment is ED i.e shaded region

2. (a) Is every diameter of a circle also a chord?

(b) Is every chord of a circle also a diameter?

Solutions:

(a) Yes every diameter of a circle is also a chord. Diameter is also called as longest chord.

(b) No, every chord is not a diameter.

3. Draw any circle and mark

(a) its centre

(b) a radius

(c) a diameter

(d) a sector

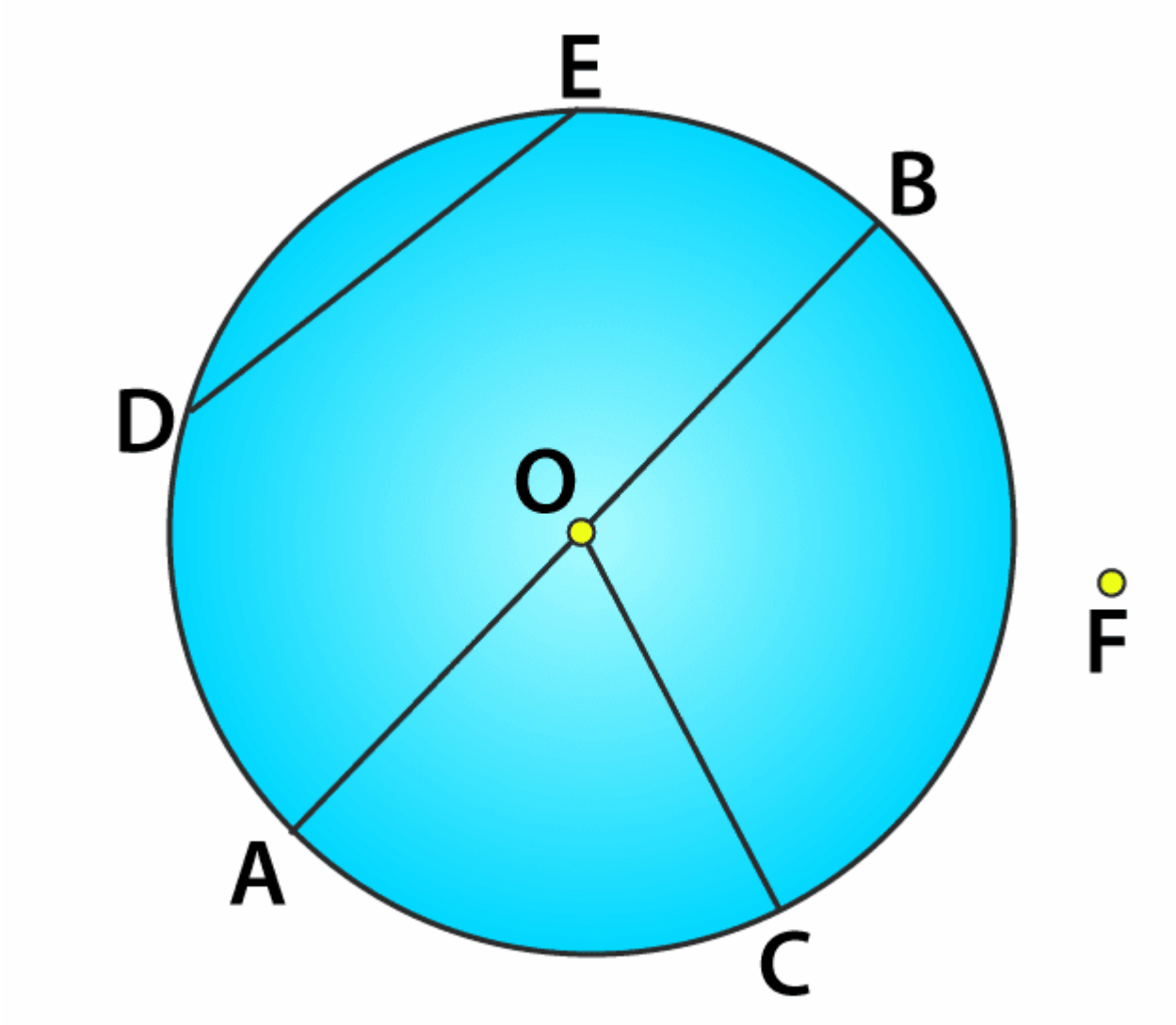
(e) a segment

(f) a point in its interior

(g) a point in its exterior

(h) an arc

Solutions:



(a) The centre of the circle is O.

(b) The radius is OC

(c) A diameter is $\overline{AB}$

(d) A sector is AOC

(e) A segment is DE

(f) A point in its interior is O

(g) A point in its exterior is F

(h) An arc is $\overset{\frown}{AC}$

4. Say true or false:

(a) Two diameters of a circle will necessarily intersect.

(b) The centre of a circle is always in its interior.

Solutions:

(a) True, two diameters will always intersect each other at the centre of the circle.

(b) True, the centre of the circle will always be in its interior.