Exercise 4.6
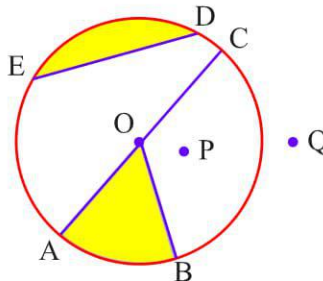
Question 1:
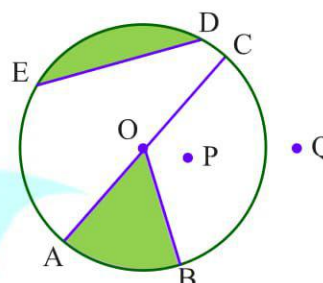
From the figure, identify:

     (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.

Answer 1:

     (a) O is the centre.
     (b) Three radii: OA, OB and OC
     (c) A diameter: AC
     (d) A chord: ED
     (e) Interior points: O, P
     (f) Exterior point: Q
     (g) A sector: OAB
     (h) A segment: ED

Question 2:

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

Answer 2:

     (a) Yes, every diameter of a circle is also a chord.
     (b) No, every chord of a circle is not a diameter.
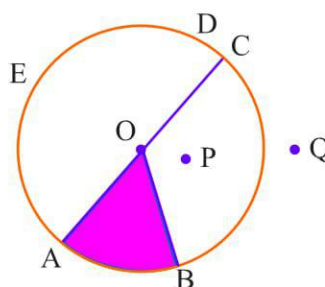
Question 3:

Draw any circle and mark:

     (a) Its centre.
     (b) A radius.
     (c) A diameter.
     (d) A sector.

Answer 3:

     (a) Its centre is O.
     (b) A radius is OB.
     (c) A diameter is AC.
     (d) A sector OAB.

Question 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.

Answer 4:

     (a) True   (b) True