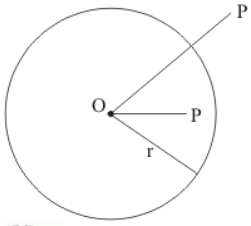
Circles Ex 16.1 Q1

Answer :

(i) All points lying inside or outside a circle are called interior points or exterior points.

Let the point P, Q and R are lie inside, outside or on the circle $C(O, r)$ in such a way as given in the figure



$OP < r$

$OQ > r$

$OR = r$

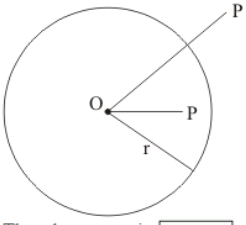
Thus the answer is interior or exterior

(ii) Given that the circles having the same centre and different radii are called

As we know that the circles having the same centre and different radii are called concentric circle.

Thus the answer is concentric circle

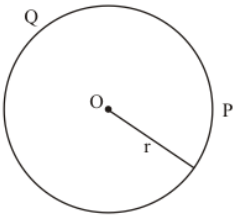
(iii) As we know that appoint whose distance from the centre of a circle is greater than its radius lies in the exterior of the circle as shown in the figure



Thus the answer is exterior

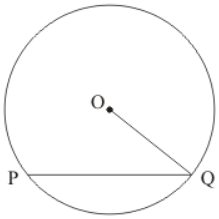
(iv) As we know that a continuous piece of a circle is an arc of the circle.

Let P and Q be points on the circle $C(O, r)$ then the piece $\overset{\frown}{PQ}$ and $\overset{\frown}{QP}$ are arcs of the circle $C(O, r)$

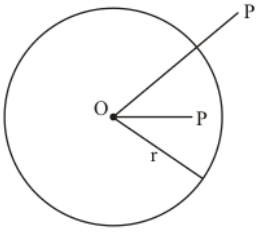


Thus the answer is arc.

(v) Given that the largest chord of the circle is a diameter of the circle.
As we know that a circle having so many diameters and a diameter of a given circle is one of the largest chords of the circle.
Thus the answer is diameter.
(vi) Given that an arc a semicircle when its ends are the ends of the diameter.
As we know that a diameter of a circle divides it into two equal parts which are arcs and each of two arcs is called a semicircle.
Thus the answer is semicircle.
(vii) As we know that segment of a circle is the region between arc and chord of the circle.
Let PQ be a chord of the circle $C(O, r)$, then PQ divides the region enclosed by the circle into two parts. Each of the part is called segment of the circle.



Thus the answer is chord.
(viii) As we know that a circle divides the plane on which it lies in three parts as shown in the figure.



Thus the answer is three.

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