Ex 10.1(solved exercise) Class 9 Maths Circle By-Ashish jha
Question 1
Fill in the blanks.
(i) The centre of a circle lies in $\qquad$ of the circle. (exterior/interior)
(ii) A point, whose distance from the centre of a circle is greater than its radius lies in $\qquad$ of the circle, (exterior/interior)
(iii) The longest chord of a circle is a $\qquad$ of the circle.
(iv) An arc is a $\qquad$ when its ends are the ends of a diameter.
(v) Segment of a circle is the region between an arc and $\qquad$ of the circle.
(vi) A circle divides the plane, on which it lies, in $\qquad$ parts.
Solution:
(i) interior
(ii) exterior
(iii) diameter
(iv) semicircle
(v) the chord
(vi) three

Question 2.
Write True or False. Give reason for your answers.
(i) Line segment joining the centre to any point on the circle is a , radius of the circle.
(ii) A circle has only finite number of equal chords.
(iii) If a circle is divided into three equal arcs, each is a major arc.
(iv) A chord of a circle, which is twice as long as its radius, is a diameter of the circle.
(v) Sector is the region between the chord and its corresponding arc.
(vi) A circle is a plane figure.

Solution:
(i) True [ $\because$ All points on the circle are equidistant from the centre]
(ii) False [ $\because$ A circle can have an infinite number of equal chords]
(iii) False [ $\because$ Each part will be less than a semicircle]
(iv) True [ $\because$ Diameter $=2 \times$ Radius]
(v) False [ $\because$ The region between the chord and its corresponding arc is a segment]
(vi) True [ $\because$ A circle is drawn on a plane]

Thanks.....

