

Chapter - 10.

Circle, Exercise - 10.1

1. Fill in the blanks:-

- (i) The centre of a circle lies in interior of the circle.
- (ii) A point, whose distance from the centre of a circle is greater than its radius lies in exterior of the circle.
- (iii) The longest chord of a circle is a diameter of the circle.
- (iv) An arc is a semi-circle when its ends are the ends of a diameter.
- (v) Segment of a circle is the region between an arc and chord of the circle.
- (vi) A circle divides the plane, on which it lies, in three.

2. Write True or False. Give reasons for your answers.

- (i) Line segment joining the centre to any point on the circle is a radius of the circle. True.
- (ii) A circle has only finite number of equal chords. False. because there are infinite number of equal chords in a circle.
- (iii) If a circle is divided into three equal arcs, each is a major arc. False. because each arc will make an angle of 120° at centre. But major arc makes angle greater than 180° at the centre.
- (iv) A chord of circle, which is twice as long as its radius, is a diameter of the circle. True.
- (v) Sector is the region between chord & its corresponding arc. False. Sector is the region which is formed between radii and arc.
- (vi) A circle is a plane figure. True.