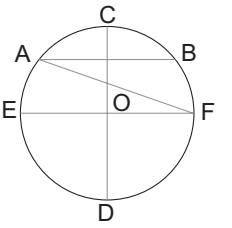
Worksheet

1. Choose the correct answer.
   a. The radius of a circle is 4.8 cm, the length of the diameter is
      i. 2.4 cm ii. 9.8 cm iii. 9.6 cm iv. 1.2 cm
   b. Three points of a circle P, Q and R are at a distance of 4.5 cm from a centre S. If for a point T, TS = 5.6 cm and for another point M, MS = 3.8 cm, then
      i. both T and M lie outside the circle.
      ii. T lies outside and M lie inside the circle.
      iii. both T and M lie inside the circle.
      iv. T lies inside and M lies outside the circle.
2. Fill in the blanks.
   a. The longest chord of a circle is _____ .
   b. A secant intersects a circle at _____ points.
   c. From a point on a circle, we can draw _____ tangent/tangents.
3. Match the following from the given figure.

I	II
a. Minor segment	i. EDF
b. Diameter	ii. AF
c. Semicircle	iii. ACB
d. Radius	iv. EF
e. Chord	v. OC



4. State whether true or false.
   a. If the longest chord of a circle measures 21 cm, then the diameter of the circle measures 10.5 cm.
   b. A chord of a circle is a line.
   c. If the radius of a circle is 2.7 cm, then every chord other than the diameter of the circle measures less than 5.4 cm.
   d. If there are two concentric circles, then the circle with smaller radius lies partly in the exterior of the circle with greater radius.
   e. A segment of a circle which contains the centre is a major segment.
5. Two concentric circles have the sum of their radii as 4 cm. If the radius of the inner circle is 1.5 cm, then find the radius of the outer circle.
6. Draw a circle with centre O and show a radius which passes through the point of contact of a tangent at point P.
7. Does a circle have more than one radius? Can they all be of different lengths ?

8. A circular frame of wood is fitted with two screws and a bar such that the bar is a chord of the circle. If the position of the screws is changed and they are brought close to each other then what will the bar represent when the screws are at the same place?

Answers to Worksheet

1.	a. iii	b. ii	2.	a. diameter	b. two	c. infinite			
3.	a. iii	b. iv	c. i	d. v	e. ii				
4.	a. False	b. False	c. True	d. False	e. True				
5.	2.5 cm	7. Yes. No, they cannot be of different lengths.							
8.	A tangent to the circular frame.								