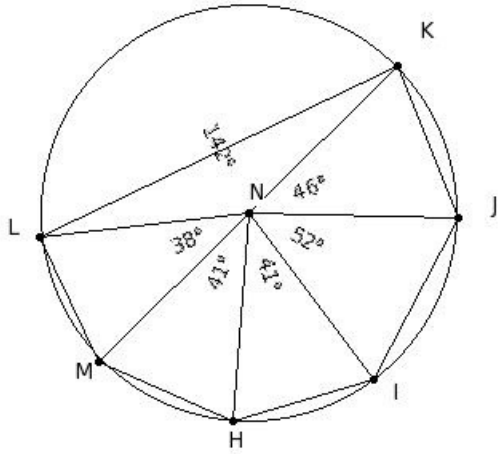
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Circles

Grade : ICSE Grade VII

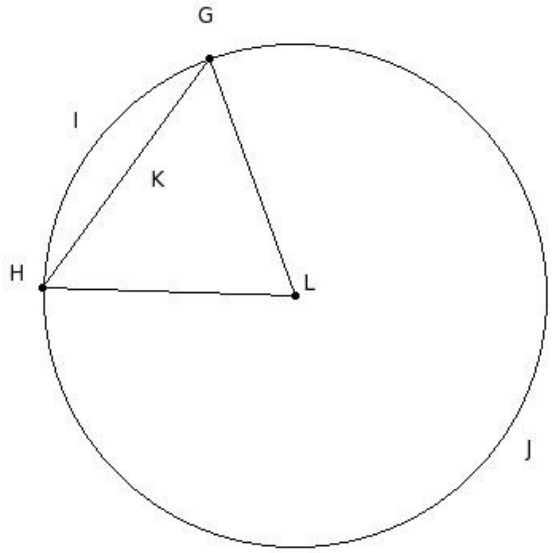
1. The radii of the circle are



(i) $\overline{HI}, \overline{IJ}, \overline{JK}, \overline{KL}, \overline{LM}, \overline{MH}$ (ii) $\overline{HI}, \overline{IJ}, \overline{JK}, \overline{KL}, \overline{LM}, \overline{MH}, \overline{NL}$ (iii) $\overline{IJ}, \overline{JK}, \overline{KL}, \overline{LM}, \overline{MH}$ (iv) $\overline{NH}, \overline{NI}, \overline{NJ}, \overline{NK}, \overline{NL}, \overline{NM}$

(v) $\overline{HI}, \overline{IJ}, \overline{JK}, \overline{KL}, \overline{LM}, \overline{MH}, \overline{KM}$

2. The major sector of the circle is



(i) LGJHL (ii) GIHKG (iii) GJHKG (iv) GJH (v) LGIHL

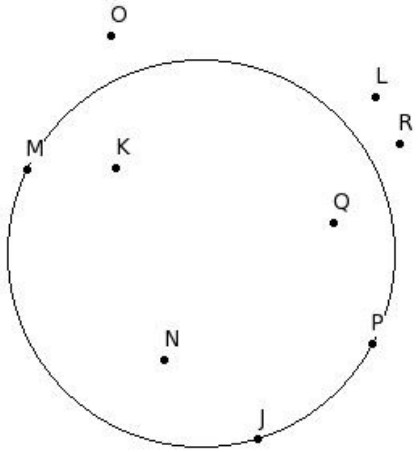
3. Two circles with equal radii are

(i) not similar (ii) only similar but not congruent (iii) congruent (iv) concentric

4. The distance around the circle is called

(i) circumference (ii) radius (iii) chord (iv) diameter (v) arc

5. Find the points belonging to the circle

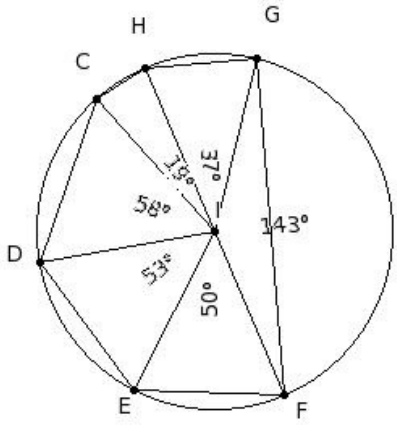


(i) {J,M,P} (ii) {K,N,Q} (iii) {J,P,N} (iv) {L,M,P} (v) {L,O,R}

6. The angle between a tangent to a circle and the radius drawn at the point of contact is

(i) 100° (ii) 105° (iii) 95° (iv) 90° (v) 120°

7. The centre of the circle is



(i) C (ii) E (iii) F (iv) I (v) D

8. Which of the following statements are true?

a) Equal length chords subtend equal angles at the centre of the circle.
b) The longest chord of the circle passes through the centre of the circle.
c) Equal length chords are equidistant from the centre of the circle.
d) No two chords bisects each other.
e) The farther the chord is from the centre, the larger the angle it subtends at the centre.

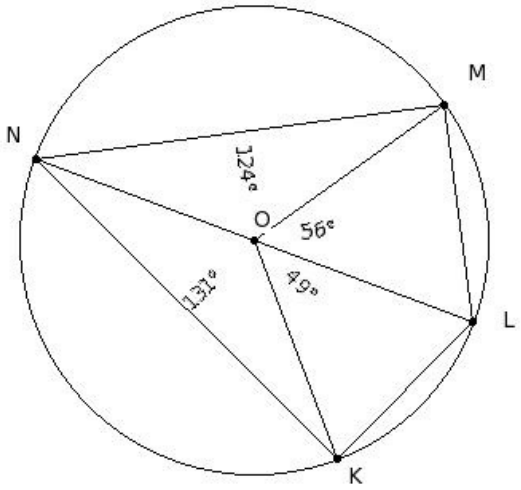
(i) {d,a,b} (ii) {e,b} (iii) {a,b,c} (iv) {d,e,c} (v) {d,a}

9. Which of the following statements are true?

a) The area enclosed by a chord and its major arc is called major segment.
b) The area enclosed by a chord and its minor arc is called minor segment.
c) A sector is the area enclosed by two radii and a chord.
d) A circle divides the plane on which it lies into three parts.
e) The diameter divides the circle into two unequal parts.

(i) {a,b,d} (ii) {e,b} (iii) {c,e,d} (iv) {c,a,b} (v) {c,a}

10. The chords of the circle are



(i) $\overline{LM}, \overline{MN}, \overline{NK}$ (ii) $\overline{OK}, \overline{OL}, \overline{OM}, \overline{ON}$ (iii) $\overline{KL}, \overline{LM}, \overline{MN}, \overline{NK}$ (iv) $\overline{KL}, \overline{LM}, \overline{MN}, \overline{NK}, \overline{OK}$

(v) $\overline{KL}, \overline{LM}, \overline{MN}, \overline{NK}, \overline{LN}$

11. Which of the following figures represent a tangent ?

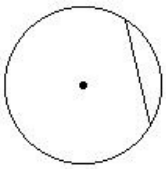


fig I

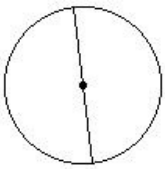


fig II

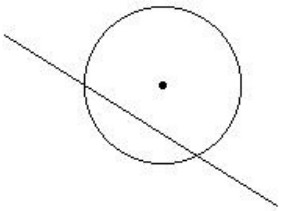


fig III

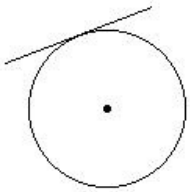


fig IV

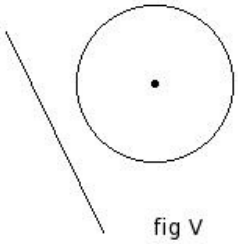
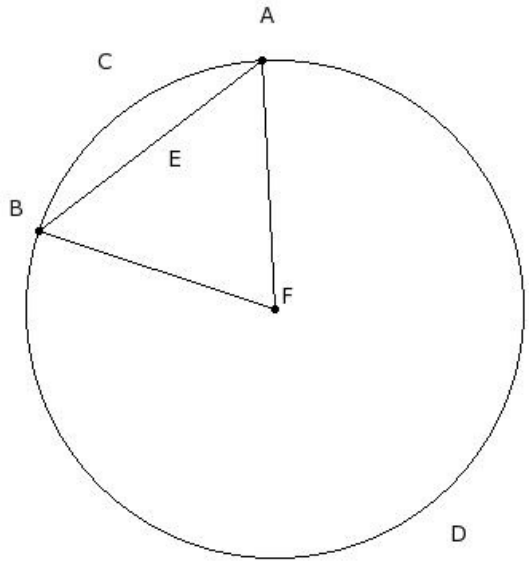


fig V

(i) fig I (ii) fig III (iii) fig II (iv) fig V (v) fig IV

12. The minor sector of the circle is



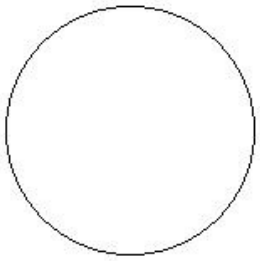
(i) ACBEA (ii) FADBF (iii) ADBEA (iv) FACBF (v) ACB

13. Which of the following statements are true?

a) A line can meet a circle atmost at two points.
b) Every circle has a unique diameter.
c) Each radius of a circle is also a chord of the circle.
d) A circle consists of an infinite number of points.
e) Every circle has a unique centre.

(i) {a,d,e} (ii) {b,c,e} (iii) {b,a,d} (iv) {c,d} (v) {b,a}

14. Identify the figure below



(i) angle (ii) heptagon (iii) octagon (iv) nonagon (v) circle

15. A chord that passes through the centre of the circle is called

(i) circumference (ii) radius (iii) major segment (iv) diameter (v) chord

16. A line segment joining any point on the circle with its centre is called

(i) centre (ii) circumference (iii) chord (iv) radius (v) segment

17. Which of the following statements are true?

a) An infinite number of diameters may be drawn for a circle.
b) Every circle has a unique diameter.
c) Two semi-circles of a circle together make the whole circle.
d) An infinite number of chords may be drawn for a circle.
e) One and only one tangent can be drawn to a circle from a point outside it.

(i) {b,a,c} (ii) {b,e,d} (iii) {a,c,d} (iv) {b,a} (v) {e,c}

18. Which of the following figures represent a diameter ?

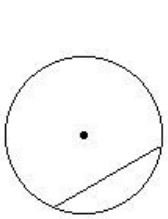


fig I

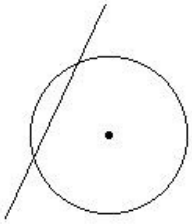


fig II

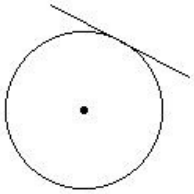


fig III

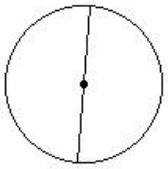


fig IV

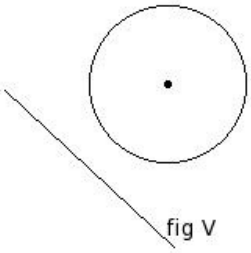


fig V

(i) fig V (ii) fig IV (iii) fig II (iv) fig III (v) fig I

19. Which of the following statements are true?

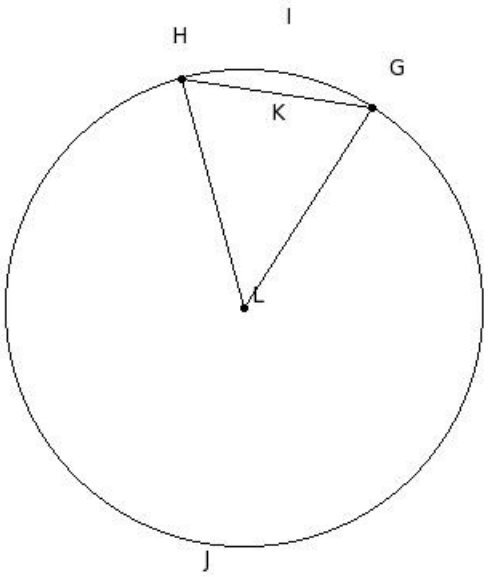
a) One and only one tangent can be drawn to a circle from a point outside it.
b) Diameter of a circle is a part of the semi-circle of the circle.
c) Every circle has a unique diameter.
d) A secant of a circle is a segment having its end points on the circle.
e) One and only one tangent can be drawn to pass through a point on a circle.

(i) {d,a,b} (ii) {a,b} (iii) {b,e} (iv) {c,e} (v) {c,e,b}

20. The segment of the circle containing the centre of the circle is called

(i) chord (ii) diameter (iii) segment (iv) centre (v) major segment

21. The major segment of the circle is



(i) GIHKG (ii) LGJHL (iii) LGIHL (iv) GIH (v) GJHKG

22. If the diameter of a circle is 84 cm, what is its radius?

(i) 40 cm (ii) 43 cm (iii) 42 cm (iv) 44 cm (v) 41 cm

23. Which of the following statements are true?

a) Atmost one tangent can be drawn through a point inside the circle.
b) The sides of a triangle can be tangents to a circle.
c) Only two tangents can be drawn from a point outside the circle.
d) Two tangents to a circle always intersect.
e) Only one tangent can be drawn through a point on a circle.

(i) {b,c,e} (ii) {d,c} (iii) {a,d,e} (iv) {a,b,c} (v) {a,b}

24. Half of a circle is called

(i) chord (ii) semi-circle (iii) segment (iv) diameter (v) circumference

25. The mid-point of the diameter of a circle is called

(i) circumference (ii) chord (iii) diameter (iv) centre (v) semi-circle

Assignment Key

1) (iv)	2) (i)	3) (iii)	4) (i)	5) (i)	6) (iv)
7) (iv)	8) (iii)	9) (i)	10) (iii)	11) (v)	12) (iv)
13) (i)	14) (v)	15) (iv)	16) (iv)	17) (iii)	18) (ii)
19) (iii)	20) (v)	21) (v)	22) (iii)	23) (i)	24) (ii)
25) (iv)					