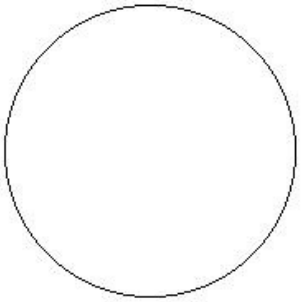
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Circle

Grade : ICSE Grade VIII

1. Identify the figure below



(i) triangle (ii) heptagon (iii) decagon (iv) nonagon (v) circle

2. Which of the following statements are true?

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

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

3. Half of a circle is called

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

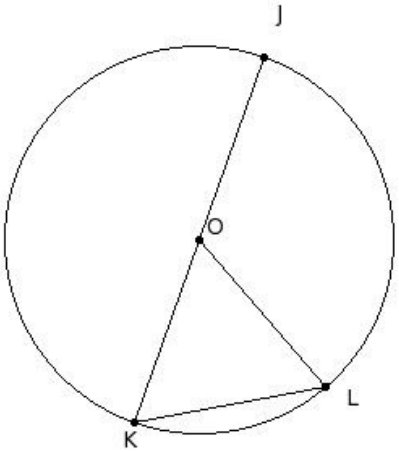
4. The distance around the circle is called

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

5. The perimeter of a circle is called

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

6. O is the centre of the circle and OL = KL. Find ∠KOL



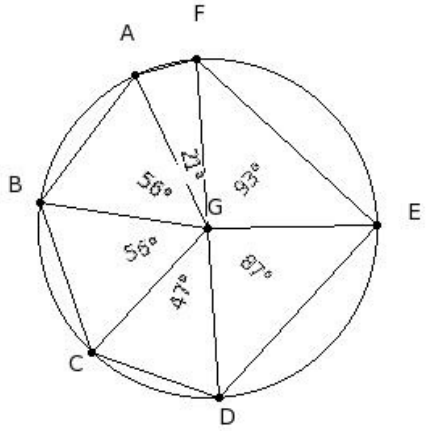
(i) 75° (ii) 60° (iii) 70° (iv) 90° (v) 65°

7. Which of the following statements are true?

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

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

8. The radii of the circle are



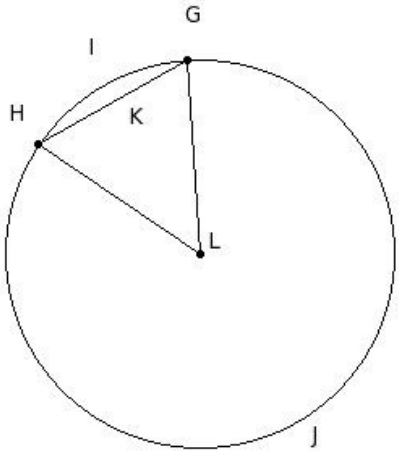
(i) $\overline{AB}, \overline{BC}, \overline{CD}, \overline{DE}, \overline{EF}, \overline{FA}$ (ii) $\overline{BC}, \overline{CD}, \overline{DE}, \overline{EF}, \overline{FA}$ (iii) $\overline{GA}, \overline{GB}, \overline{GC}, \overline{GD}, \overline{GE}, \overline{GF}$

(iv) $\overline{AB}, \overline{BC}, \overline{CD}, \overline{DE}, \overline{EF}, \overline{FA}, \overline{DF}$ (v) $\overline{AB}, \overline{BC}, \overline{CD}, \overline{DE}, \overline{EF}, \overline{FA}, \overline{GD}$

9. The angle subtended by the diameter at any point on the circle is

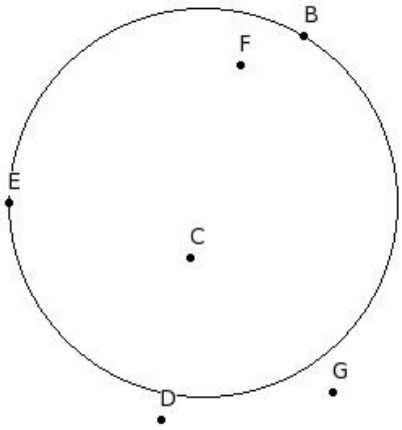
(i) 105° (ii) 90° (iii) 95° (iv) 100° (v) 120°

10. The minor segment of the circle is



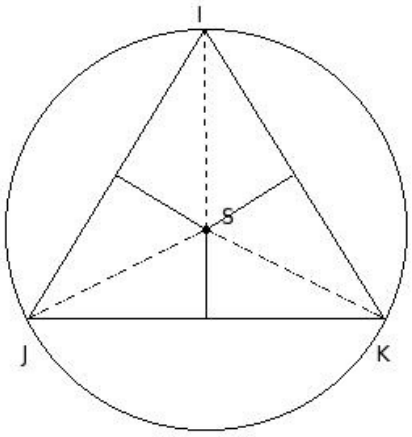
(i) GIH (ii) GJH (iii) GJHKG (iv) GIHKG (v) LGIHL

11. Find the points belonging to the inside of the circle



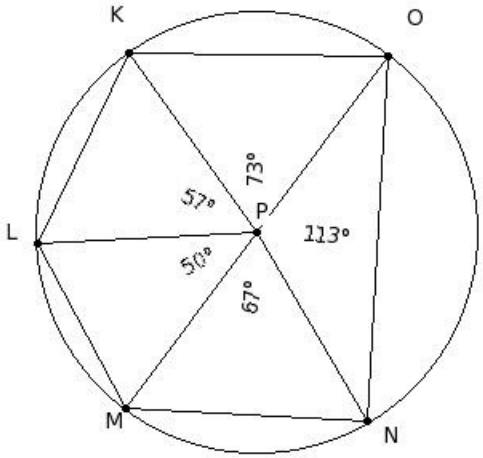
(i) {C,F} (ii) {C,D} (iii) {D,G} (iv) {F,E} (v) {B,E}

12. In the given triangle S is the circumcentre. If SI = 12.40 cm, find the circumference of the circumcircle



(i) 78.9 cm (ii) 75.9 cm (iii) 76.9 cm (iv) 79.9 cm (v) 77.9 cm

13. The diameters of the circle are



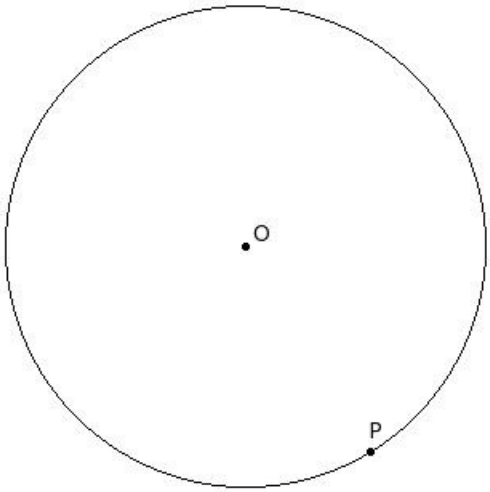
(i) $\overline{KL}, \overline{LM}, \overline{MN}, \overline{NO}, \overline{OK}$ (ii) $\overline{KL}, \overline{LM}, \overline{MN}, \overline{NO}, \overline{OK}, \overline{MO}$ (iii) $\overline{PK}, \overline{PL}, \overline{PM}, \overline{PN}, \overline{PO}, \overline{MO}$ (iv) $\overline{PK}, \overline{PL}, \overline{PM}, \overline{PN}, \overline{PO}$

(v) $\overline{MO}$

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

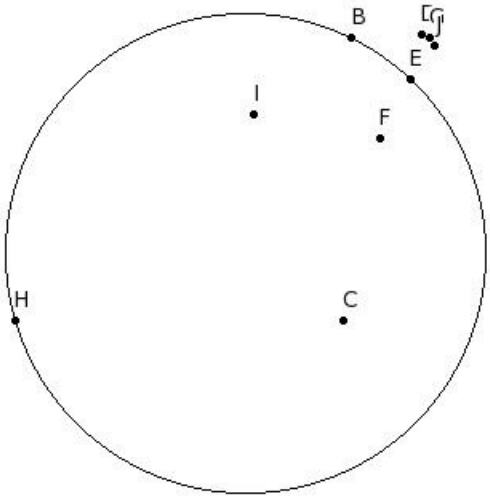
(i) centre (ii) chord (iii) semi-circle (iv) major segment (v) radius

15. 'O' is the centre of a circle of radius 'r' and 'P' is any point in its plane. If $\overline{OP}$ = r ,then P is



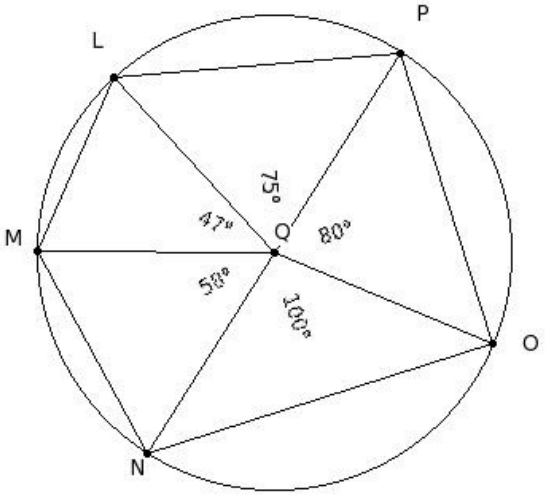
(i) outside the circle (ii) inside the circle (iii) on the circle

16. Find the points belonging to the outside of the circle



(i) {D,J,C} (ii) {B,E,H} (iii) {D,G,J} (iv) {E,G,J} (v) {C,F,I}

17. The chords of the circle are



(i) $\overline{LM}, \overline{MN}, \overline{NO}, \overline{OP}, \overline{PL}, \overline{QO}$ (ii) $\overline{LM}, \overline{MN}, \overline{NO}, \overline{OP}, \overline{PL}$ (iii) $\overline{LM}, \overline{MN}, \overline{NO}, \overline{OP}, \overline{PL}, \overline{NP}$ (iv) $\overline{MN}, \overline{NO}, \overline{OP}, \overline{PL}$

(v) $\overline{QL}, \overline{QM}, \overline{QN}, \overline{QO}, \overline{QP}$

18. In triangle BCD, if a circle is drawn with CD as diameter and if it passes through B it is a

(i) equilateral triangle (ii) obtuse angled triangle (iii) acute angled triangle (iv) right angle triangle

19. Which of the following figures represent a tangent ?

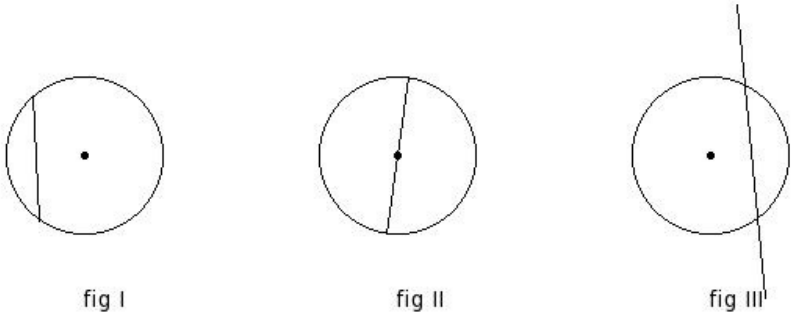


fig I fig II fig III

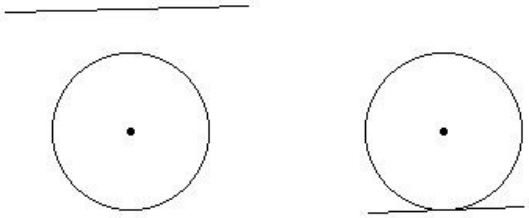


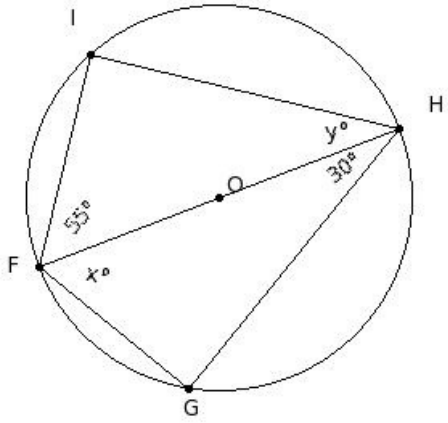
fig IV fig V

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

20. If the radius of a circle is 49 cm, what is its diameter?

(i) 100 cm (ii) 99 cm (iii) 98 cm (iv) 97 cm (v) 96 cm

21. O is the centre of the circle. If ∠FHG = 30° and ∠HFI = 55°, find x°, y°



(i) 65°, 80° (ii) 45°, 70° (iii) 25°, 60° (iv) 35°, 60° (v) 60°, 35°

22. Which of the following figures represent a chord ?

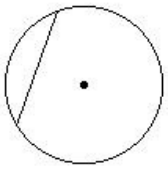


fig I

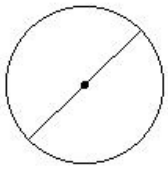


fig II

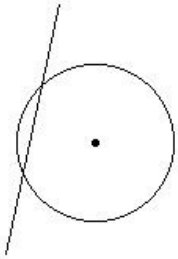


fig III

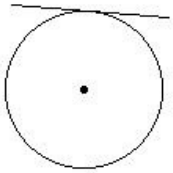


fig IV

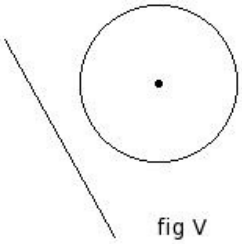


fig V

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

23. Which of the following statements are true?

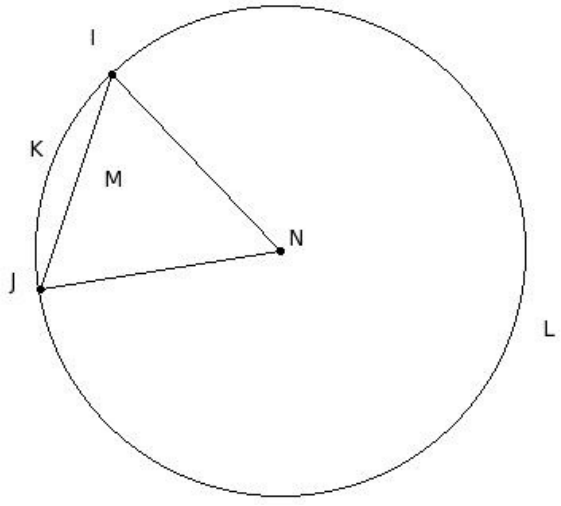
a) Every circle has a unique diameter.
b) One and only one tangent can be drawn to a circle from a point outside it.
c) Diameter of a circle is a part of the semi-circle of the circle.
d) A secant of a circle is a segment having its end points on the circle.
e) One and only one tangent can be drawn to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

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

24. A chord of a circle divides the whole circular region into two parts, each called a

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

25. The major segment of the circle is



(i) IKJMI (ii) IKJ (iii) ILJMI (iv) NIKJN (v) ILJ

Assignment Key

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