EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Circle

Grade : ICSE Grade VIII

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

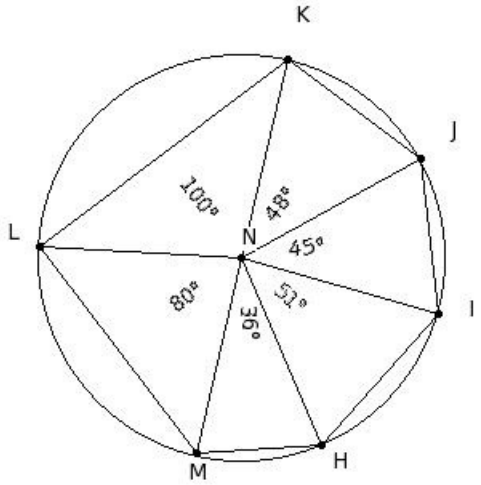
   (i) radius (ii) chord (iii) major segment (iv) segment (v) circumference

2. Which of the following statements are true?

   a) Every circle has a unique centre.
   b) A line can meet a circle atmost at two points.
   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 diameter.

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

3. The chords of the circle are



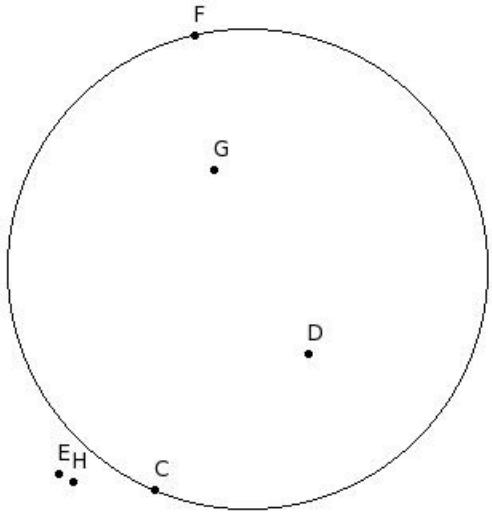
   (i) $\overline{IJ}, \overline{JK}, \overline{KL}, \overline{LM}, \overline{MH}$ (ii) $\overline{HI}, \overline{IJ}, \overline{JK}, \overline{KL}, \overline{LM}, \overline{MH}$ (iii) $\overline{HI}, \overline{IJ}, \overline{JK}, \overline{KL}, \overline{LM}, \overline{MH}, \overline{KM}$ (iv) $\overline{NH},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

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

4. If the radius of a circle is 42 cm, what is its diameter?

   (i) 82 cm (ii) 84 cm (iii) 83 cm (iv) 85 cm (v) 86 cm

5. Find the points belonging to the circle



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

6. Which of the following figures represent a chord ?

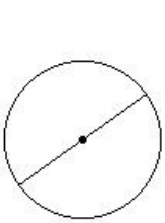


fig I

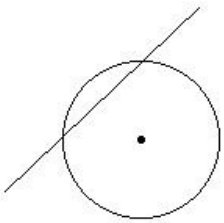


fig II

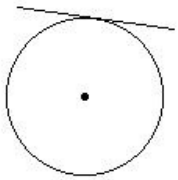


fig III

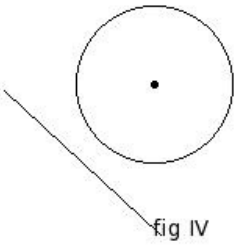


fig IV

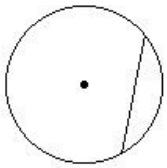
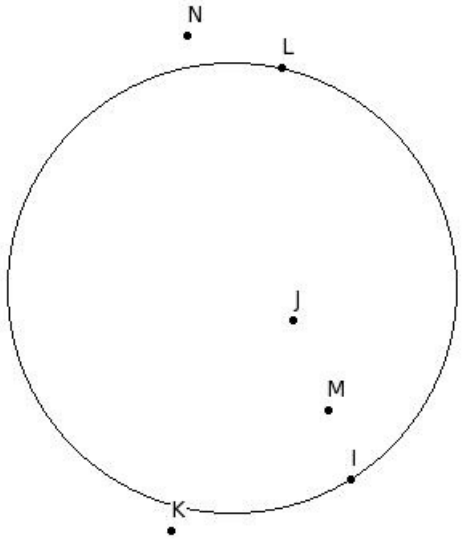


fig V

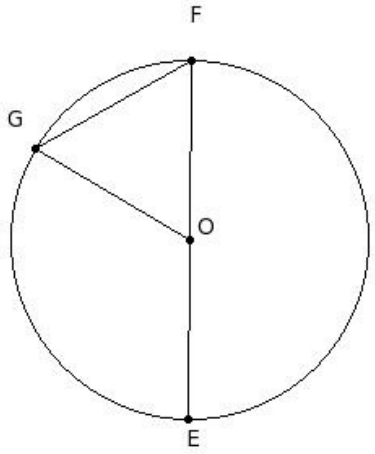
(i) fig IV (ii) fig I (iii) fig III (iv) fig V (v) fig II

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



(i) {I,L} (ii) {K,N} (iii) {N,J} (iv) {L,M} (v) {J,M}

8. O is the centre of the circle and OG = FG. Find ∠FOG

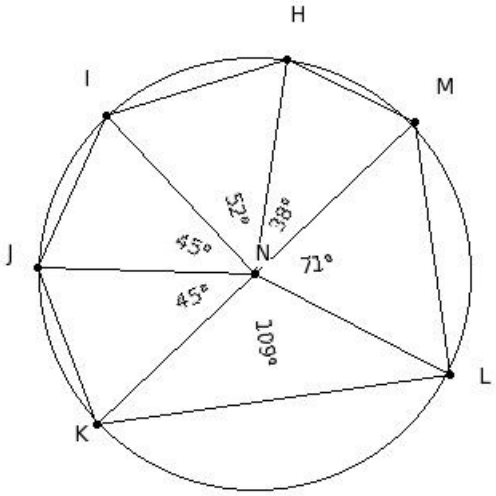


(i) 90° (ii) 75° (iii) 60° (iv) 65° (v) 70°

9. Two circles with equal radii are

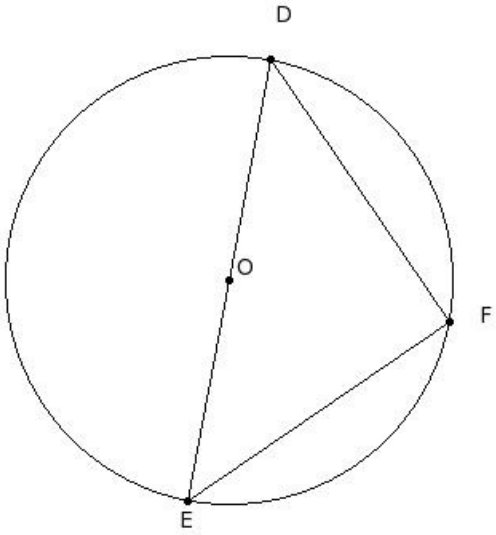
(i) not similar (ii) concentric (iii) only similar but not congruent (iv) congruent

10. The centre of the circle is



(i) I (ii) N (iii) K (iv) J (v) H

11. In the given figure DF & EF are equal length chords of the circle. Find ∠FDE



(i) 55° (ii) 60° (iii) 75° (iv) 45° (v) 50°

12. Half of a circle is called

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

13. If the radius of the circumcircle is half the length of a side of the triangle, then the triangle is

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

14. A line segment having its end points on the circle is called a

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

15. Which of the following figures represent a tangent ?

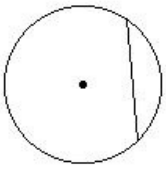


fig I

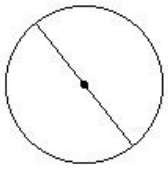


fig II

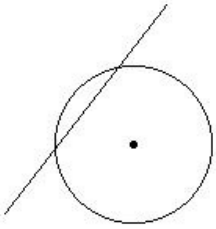


fig III

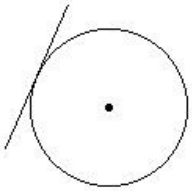


fig IV

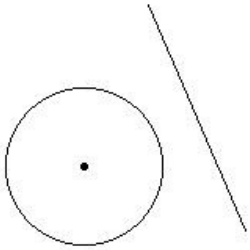
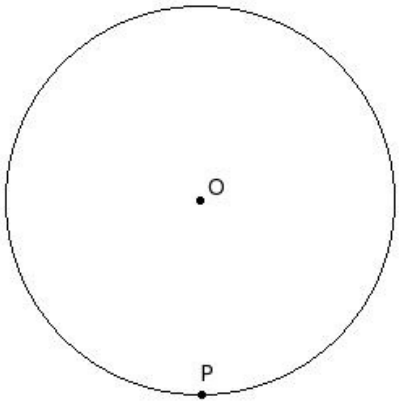


fig V

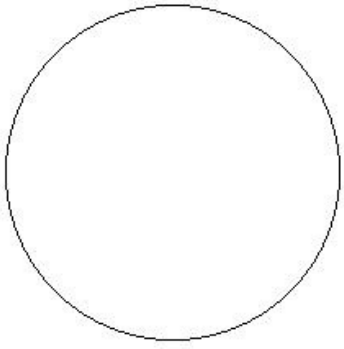
(i) fig V (ii) fig IV (iii) fig I (iv) fig III (v) fig II

16. '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



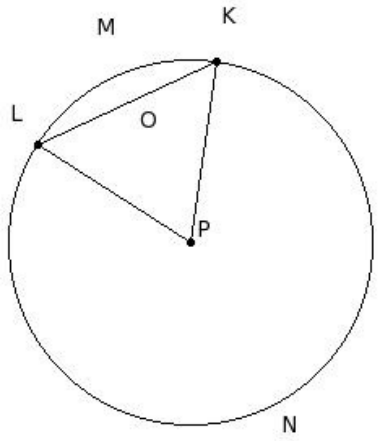
(i) on the circle (ii) outside the circle (iii) inside the circle

17. Identify the figure below



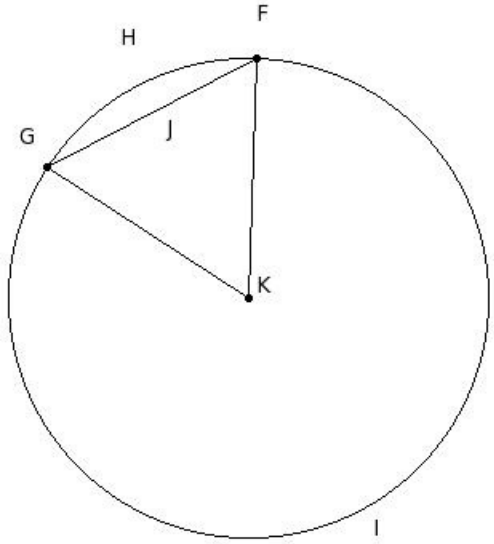
(i) decagon (ii) quadrilateral (iii) heptagon (iv) circle (v) angle

18. The major arc of the circle is



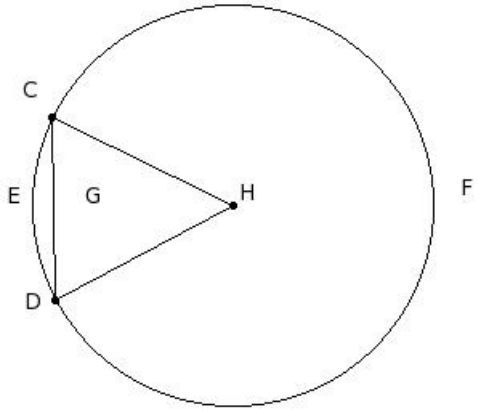
(i) KNL (ii) KMLOK (iii) KNLOK (iv) PKNLP (v) KML

19. The minor sector of the circle is



(i) FHGJF (ii) FIG (iii) FHG (iv) KFHGK (v) FIGJF

20. The major segment of the circle is

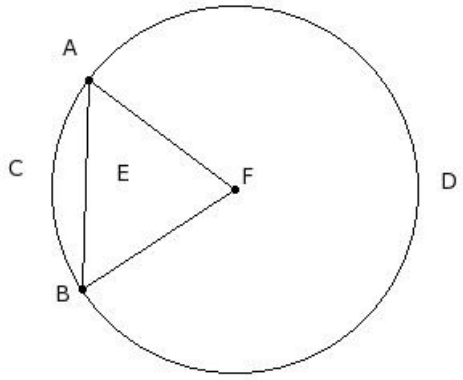


(i) CFD (ii) CED (iii) CEDGC (iv) HCFDH (v) CFDGC

21. An arc subtends 90° in its alternate segment. The arc is

(i) semi-circle (ii) major arc (iii) major segment (iv) quadrant (v) minor arc

22. The minor segment of the circle is



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

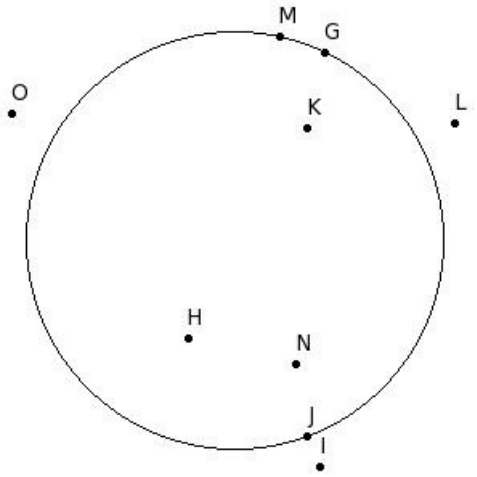
23. The mid-point of the diameter of a circle is called

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

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

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

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



(i) {I,M,O} (ii) {K,I,O} (iii) {I,L,O} (iv) {G,J,M} (v) {H,K,N}

Assignment Key

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