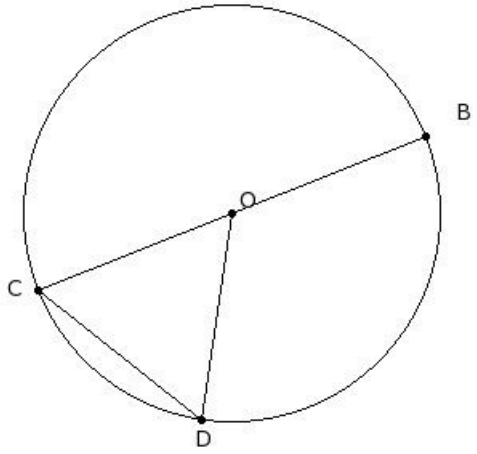
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Circle

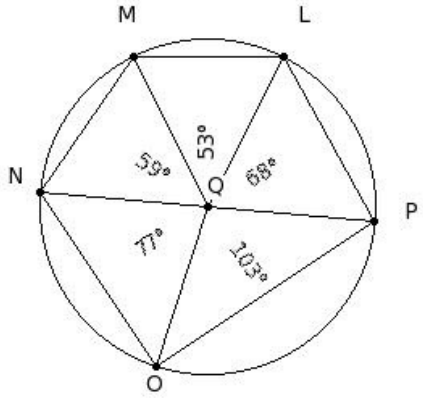
Grade : ICSE Grade VIII

1. O is the centre of the circle and OD = CD. Find ∠COD



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

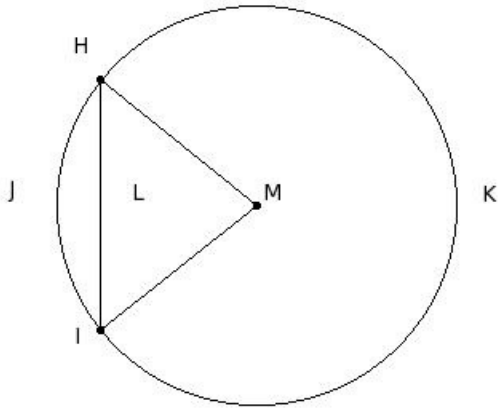
2. The diameters of the circle are



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

(v) $\overline{LM}, \overline{MN}, \overline{NO}, \overline{OP}, \overline{PL}$

3. The minor sector of the circle is

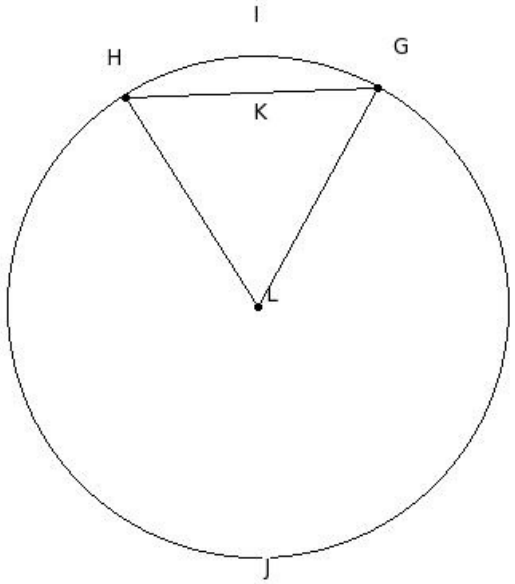


(i) HJI (ii) MHJIM (iii) HKILH (iv) HKI (v) HJILH

4. The perimeter of a circle is called

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

5. The major segment of the circle is



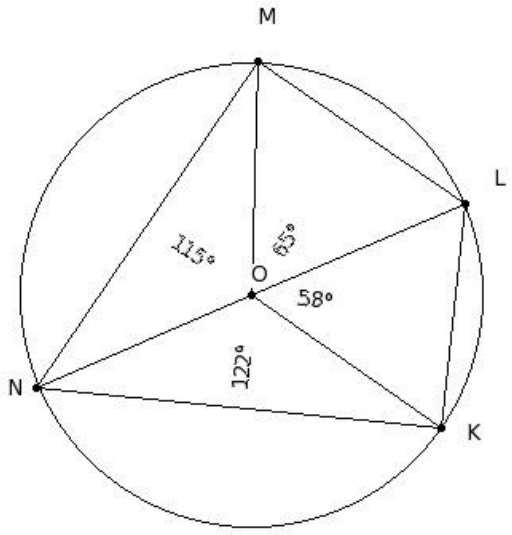
(i) GIHKG (ii) GJH (iii) GJHKG (iv) GIH (v) LGIHL

6. Which of the following statements are true?

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

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

7. The radii of the circle are



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

8. Which of the following figures represent a tangent ?

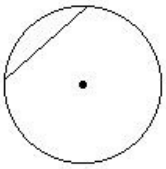


fig I

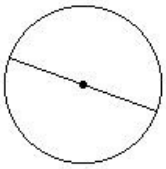


fig II

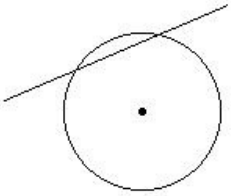


fig III

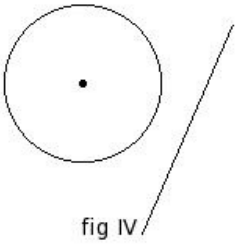


fig IV

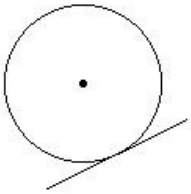
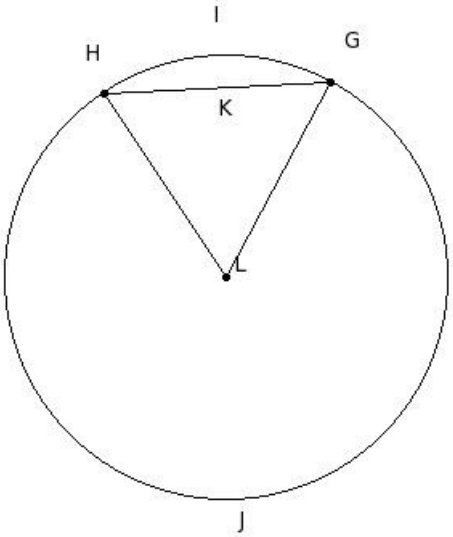


fig V

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

9. The major sector of the circle is



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

10. If the diameter of a circle is 196 cm, what is its radius?

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

11. Which of the following figures represent a secant ?

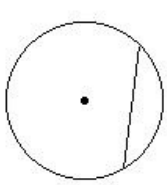


fig I

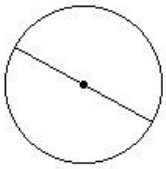


fig II

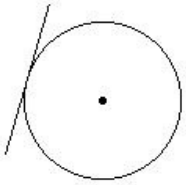


fig III

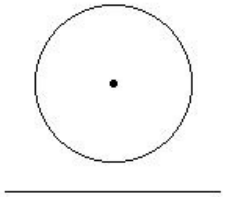


fig IV

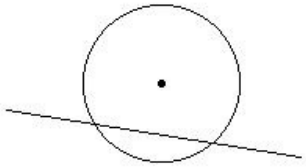
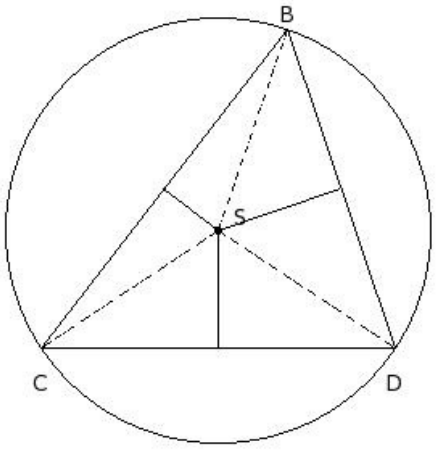


fig V

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

12. In the given triangle S is the circumcentre. If SB = 13.20 cm, find the circumference of the circumcircle

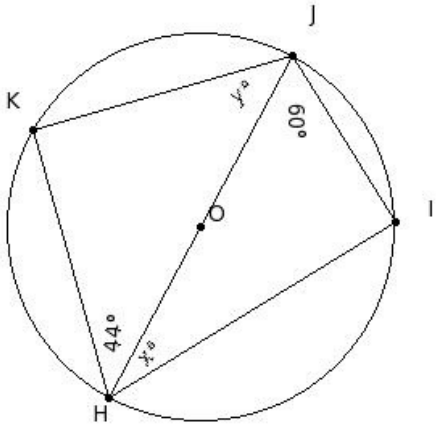


(i) 82.0 cm (ii) 84.0 cm (iii) 85.0 cm (iv) 83.0 cm (v) 81.0 cm

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

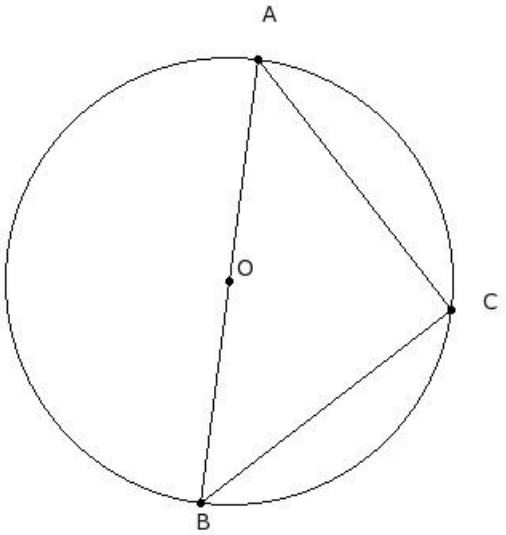
(i) radius (ii) semi-circle (iii) chord (iv) major segment (v) circumference

14. O is the centre of the circle. If ∠HJI = 60° and ∠JHK = 44°, find x°, y°



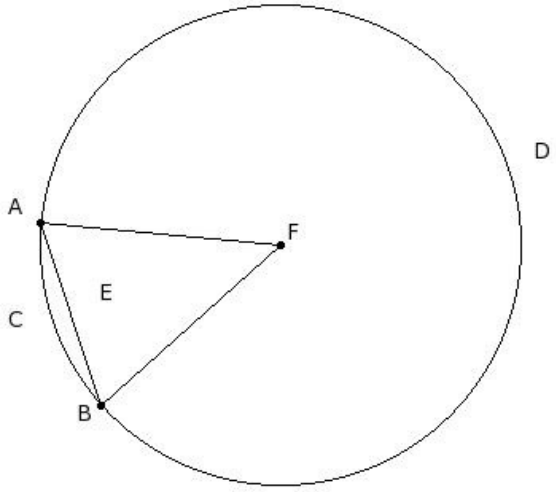
(i) 46°, 30° (ii) 56°, 40° (iii) 76°, 50° (iv) 36°, 30° (v) 30°, 46°

15. In the given figure AC & BC are equal length chords of the circle. Find ∠CAB



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

16. The minor segment of the circle is



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

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

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

18. Which of the following statements are true?

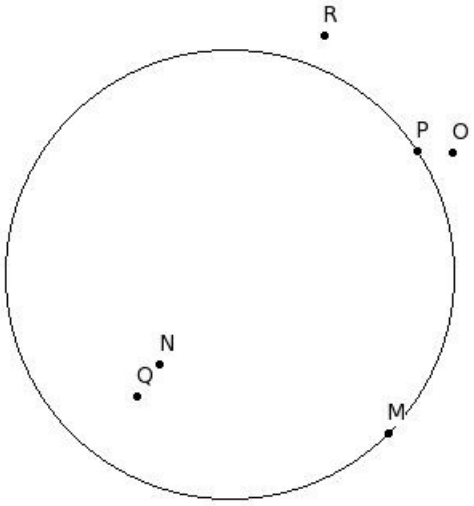
a) One and only one tangent can be drawn to pass through a point on a circle.
b) One and only one tangent can be drawn to a circle from a point outside it.
c) A secant of a circle is a segment having its end points on the circle.
d) Diameter of a circle is a part of the semi-circle of the circle.
e)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

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

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

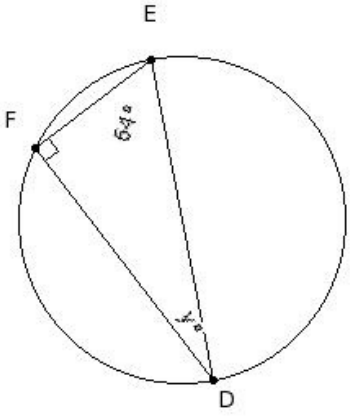
(i) major segment (ii) segment (iii) circumference (iv) semi-circle (v) centre

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



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

21. Find the missing angle in the following figure?



(i) 41° (ii) 26° (iii) 36° (iv) 56° (v) 31°

22. Half of a circle is called

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

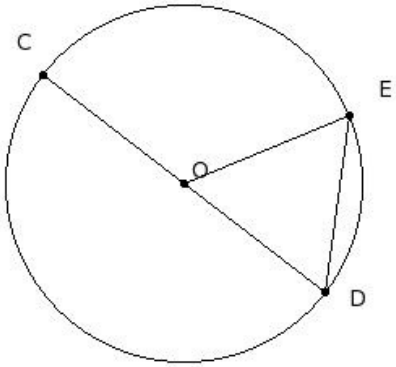
23. In triangle ABC, if a circle is drawn with BC as diameter and if it passes through A it is a

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

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

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

25. O is the centre of the circle and OE = DE. Find ∠EOC



(i) 120° (ii) 135° (iii) 130° (iv) 125° (v) 150°

Assignment Key

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