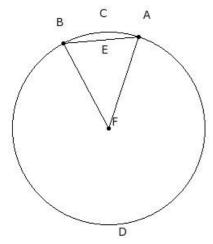
Name: Chapter Based Worksheet

Chapter : Circle

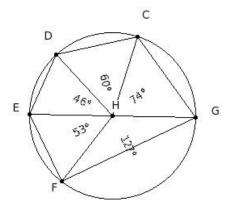
Grade: ICSE Grade VIII

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- 1. A chord of a circle divides the whole circular region into two parts, each called a
  - (i) major segment (ii) radius (iii) semi-circle (iv) segment (v) circumference
- 2. 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) Every circle has a unique centre.
  - d) Each radius of a circle is also a chord of the circle.
  - e) A circle consists of an infinite number of points.
  - (i)  $\{b,d,e\}$  (ii)  $\{b,a,c\}$  (iii)  $\{d,c\}$  (iv)  $\{a,c,e\}$  (v)  $\{b,a\}$
- 3. The minor segment of the circle is

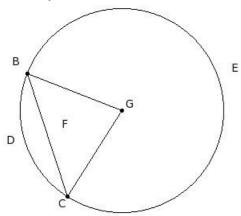


- (i) ACB (ii) ADB (iii) FACBF (iv) ADBEA (v) ACBEA
- 4. The chords of the circle are

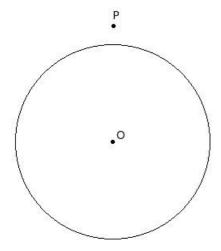


- (i)  $\overline{CD}$ ,  $\overline{DE}$ ,  $\overline{FF}$ ,  $\overline{FG}$ ,  $\overline{GC}$ ,  $\overline{HF}$  (ii)  $\overline{DE}$ ,  $\overline{EF}$ ,  $\overline{FG}$ ,  $\overline{GC}$  (iii)  $\overline{CD}$ ,  $\overline{DE}$ ,  $\overline{EF}$ ,  $\overline{FG}$ ,  $\overline{GC}$  (iv)  $\overline{CD}$ ,  $\overline{DE}$ ,  $\overline{EF}$ ,  $\overline{FG}$ ,  $\overline{GC}$ ,  $\overline{EG}$
- (v)  $\overline{HC}$ ,  $\overline{HD}$ ,  $\overline{HE}$ ,  $\overline{HF}$ ,  $\overline{HG}$

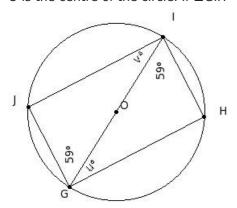
5. The major arc of the circle is



- (i) BDCFB (ii) GBECG (iii) BECFB (iv) GBDCG (v) BEC
- 6. The angle subtended by the diameter at any point on the circle is
  - (i)  $105^{\circ}$  (ii)  $95^{\circ}$  (iii)  $90^{\circ}$  (iv)  $100^{\circ}$  (v)  $120^{\circ}$
- 7. '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

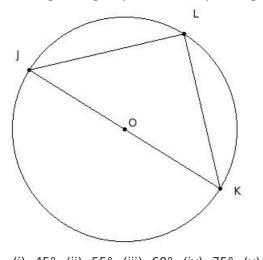


- (i) on the circle (ii) inside the circle (iii) outside the circle
- 8. O is the centre of the circle. If  $\angle$ GIH = 59° and  $\angle$ IGJ = 59°, find u°, v°

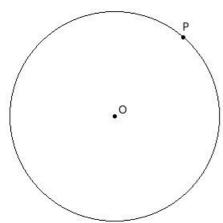


(i)  $41^\circ$ ,  $41^\circ$  (ii)  $21^\circ$ ,  $31^\circ$  (iii)  $61^\circ$ ,  $51^\circ$  (iv)  $31^\circ$ ,  $31^\circ$ 

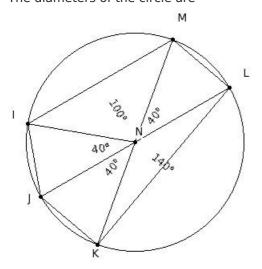
9. In the given figure JL & KL are equal length chords of the circle. Find ∠LJK



- (i) 45° (ii) 55° (iii) 60° (iv) 75° (v) 50°
- 10. '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

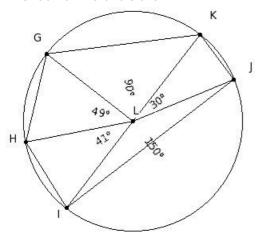


- (i) outside the circle (ii) inside the circle (iii) on the circle
- 11. The diameters of the circle are



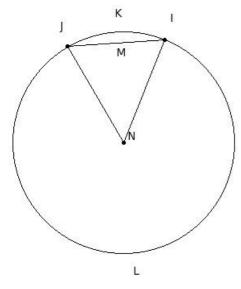
- $(i) \quad \overline{JL}, \overline{KM} \quad (ii) \quad \overline{NI}, \overline{NJ}, \overline{NK}, \overline{NL}, \overline{NM} \quad (iii) \quad \overline{IJ}, \overline{JK}, \overline{KL}, \overline{LM}, \overline{MI} \quad (iv) \quad \overline{IJ}, \overline{JK}, \overline{KL}, \overline{LM}, \overline{MI}, \overline{JL} \quad (v) \quad \overline{NI}, \overline{NJ}, \overline{NK}, \overline{NL}, \overline{NM}, \overline{JL}$
- 12. Two circles with equal radii are
  - (i) only similar but not congruent (ii) not similar (iii) congruent (iv) concentric

## 13. The radii of the circle are

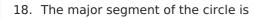


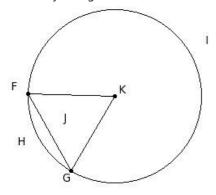
- $(i) \ \overline{GH}, \overline{HI}, \overline{IJ}, \overline{JK}, \overline{KG}, \overline{IK} \ (ii) \ \overline{GH}, \overline{HI}, \overline{IJ}, \overline{JK}, \overline{KG}, \overline{LI} \ (iii) \ \overline{HI}, \overline{IJ}, \overline{JK}, \overline{KG} \ (iv) \ \overline{GH}, \overline{HI}, \overline{IJ}, \overline{JK}, \overline{KG}$
- (v)  $\overline{LG}$ ,  $\overline{LH}$ ,  $\overline{LI}$ ,  $\overline{LJ}$ ,  $\overline{LK}$
- 14. Half of a circle is called
  - (i) segment (ii) circumference (iii) diameter (iv) semi-circle (v) radius
- 15. The distance around the circle is called
  - (i) arc (ii) diameter (iii) chord (iv) circumference (v) radius

## 16. The major sector of the circle is



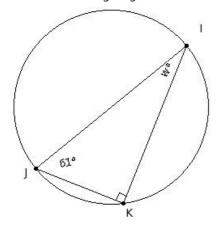
- (i) NIKJN (ii) ILJ (iii) NILJN (iv) ILJMI (v) IKJMI
- 17. If the diameter of a circle is 126 cm, what is its radius?
  - (i) 64 cm (ii) 62 cm (iii) 65 cm (iv) 61 cm (v) 63 cm





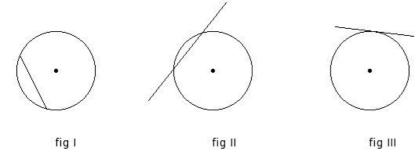
(i) FHG (ii) KFHGK (iii) FIGJF (iv) FIG (v) FHGJF

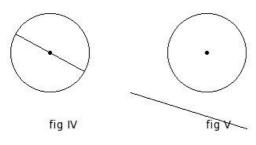
## 19. Find the missing angle in the following figure?



(i)  $39^{\circ}$  (ii)  $29^{\circ}$  (iii)  $34^{\circ}$  (iv)  $44^{\circ}$  (v)  $59^{\circ}$ 

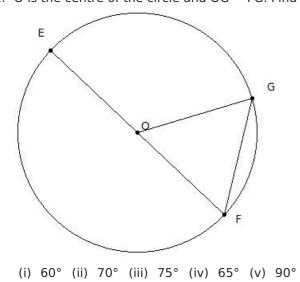
## 20. Which of the following figures represent a diameter?





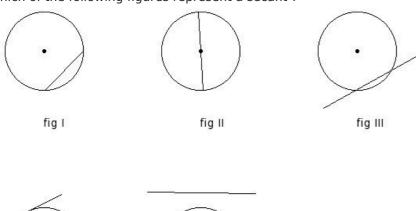
(i) fig III (ii) fig V (iii) fig II (iv) fig I (v) fig IV

21. O is the centre of the circle and OG = FG. Find  $\angle FOG$ 



- 22. A line segment having its end points on the circle is called a
  - (i) chord (ii) radius (iii) segment (iv) semi-circle (v) circumference
- 23. The perimeter of a circle is called
  - (i) chord (ii) radius (iii) centre (iv) major segment (v) circumference
- 24. A line segment joining any point on the circle with its centre is called
  - (i) chord (ii) radius (iii) major segment (iv) circumference (v) diameter

25. Which of the following figures represent a secant?



 $\label{eq:figV} \text{fig V} \\ \text{(i) fig III (ii) fig V (iii) fig IV (iv) fig II (v) fig I}$ 

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

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