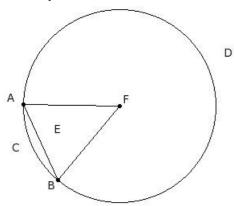
Name: Chapter Based Worksheet

Chapter: Circle

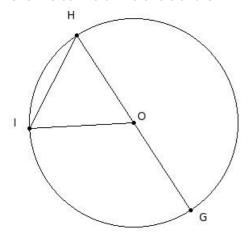
Grade: ICSE Grade VIII

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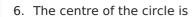
## 1. The major sector of the circle is

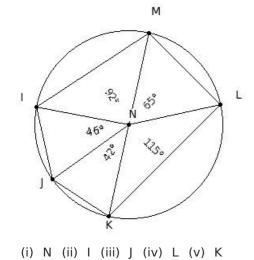


- (i) ADBEA (ii) FADBF (iii) ADB (iv) FACBF (v) ACBEA
- 2. A chord that passes through the centre of the circle is called
  - (i) circumference (ii) radius (iii) major segment (iv) diameter (v) semi-circle
- 3. The perimeter of a circle is called
  - (i) circumference (ii) chord (iii) segment (iv) semi-circle (v) centre
- 4. 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
- 5. O is the centre of the circle and OI = HI. Find  $\angle HOI$

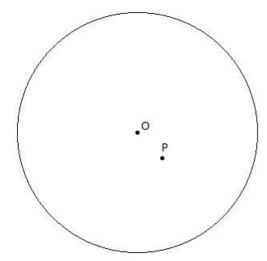


(i) 65° (ii) 90° (iii) 75° (iv) 60° (v) 70°

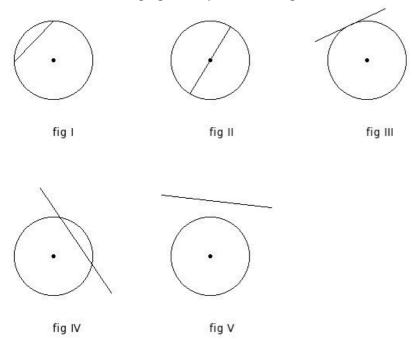




7. 'O' is the centre of a circle of radius 'r' and 'P' is any point in its plane. If  $\overline{OP}$  < r,then P is



- (i) outside the circle (ii) on the circle (iii) inside the circle
- 8. Which of the following figures represent a tangent?



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

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

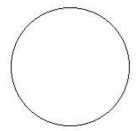
(i) chord (ii) centre (iii) segment (iv) semi-circle (v) diameter

## 10. The chords of the circle are

7290 R A2° M

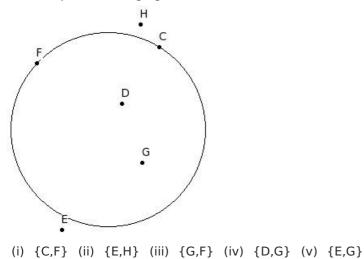
- (i)  $\overline{RL}$ ,  $\overline{RM}$ ,  $\overline{RN}$ ,  $\overline{RO}$ ,  $\overline{RP}$ ,  $\overline{RQ}$  (ii)  $\overline{LM}$ ,  $\overline{MN}$ ,  $\overline{NO}$ ,  $\overline{OP}$ ,  $\overline{PQ}$ ,  $\overline{QL}$ ,  $\overline{RO}$  (iii)  $\overline{MN}$ ,  $\overline{NO}$ ,  $\overline{OP}$ ,  $\overline{PQ}$ ,  $\overline{QL}$
- (iv)  $\overline{LM}$ ,  $\overline{MN}$ ,  $\overline{NO}$ ,  $\overline{OP}$ ,  $\overline{PQ}$ ,  $\overline{QL}$  (v)  $\overline{LM}$ ,  $\overline{MN}$ ,  $\overline{NO}$ ,  $\overline{OP}$ ,  $\overline{PQ}$ ,  $\overline{QL}$ ,  $\overline{OQ}$

## 11. Identify the figure below

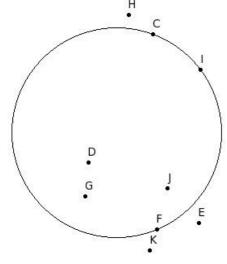


- (i) octagon (ii) pentagon (iii) angle (iv) quadrilateral (v) circle
- 12. If the radius of a circle is 70 cm, what is its diameter?
  - (i) 140 cm (ii) 141 cm (iii) 139 cm (iv) 138 cm (v) 142 cm
- 13. Which of the following statements are true?
  - a) One and only one tangent can be drawn to a circle from a point outside it.
  - b) Two semi-circles of a circle together make the whole circle.
  - c) An infinite number of chords may be drawn for a circle.
  - d) Every circle has a unique diameter.
  - e) An infinite number of diameters may be drawn for a circle.
  - (i)  $\{a,b,c\}$  (ii)  $\{a,b\}$  (iii)  $\{d,c\}$  (iv)  $\{b,c,e\}$  (v)  $\{a,d,e\}$
- 14. The angle subtended by the diameter at any point on the circle is
  - (i)  $95^{\circ}$  (ii)  $105^{\circ}$  (iii)  $90^{\circ}$  (iv)  $120^{\circ}$  (v)  $100^{\circ}$

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

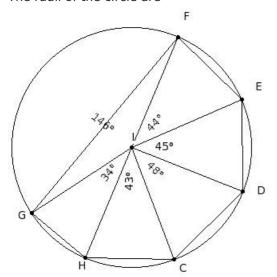


16. Find the points belonging to the circle



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

17. The radii of the circle are



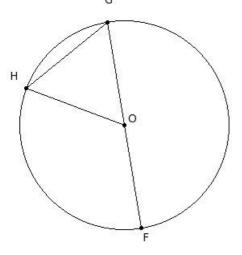
(i)  $\overline{\text{CD}}$ ,  $\overline{\text{DE}}$ ,  $\overline{\text{FF}}$ ,  $\overline{\text{FG}}$ ,  $\overline{\text{GH}}$ ,  $\overline{\text{HC}}$ ,  $\overline{\text{FH}}$  (ii)  $\overline{\text{CD}}$ ,  $\overline{\text{DE}}$ ,  $\overline{\text{EF}}$ ,  $\overline{\text{FG}}$ ,  $\overline{\text{GH}}$ ,  $\overline{\text{HC}}$  (iii)  $\overline{\text{IC}}$ ,  $\overline{\text{ID}}$ ,  $\overline{\text{IE}}$ ,  $\overline{\text{IF}}$ ,  $\overline{\text{IG}}$ ,  $\overline{\text{IH}}$ 

(iv)  $\overline{CD}$ ,  $\overline{DE}$ ,  $\overline{EF}$ ,  $\overline{FG}$ ,  $\overline{GH}$ ,  $\overline{HC}$ ,  $\overline{IG}$  (v)  $\overline{DE}$ ,  $\overline{EF}$ ,  $\overline{FG}$ ,  $\overline{GH}$ ,  $\overline{HC}$ 

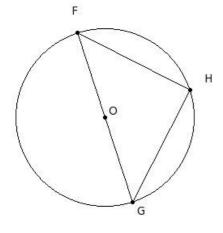
18. In triangle EFG, if a circle is drawn with FG as diameter and if it passes through E it is a

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

- 19. A line segment having its end points on the circle is called a
  - (i) segment (ii) diameter (iii) centre (iv) chord (v) semi-circle
- 20. O is the centre of the circle and OH = GH. Find  $\angle HOF$



- (i) 135° (ii) 120° (iii) 150° (iv) 130° (v) 125°
- 21. In the given figure FH & GH are equal length chords of the circle. Find  $\angle$ HFG



- (i) 60° (ii) 55° (iii) 75° (iv) 50° (v) 45°
- 22. If the diameter of a circle is 126 cm, what is its radius?
  - (i) 63 cm (ii) 62 cm (iii) 64 cm (iv) 65 cm (v) 61 cm
- 23. Half of a circle is called
  - (i) semi-circle (ii) centre (iii) segment (iv) circumference (v) major segment
- 24. A line segment joining any point on the circle with its centre is called
  - (i) radius (ii) semi-circle (iii) major segment (iv) chord (v) segment
- 25. Two circles with equal radii are
  - (i) congruent (ii) only similar but not congruent (iii) not similar (iv) concentric

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

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