EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Circles

Grade : ICSE Grade VII

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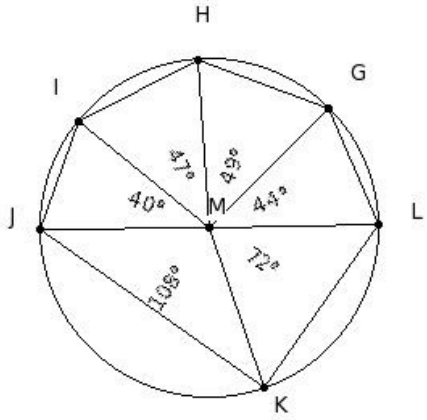
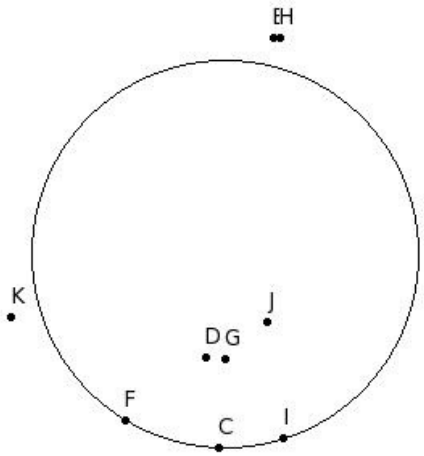
1. The diameters of the circle are



(i) $\overline{JL}$ (ii) $\overline{GH}, \overline{HI}, \overline{IJ}, \overline{JK}, \overline{KL}, \overline{LG}$ (iii) $\overline{GH}, \overline{HI}, \overline{IJ}, \overline{JK}, \overline{KL}, \overline{LG}, \overline{JL}$ (iv) $\overline{MG}, \overline{MH}, \overline{MI}, \overline{MJ}, \overline{MK}, \overline{ML}, \overline{JL}$

(v) $\overline{MG}, \overline{MH}, \overline{MI}, \overline{MJ}, \overline{MK}, \overline{ML}$

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



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

3. Which of the following statements are true?

a) Atmost one circle can be drawn passing through three non-collinear points.
b) Only one circle can be drawn passing through two points.
c) Only one circle can be drawn with a centre.
d) Exactly two tangents can be drawn parallel to a secant.
e) Infinite circles can be drawn passing through three collinear points.

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

4. Which of the following statements are true?

a) A radius is a limiting case of a diameter.
b) A diameter is a limiting case of a chord.
c) A tangent is the limiting case of a secant.
d) A secant has two end points.
e) A secant and a chord are same.

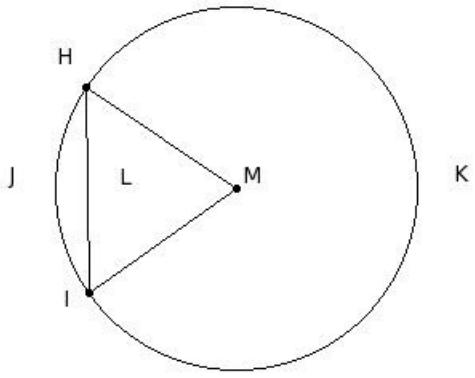
(i) {a,b} (ii) {d,c,b} (iii) {e,a,b} (iv) {b,c} (v) {d,c}

5. Which of the following statements are true?

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

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

6. The minor arc of the circle is

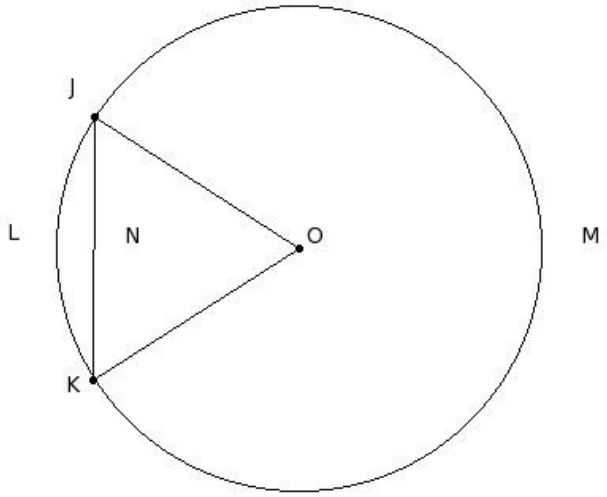


(i) HJILH (ii) MHJIM (iii) HKILH (iv) MHKIM (v) HJI

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

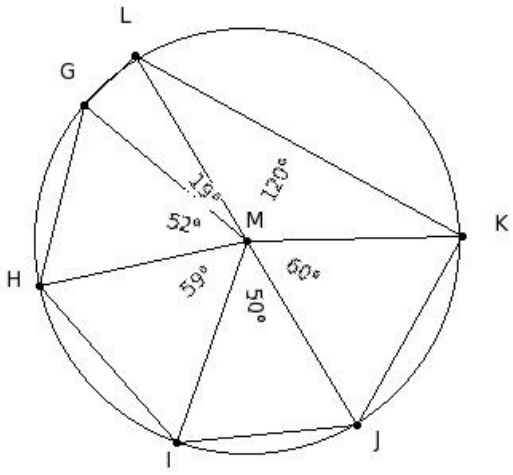
(i) segment (ii) circumference (iii) diameter (iv) major segment (v) chord

8. The minor sector of the circle is



(i) OJMKO (ii) JMKNJ (iii) JLKNJ (iv) JLK (v) OJLKO

9. The centre of the circle is

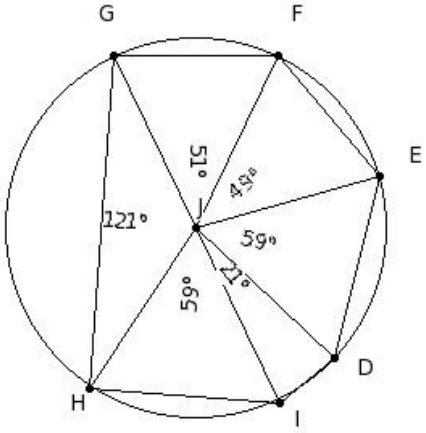


(i) H (ii) G (iii) J (iv) I (v) M

10. The segment of the circle containing the centre of the circle is called

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

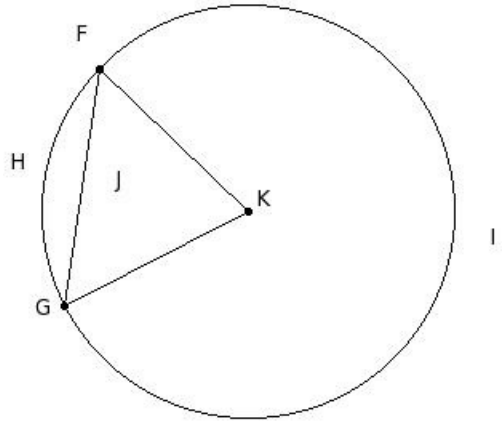
11. The chords of the circle are



(i) $\overline{DE}, \overline{EF}, \overline{FG}, \overline{GH}, \overline{HI}, \overline{ID}$ (ii) $\overline{DE}, \overline{EF}, \overline{FG}, \overline{GH}, \overline{HI}, \overline{ID}, \overline{GI}$ (iii) $\overline{EF}, \overline{FG}, \overline{GH}, \overline{HI}, \overline{ID}$ (iv) $\overline{JD}, \overline{JE}, \overline{JF}, \overline{JG}, \overline{JH}, \overline{JI}$

(v) $\overline{DE}, \overline{EF}, \overline{FG}, \overline{GH}, \overline{HI}, \overline{ID}, \overline{JF}$

12. The major segment of the circle is



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

13. Which of the following statements are true?

a) Two chords bisect each other.
b) The diameter divides the circle into two unequal parts.
c) The midpoint of any diameter of a circle is its centre.
d) The longest of all chords of a circle is called diameter.
e) A sector is the area enclosed by two radii and a chord.

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

14. Which of the following figures represent a chord ?

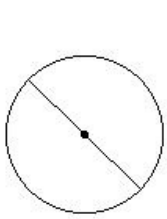


fig I

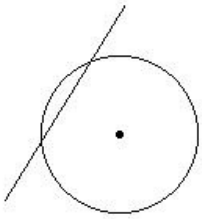


fig II

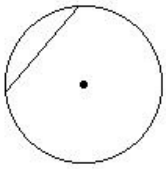


fig III

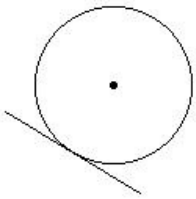


fig IV

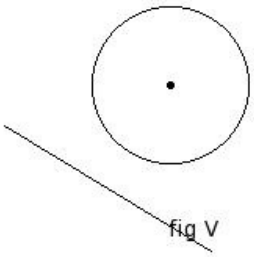
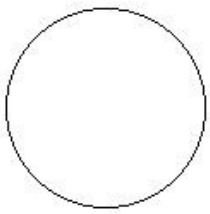


fig V

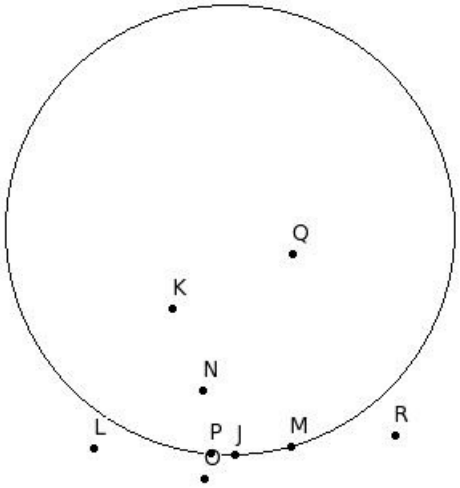
(i) fig V (ii) fig IV (iii) fig III (iv) fig I (v) fig II

15. Identify the figure below



(i) hexagon (ii) circle (iii) nonagon (iv) angle (v) quadrilateral

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



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

17. Which of the following statements are true?

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

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

18. Which of the following figures represent a diameter ?

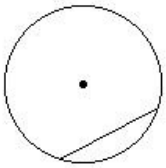


fig I

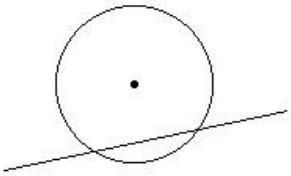


fig II

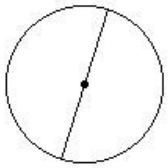


fig III

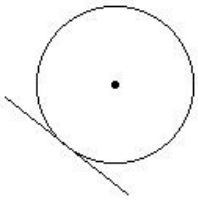


fig IV

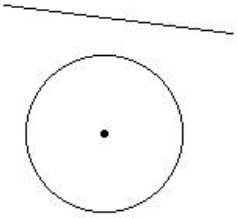


fig V

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

19. Which of the following statements are true?

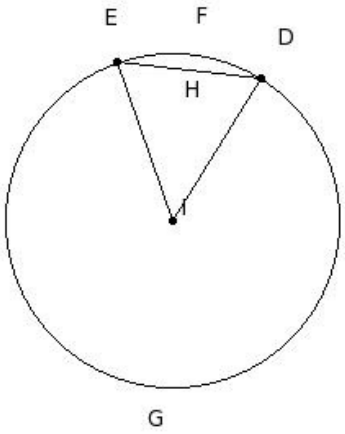
a) The diameter divides the circle into two unequal parts.
b) The area enclosed by a chord and its major arc is called major segment.
c) A circle divides the plane on which it lies into three parts.
d) A sector is the area enclosed by two radii and a chord.
e) The area enclosed by a chord and its minor arc is called minor segment.

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

20. The distance around the circle is called

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

21. The major sector of the circle is



(i) IDFEI (ii) DGE (iii) IDGEI (iv) DFEHD (v) DGEHD

22. If the diameter of a circle is 70 cm, what is its radius?

(i) 34 cm (ii) 36 cm (iii) 33 cm (iv) 35 cm (v) 37 cm

23. Which of the following figures represent a secant ?

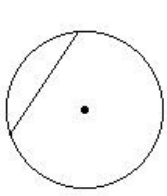


fig I

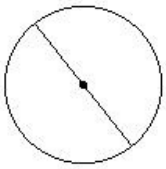


fig II

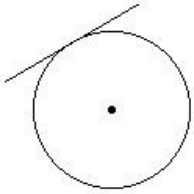


fig III

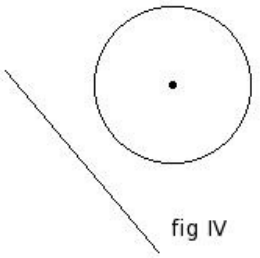


fig IV

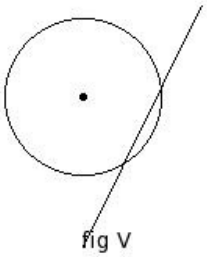


fig V

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

24. Which of the following statements are true?

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

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

25. The angle between a tangent to a circle and the radius drawn at the point of contact is

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

Assignment Key

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

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