Name : Circle Basics

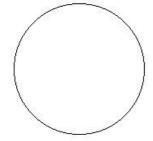
Chapter : Circles

Grade: ICSE Grade VII

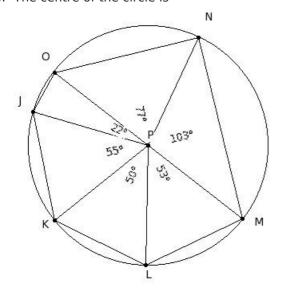
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- 1. The mid-point of the diameter of a circle is called
 - (i) chord (ii) major segment (iii) semi-circle (iv) centre (v) circumference
- 2. A line segment joining any point on the circle with its centre is called
 - (i) diameter (ii) centre (iii) semi-circle (iv) segment (v) radius
- 3. A line segment having its end points on the circle is called a
 - (i) circumference (ii) diameter (iii) centre (iv) major segment (v) chord
- 4. A chord that passes through the centre of the circle is called
 - (i) diameter (ii) chord (iii) circumference (iv) major segment (v) centre
- 5. A chord of a circle divides the whole circular region into two parts, each called a
 - (i) major segment (ii) segment (iii) circumference (iv) diameter (v) radius
- 6. The segment of the circle containing the centre of the circle is called
 - (i) diameter (ii) major segment (iii) circumference (iv) segment (v) radius
- 7. Half of a circle is called
 - (i) semi-circle (ii) segment (iii) major segment (iv) circumference (v) radius
- 8. The perimeter of a circle is called
 - (i) segment (ii) chord (iii) radius (iv) circumference (v) centre
- 9. Which of the following statements are true?
 - a) Every circle has a unique centre.
 - b) Each radius of a circle is also a chord of the circle.
 - c) A circle consists of an infinite number of points.
 - d) Every circle has a unique diameter.
 - e) A line can meet a circle atmost at two points.
 - (i) {d,c} (ii) {b,a} (iii) {b,a,c} (iv) {b,d,e} (v) {a,c,e}
- 10. Which of the following statements are true?
 - a) Two semi-circles of a circle together make the whole circle.
 - b) An infinite number of diameters may be drawn for a circle.
 - c) An infinite number of chords may be drawn for a circle.
 - d) One and only one tangent can be drawn to a circle from a point outside it.
 - e) Every circle has a unique diameter.
 - (i) {e,b} (ii) {d,e,c} (iii) {d,a,b} (iv) {d,a} (v) {a,b,c}

- 11. Which of the following statements are true?
 - a) Diameter of a circle is a part of the semi-circle of the circle.
 - b) A secant of a circle is a segment having its end points on the circle.
 - c) One and only one tangent can be drawn to pass through a point on a circle.
 - d) Every circle has a unique diameter.
 - e) One and only one tangent can be drawn to a circle from a point outside it.
 - (i) {d,c} (ii) {a,c} (iii) {d,c,a} (iv) {e,b,a} (v) {b,a}
- 12. If the radius of a circle is 84 cm, what is its diameter?
 - (i) 167 cm (ii) 168 cm (iii) 170 cm (iv) 166 cm (v) 169 cm
- 13. Two circles with equal radii are
 - (i) only similar but not congruent (ii) concentric (iii) not similar (iv) congruent
- 14. The angle between a tangent to a circle and the radius drawn at the point of contact is
 - (i) 120° (ii) 95° (iii) 100° (iv) 90° (v) 105°
- 15. Identify the figure below

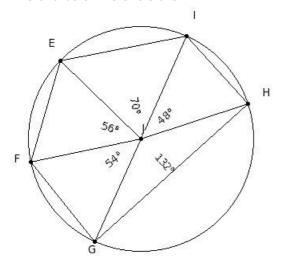


- (i) circle (ii) triangle (iii) nonagon (iv) quadrilateral (v) octagon
- 16. The centre of the circle is



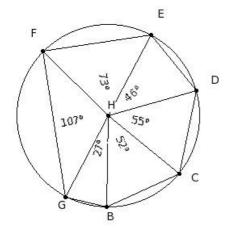
(i) P (ii) K (iii) J (iv) L (v) M

17. The chords of the circle are



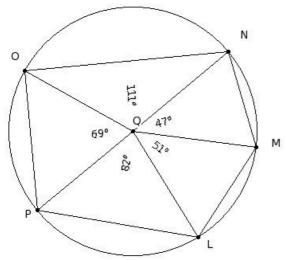
- $(i) \ \overline{JE}, \overline{JF}, \overline{JG}, \overline{JH}, \overline{JI} \ (ii) \ \overline{EF}, \overline{FG}, \overline{GH}, \overline{HI}, \overline{IE}, \overline{JF} \ (iii) \ \overline{FG}, \overline{GH}, \overline{HI}, \overline{IE}, \overline{GI}$
- (v) \overline{EF} , \overline{FG} , \overline{GH} , \overline{HI} , \overline{IE}

18. The diameters of the circle are



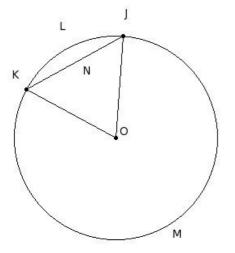
- (i) \overline{BC} , \overline{CD} , \overline{DE} , \overline{EF} , \overline{FG} , \overline{GB} (ii) \overline{BC} , \overline{CD} , \overline{DE} , \overline{EF} , \overline{FG} , \overline{GB} , \overline{EG} (iii) \overline{HB} , \overline{HC} , \overline{HD} , \overline{HE} , \overline{HF} , \overline{HG} , \overline{EG} (iv) \overline{EG}
- (v) \overline{HB} , \overline{HC} , \overline{HD} , \overline{HE} , \overline{HF} , \overline{HG}

19. The radii of the circle are



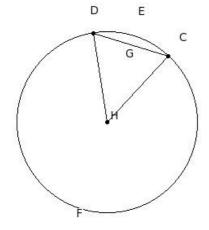
- $(i) \quad \overline{LM} \,, \overline{MN} \,, \overline{NO} \,, \overline{OP} \,, \overline{PL} \quad (ii) \quad \overline{LM} \,, \overline{MN} \,, \overline{NO} \,, \overline{OP} \,, \overline{PL} \,, \overline{QO} \quad (iii) \quad \overline{LM} \,, \overline{MN} \,, \overline{NO} \,, \overline{OP}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

20. The minor sector of the circle is



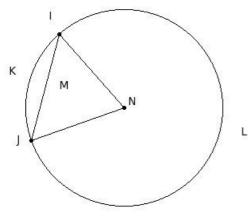
(i) JLKNJ (ii) JLK (iii) JMKNJ (iv) OJLKO (v) JMK

21. The major sector of the circle is



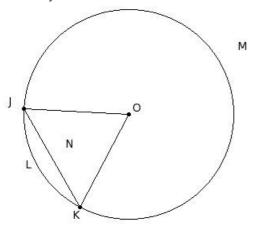
(i) HCFDH (ii) CED (iii) CEDGC (iv) CFD (v) HCEDH

22. The minor arc of the circle is

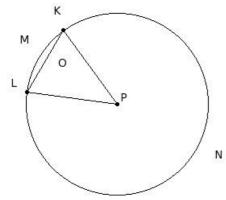


(i) NIKJN (ii) IKJ (iii) IKJMI (iv) ILJ (v) NILJN

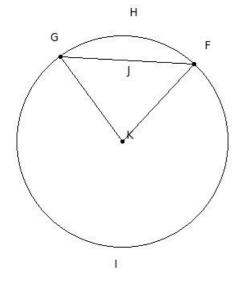
23. The major arc of the circle is



- (i) JMKNJ (ii) JMK (iii) JLKNJ (iv) OJLKO (v) OJMKO
- 24. The minor segment of the circle is

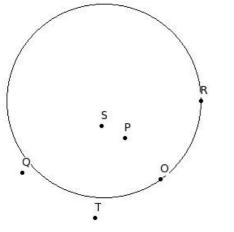


- (i) KMLOK (ii) KML (iii) PKNLP (iv) KNL (v) PKMLP
- 25. The major segment of the circle is

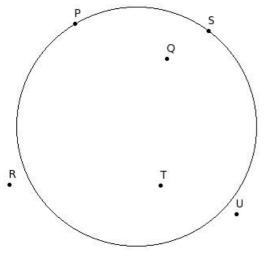


- (i) FIG (ii) FHGJF (iii) FHG (iv) FIGJF (v) KFHGK
- 26. The distance around the circle is called
 - (i) radius (ii) chord (iii) diameter (iv) arc (v) circumference

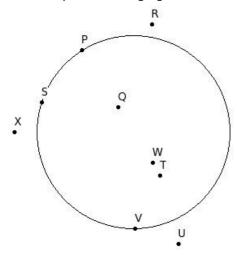
27. Find the points belonging to the circle



- (i) {Q,T} (ii) {T,R} (iii) {O,R} (iv) {P,S} (v) {P,R}
- 28. Find the points belonging to the inside of the circle

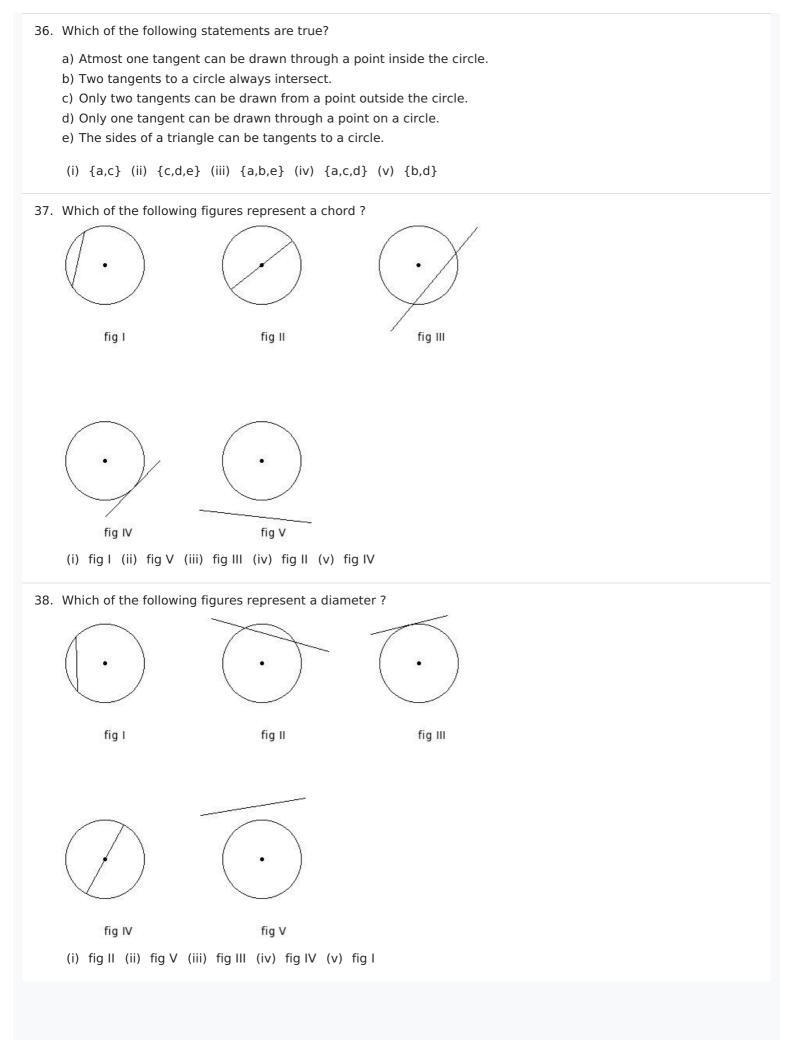


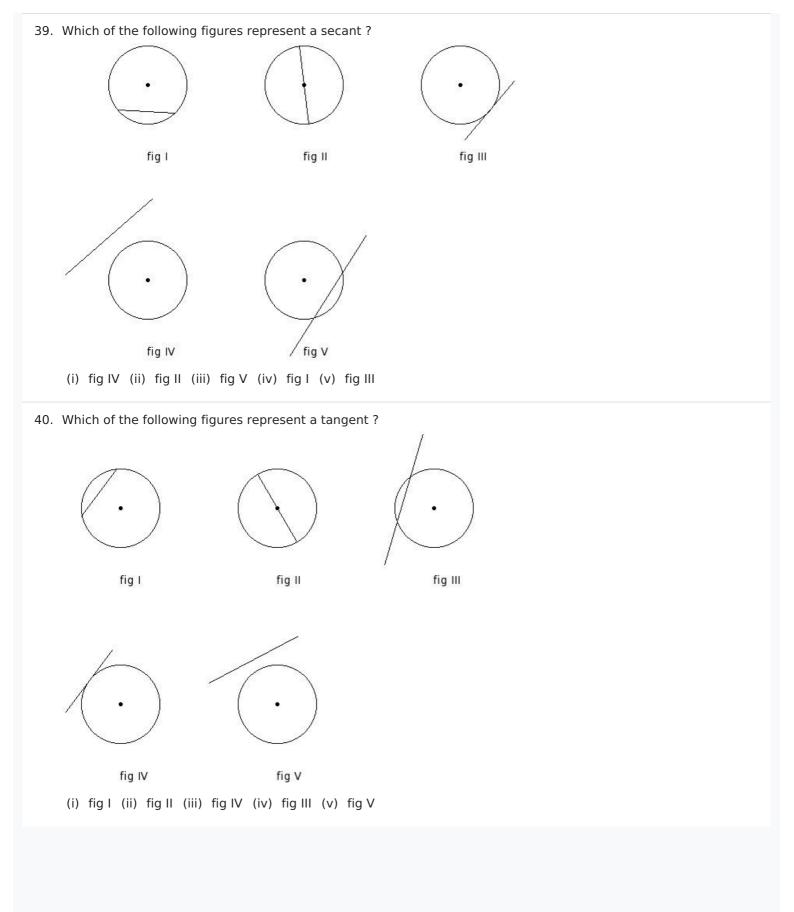
- (i) $\{P,S\}$ (ii) $\{U,Q\}$ (iii) $\{R,U\}$ (iv) $\{P,Q\}$ (v) $\{Q,T\}$
- 29. Find the points belonging to the outside of the circle



| a) The radius is the shortest chord. |
|--|
| b) Atmost one chord can be drawn on a circle with a certain length. |
| c) A chord divides a circle into two segments. |
| d) The diameter is the longest chord. |
| e) A chord divides a circle into two sectors. |
| (i) {b,d} (ii) {b,d,c} (iii) {c,d} (iv) {a,c} (v) {e,a,c} |
| 31. Which of the following statements are true? |
| |
| a) Equal length chords subtend equal angles at the centre of the circle. |
| b) Equal length chords are equidistant from the centre of the circle.c) The farther the chord is from the centre, the larger the angle it subtends at the centre. |
| d) The longest chord of the circle passes through the centre of the circle. |
| e) No two chords bisects each other. |
| |
| (i) {c,e,d} (ii) {a,b,d} (iii) {e,b} (iv) {c,a} (v) {c,a,b} |
| 32. Which of the following statements are true? |
| a) The area enclosed by a chord and its minor arc is called minor segment. |
| 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) The diameter divides the circle into two unequal parts. |
| e) A sector is the area enclosed by two radii and a chord. |
| (i) {a,b,c} (ii) {d,e,c} (iii) {d,a,b} (iv) {e,b} (v) {d,a} |
| 33. 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) {b,d,c} (ii) {b,d} (iii) {a,c} (iv) {e,a,c} (v) {c,d} |
| (i) {b,u,c} (ii) {b,u} (iii) {a,c} (iv) {e,a,c} (v) {c,u} |
| 34. Which of the following statements are true? |
| a) Only one circle can be drawn with a centre. |
| b) Atmost one circle can be drawn passing through three non-collinear points. |
| c) Only one circle can be drawn passing through two points. |
| d) Exactly two tangents can be drawn parallel to a secant. |
| e) Infinite circles can be drawn passing through three collinear points. |
| (i) {b,d} (ii) {e,a,b} (iii) {a,b} (iv) {c,d,b} (v) {c,d} |
| 35. Which of the following statements are true? |
| a) A tangent is the limiting case of a secant. |
| b) A secant and a chord are same. |
| c) A diameter is a limiting case of a chord. |
| d) A radius is a limiting case of a diameter. |
| e) A secant has two end points. |
| (i) {d,c,a} (ii) {b,a} (iii) {e,b,a} (iv) {d,c} (v) {a,c} |
| |
| |

30. Which of the following statements are true?





| Assignment Key | | | | | | |
|----------------|----------|-----------|-----------|----------|-----------|--|
| 1) (iv) | 2) (v) | 3) (v) | 4) (i) | 5) (ii) | 6) (ii) | |
| 7) (i) | 8) (iv) | 9) (v) | 10) (v) | 11) (ii) | 12) (ii) | |
| 13) (iv) | 14) (iv) | 15) (i) | 16) (i) | 17) (v) | 18) (iv) | |
| 19) (iv) | 20) (iv) | 21) (i) | 22) (ii) | 23) (ii) | 24) (i) | |
| 25) (iv) | 26) (v) | 27) (iii) | 28) (v) | 29) (i) | 30) (iii) | |
| 31) (ii) | 32) (i) | 33) (v) | 34) (i) | 35) (v) | 36) (ii) | |
| 37) (i) | 38) (iv) | 39) (iii) | 40) (iii) | | | |

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