



1. The mid-point of the diameter of a circle is called  
(i) radius (ii) diameter (iii) chord (iv) circumference (v) centre
2. A line segment joining any point on the circle with its centre is called  
(i) diameter (ii) radius (iii) major segment (iv) segment (v) semi-circle
3. A line segment having its end points on the circle is called a  
(i) diameter (ii) segment (iii) chord (iv) centre (v) circumference
4. A chord that passes through the centre of the circle is called  
(i) circumference (ii) segment (iii) diameter (iv) radius (v) chord
5. A chord of a circle divides the whole circular region into two parts, each called a  
(i) diameter (ii) chord (iii) semi-circle (iv) circumference (v) segment
6. The segment of the circle containing the centre of the circle is called  
(i) diameter (ii) major segment (iii) semi-circle (iv) circumference (v) centre
7. Half of a circle is called  
(i) circumference (ii) radius (iii) centre (iv) segment (v) semi-circle
8. The perimeter of a circle is called  
(i) circumference (ii) radius (iii) diameter (iv) segment (v) semi-circle
9. Which of the following statements are true?
  - a) A circle consists of an infinite number of points.
  - b) A line can meet a circle at most at two points.
  - c) Every circle has a unique diameter.
  - d) Every circle has a unique centre.
  - e) Each radius of a circle is also a chord of the circle.

(i) {a,b,d} (ii) {c,a,b} (iii) {c,a} (iv) {c,e,d} (v) {e,b}
10. 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) An infinite number of chords may be drawn for a circle.
  - c) An infinite number of diameters may be drawn for a circle.
  - d) Two semi-circles of a circle together make the whole circle.
  - e) Every circle has a unique diameter.

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

11. 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) One and only one tangent can be drawn to a circle from a point outside it.
- d) One and only one tangent can be drawn to pass through a point on a circle.
- e) Diameter of a circle is a part of the semi-circle of the circle.

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

12. If the diameter of a circle is 140 cm, what is its radius?

(i) 68 cm (ii) 70 cm (iii) 71 cm (iv) 72 cm (v) 69 cm

13. If the radius of a circle is 77 cm, what is its diameter?

(i) 152 cm (ii) 155 cm (iii) 153 cm (iv) 156 cm (v) 154 cm

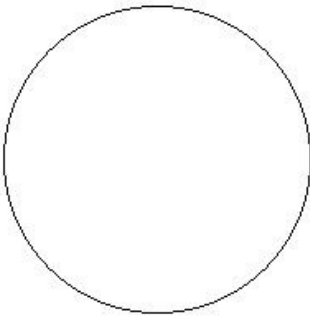
14. If the radius of a circle is 42 cm, what is its circumference?

(i) 264 cm (ii) 262 cm (iii) 263 cm (iv) 265 cm (v) 266 cm

15. Two circles with equal radii are

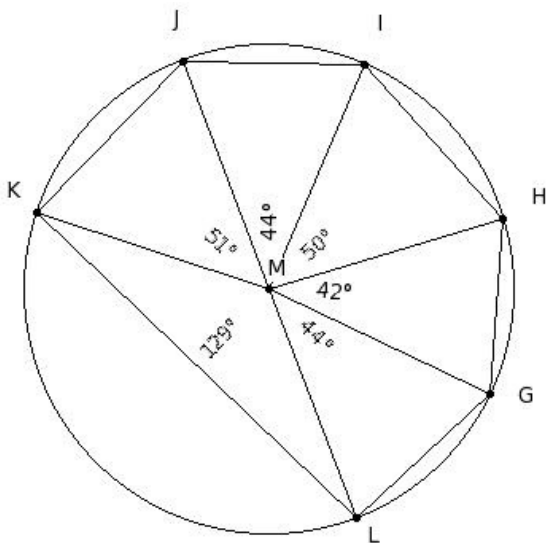
(i) only similar but not congruent (ii) congruent (iii) concentric (iv) not similar

16. Identify the figure below



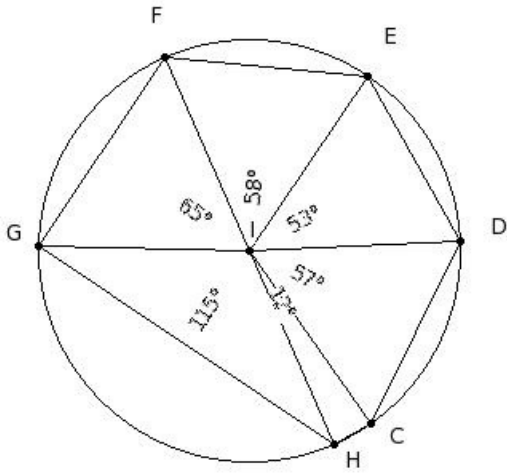
(i) pentagon (ii) quadrilateral (iii) hexagon (iv) circle (v) triangle

17. The centre of the circle is



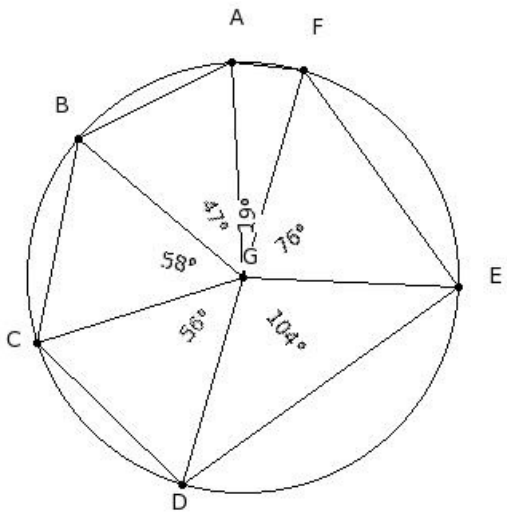
(i) M (ii) J (iii) G (iv) I (v) H

18. The chords of the circle are



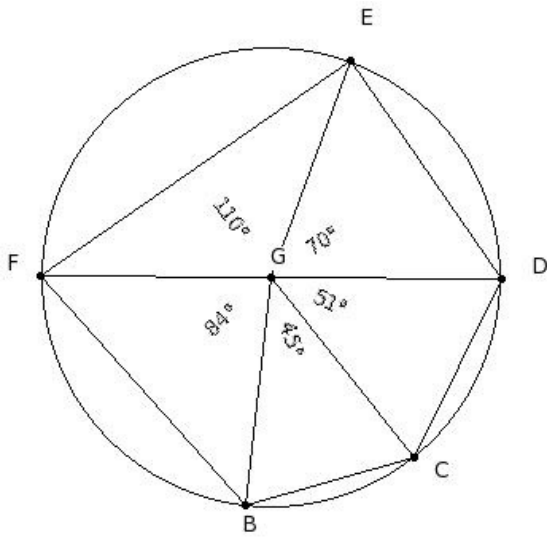
- (i)  $\overline{DE}, \overline{EF}, \overline{FG}, \overline{GH}, \overline{HC}$  (ii)  $\overline{CD}, \overline{DE}, \overline{EF}, \overline{FG}, \overline{GH}, \overline{HC}, \overline{IH}$  (iii)  $\overline{CD}, \overline{DE}, \overline{EF}, \overline{FG}, \overline{GH}, \overline{HC}, \overline{FH}$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

19. The diameters of the circle are



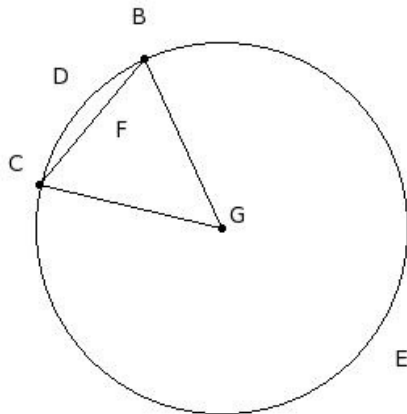
- (i)  $\overline{GA}, \overline{GB}, \overline{GC}, \overline{GD}, \overline{GE}, \overline{GF}, \overline{DF}$  (ii)  $\overline{AB}, \overline{BC}, \overline{CD}, \overline{DE}, \overline{EF}, \overline{FA}, \overline{DF}$  (iii)  $\overline{DF}$  (iv)  $\overline{AB}, \overline{BC}, \overline{CD}, \overline{DE}, \overline{EF}, \overline{FA}$   
 (v)  $\overline{GA}, \overline{GB}, \overline{GC}, \overline{GD}, \overline{GE}, \overline{GF}$

20. The radii of the circle are



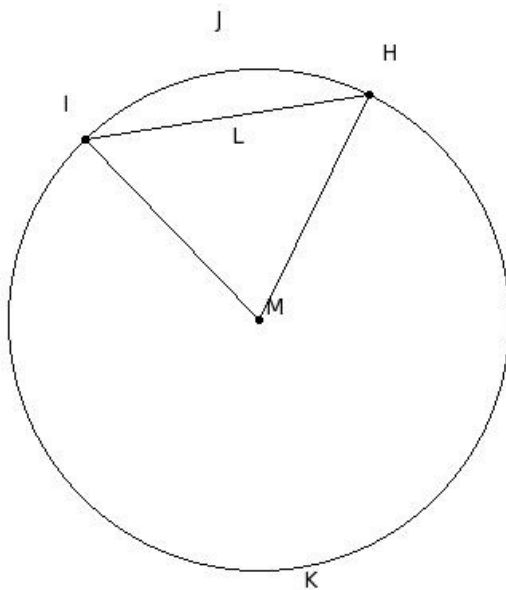
- (i)  $\overline{BC}, \overline{CD}, \overline{DE}, \overline{EF}, \overline{FB}$  (ii)  $\overline{BC}, \overline{CD}, \overline{DE}, \overline{EF}, \overline{FB}, \overline{GE}$  (iii)  $\overline{CD}, \overline{DE}, \overline{EF}, \overline{FB}$  (iv)  $\overline{BC}, \overline{CD}, \overline{DE}, \overline{EF}, \overline{FB}, \overline{DF}$   
 (v)  $\overline{GB}, \overline{GC}, \overline{GD}, \overline{GE}, \overline{GF}$

21. The minor sector of the circle is



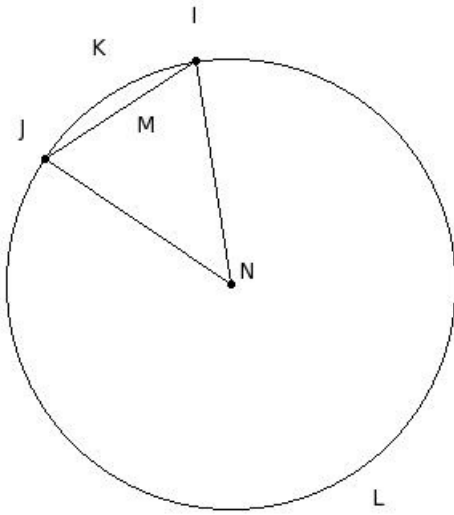
- (i) BEC (ii) BECFB (iii) GBDCG (iv) GBECG (v) BDCFB

22. The major sector of the circle is



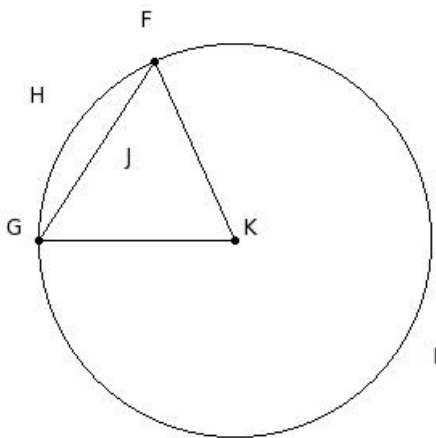
- (i) HKI (ii) HJILH (iii) HJI (iv) MHJIM (v) MHKIM

23. The minor arc of the circle is



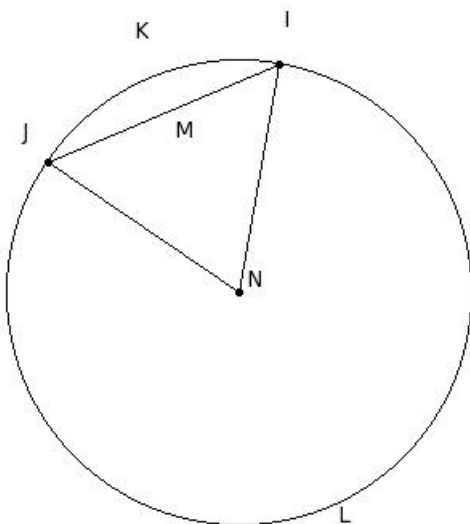
- (i) ILJMI (ii) IKJ (iii) ILJ (iv) IKJMI (v) NIKJN

24. The major arc of the circle is



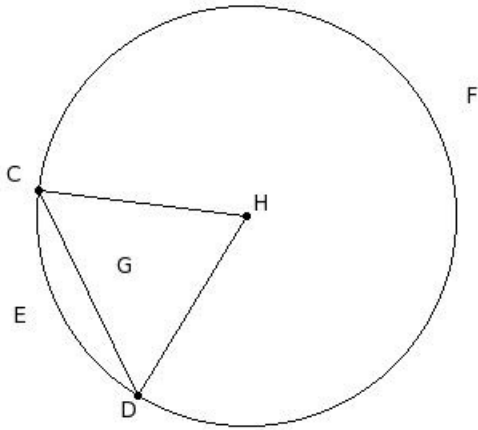
- (i) FHGJF (ii) KFHGK (iii) FHG (iv) KFIGK (v) FIG

25. The minor segment of the circle is



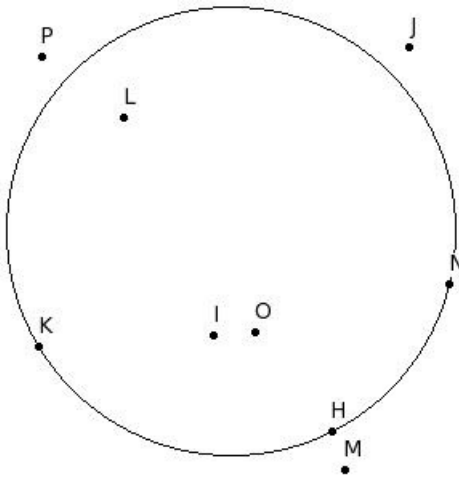
- (i) IKJ (ii) NIKJN (iii) NILJN (iv) ILJ (v) IKJMI

26. The major segment of the circle is



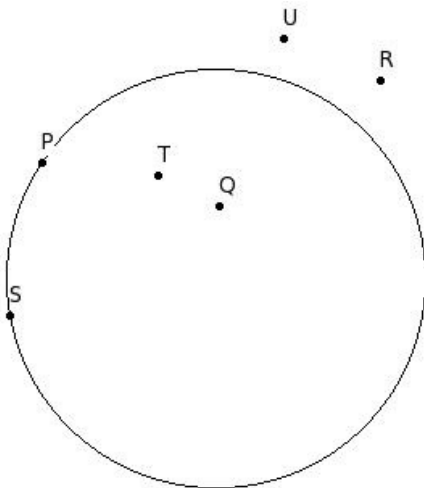
- (i) CED (ii) HCFDH (iii) CFD (iv) HCEDH (v) CFDGC

27. Find the points belonging to the circle



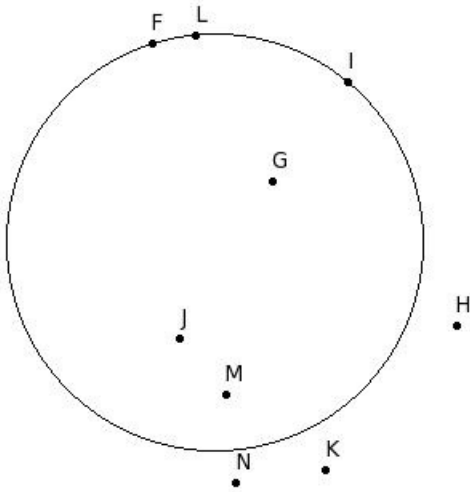
- (i) {I,L,O} (ii) {O,K,H} (iii) {J,M,P} (iv) {H,K,N} (v) {K,J,N}

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



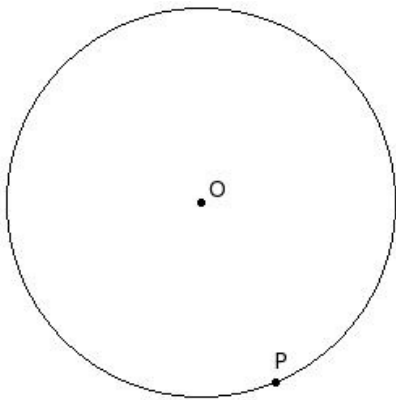
- (i) {P,S} (ii) {Q,T} (iii) {T,S} (iv) {R,Q} (v) {R,U}

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



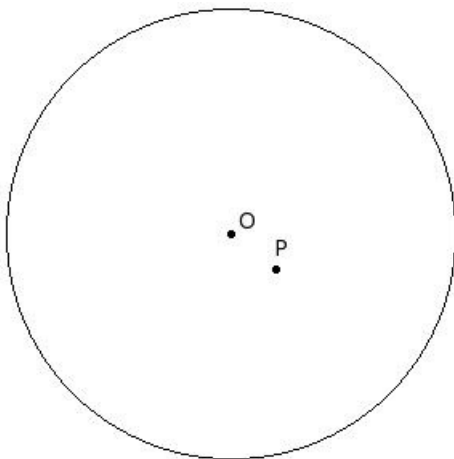
- (i) {G,J,M} (ii) {N,G,K} (iii) {H,K,N} (iv) {F,I,L} (v) {H,K,F}

30. '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



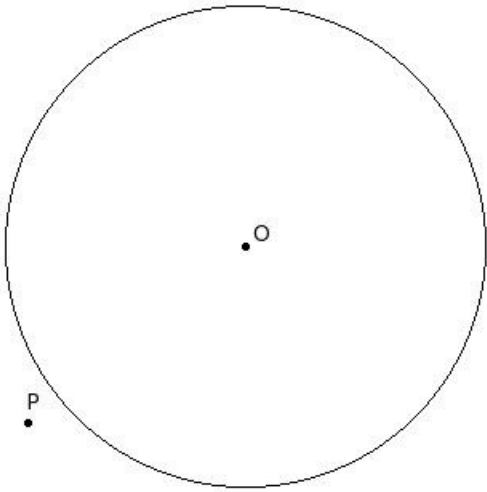
- (i) inside the circle (ii) on the circle (iii) outside the circle

31. '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) inside the circle (ii) outside the circle (iii) on the circle

32. '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) inside the circle (ii) on the circle (iii) outside the circle

33. A line which intersects the circle at two distinct points is called a

(i) centre (ii) tangent (iii) diameter (iv) radius (v) secant

34. A line which touches a circle at only one point is called a

(i) tangent (ii) radius (iii) circumference (iv) semi-circle (v) diameter

35. If the two radii OP and OQ of a circle are at right angles to each other, then the sector OPQ is called a

(i) tangent (ii) chord (iii) secant (iv) semi-circle (v) quadrant

36. Which of the following statements are true?

- a) A chord divides a circle into two segments.
- b) Atmost one chord can be drawn on a circle with a certain length.
- c) The radius is the shortest chord.
- d) The diameter is the longest chord.
- e) A chord divides a circle into two sectors.

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

37. Which of the following statements are true?

- a) The longest chord of the circle passes through the centre of the circle.
- b) Equal length chords subtend equal angles at the centre of the circle.
- c) No two chords bisect each other.
- d) Equal length chords are equidistant from the centre of the circle.
- e) The farther the chord is from the centre, the larger the angle it subtends at the centre.

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

38. Which of the following statements are true?

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

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

39. Which of the following statements are true?

- a) The longest of all chords of a circle is called diameter.
- b) Two chords bisect each other.
- c) The midpoint of any diameter of a circle is its centre.
- 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,c} (ii) {b,a} (iii) {d,c} (iv) {e,b,a} (v) {d,c,a}

40. Which of the following statements are true?

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

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

41. Which of the following statements are true?

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

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

42. Which of the following statements are true?

- a) If two circles touch internally, the square of the distance between their centres is the difference of the squares of their radii.
- b) If two circles touch externally, the square of the distance between their centres is the sum of the squares of their radii.
- c) If two circles touch internally, their centres and the point of contact form a scalene triangle.
- d) If two circles touch externally, their centres and the point of contact form an isosceles triangle.
- e) If two circles touch internally, the distance between their centres is the difference of their radii.
- f) If two circles touch externally, the distance between their centres is the sum of their radii.

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

43. The point of intersection of the angular bisectors of a triangle is

(i) orthocentre (ii) circumcentre (iii) excentre (iv) centroid (v) incentre

44. The angle subtended by the semicircle at the centre is

(i)  $195^\circ$  (ii)  $190^\circ$  (iii)  $210^\circ$  (iv)  $185^\circ$  (v)  $180^\circ$

45. The angle subtended by the diameter at any point on the circle is

(i)  $120^\circ$  (ii)  $95^\circ$  (iii)  $105^\circ$  (iv)  $100^\circ$  (v)  $90^\circ$

46. 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) right angle triangle (iii) acute angled triangle (iv) equilateral triangle

47. Circles having common centre are called

- (i) intersecting circles (ii) congruent circles (iii) concentric circles (iv) similar circles

48. If two circles are concentric, then

- (i) their centres are same (ii) their radii are same (iii) their perimeters are same  
(iv) their diameters are same

49. Which of the following figures represent a chord ?

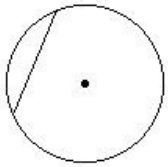


fig I

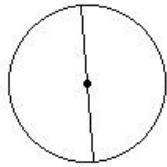


fig II

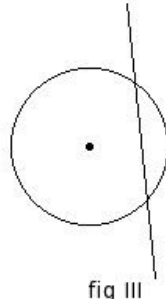


fig III

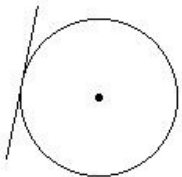


fig IV

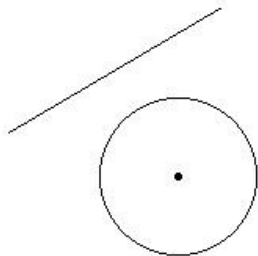


fig V

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

50. Which of the following figures represent a diameter ?

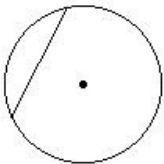


fig I

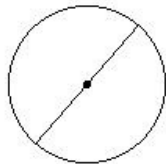


fig II

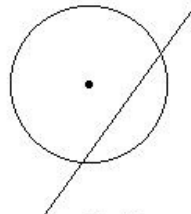


fig III

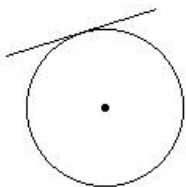


fig IV

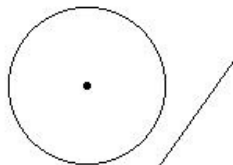


fig V

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

51. Which of the following figures represent a secant ?

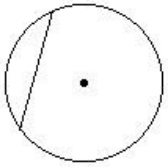


fig I

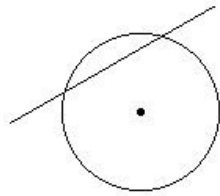


fig II

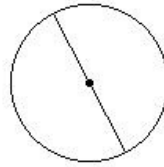


fig III

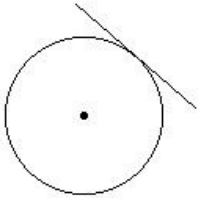


fig IV

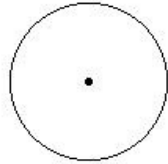


fig V

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

52. Which of the following figures represent a tangent ?

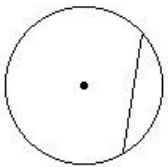


fig I

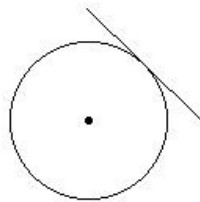


fig II

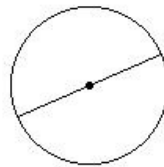


fig III

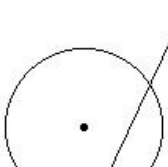


fig IV

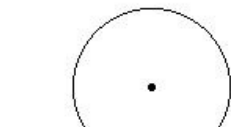


fig V

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

53. With the vertices of a triangle  $\triangle H I J$  as centres, three circles are drawn touching each other externally. If the sides of the triangle are 12 cm , 17 cm and 13 cm , find the radii of the circles

- (i) 9 cm , 13 cm & 14 cm respectively (ii) 9 cm , 8 cm & 9 cm respectively  
 (iii) 4 cm , 8 cm & 9 cm respectively (iv) 4 cm , 13 cm & 9 cm respectively  
 (v) 4 cm , 8 cm & 14 cm respectively

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

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

55. Which of the following statements are true?

- a) All chords of a circle are diameters.
- b)  $\pi$  is a rational number.
- c) All diameters of a circle are chords.
- d)  $\frac{22}{7}$  is a rational number.
- e) A circle divides the plane into three mutually disjoint sets of points.

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

56. Points which lie on the circumference of the circle are called

- (i) Coincident points (ii) Similar points (iii) Concurrent points (iv) Concyclic points (v) Cyclic points

## Assignment Key

1) (v)	2) (ii)	3) (iii)	4) (iii)	5) (v)	6) (ii)
7) (v)	8) (i)	9) (i)	10) (iii)	11) (iii)	12) (ii)
13) (v)	14) (i)	15) (ii)	16) (iv)	17) (i)	18) (iv)
19) (iii)	20) (v)	21) (iii)	22) (v)	23) (ii)	24) (v)
25) (v)	26) (v)	27) (iv)	28) (ii)	29) (iii)	30) (ii)
31) (i)	32) (iii)	33) (v)	34) (i)	35) (v)	36) (ii)
37) (i)	38) (i)	39) (i)	40) (ii)	41) (v)	42) (i)
43) (v)	44) (v)	45) (v)	46) (ii)	47) (iii)	48) (i)
49) (iv)	50) (i)	51) (iv)	52) (iii)	53) (iii)	54) (iii)
55) (ii)	56) (iv)				