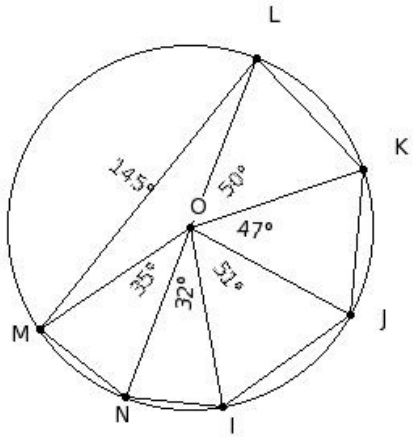
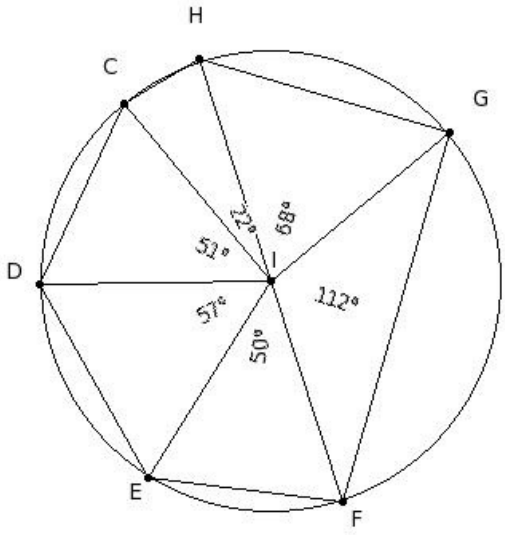
1. The centre of the circle is



(i) O (ii) K (iii) I (iv) J (v) L

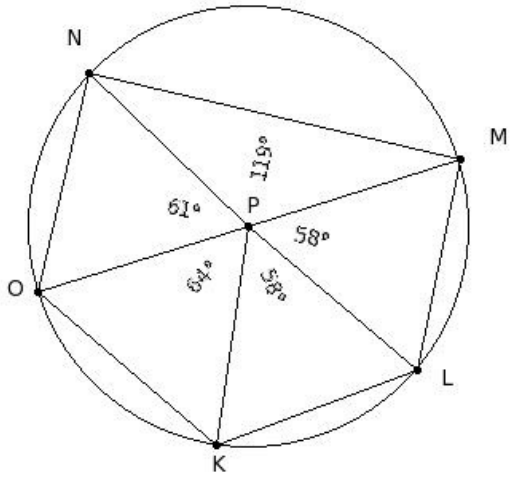
2. The chords of the circle are



(i) $\overline{DE}, \overline{EF}, \overline{FG}, \overline{GH}, \overline{HC}$ (ii) $\overline{CD}, \overline{DE}, \overline{EF}, \overline{FG}, \overline{GH}, \overline{HC}$ (iii) $\overline{CD}, \overline{DE}, \overline{EF}, \overline{FG}, \overline{GH}, \overline{HC}, \overline{IG}$

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

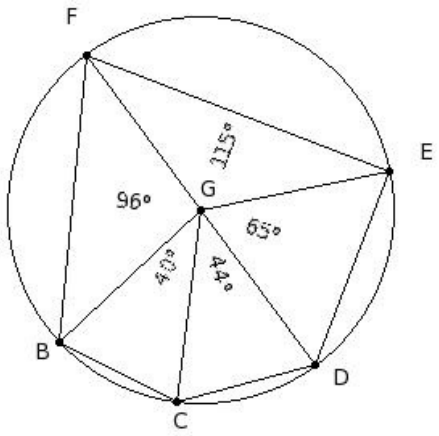
3. The diameters of the circle are



(i) $\overline{PK}, \overline{PL}, \overline{PM}, \overline{PN}, \overline{PO}, \overline{MO}$ (ii) $\overline{MO}$ (iii) $\overline{PK}, \overline{PL}, \overline{PM}, \overline{PN}, \overline{PO}$ (iv) $\overline{KL}, \overline{LM}, \overline{MN}, \overline{NO}, \overline{OK}, \overline{MO}$

(v) $\overline{KL}, \overline{LM}, \overline{MN}, \overline{NO}, \overline{OK}$

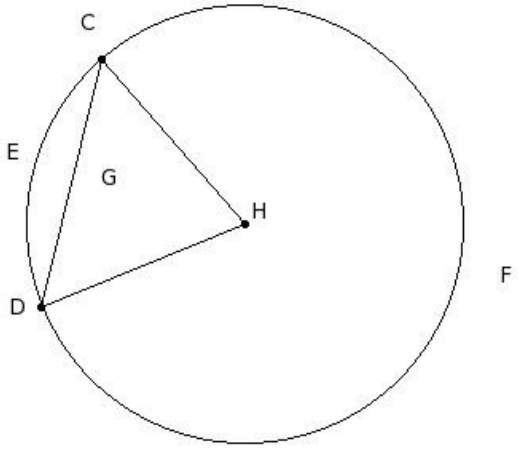
4. The radii of the circle are



(i) $\overline{BC}, \overline{CD}, \overline{DE}, \overline{EF}, \overline{FB}, \overline{DF}$ (ii) $\overline{BC}, \overline{CD}, \overline{DE}, \overline{EF}, \overline{FB}$ (iii) $\overline{CD}, \overline{DE}, \overline{EF}, \overline{FB}$ (iv) $\overline{BC}, \overline{CD}, \overline{DE}, \overline{EF}, \overline{FB}, \overline{GC}$

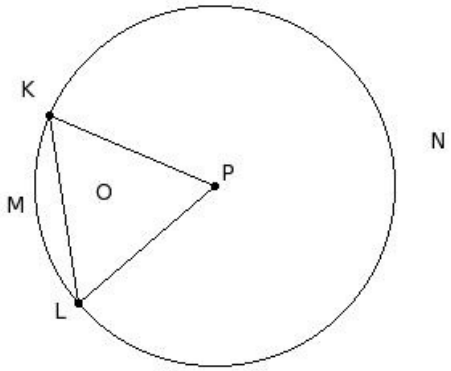
(v) $\overline{GB}, \overline{GC}, \overline{GD}, \overline{GE}, \overline{GF}$

5. The minor sector of the circle is



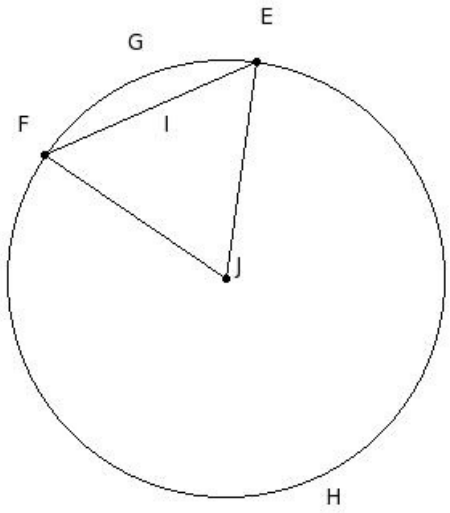
(i) HCEDH (ii) CEDGC (iii) CED (iv) CFDGC (v) HCFDH

6. The major sector of the circle is



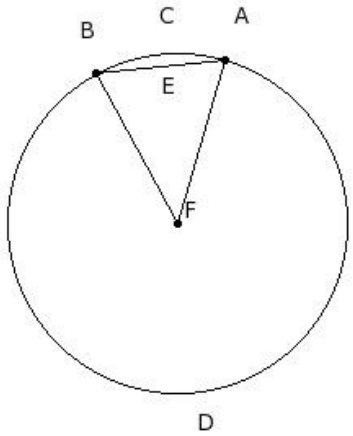
(i) KML (ii) KMLOK (iii) PKNLP (iv) PKMLP (v) KNLOK

7. The minor arc of the circle is



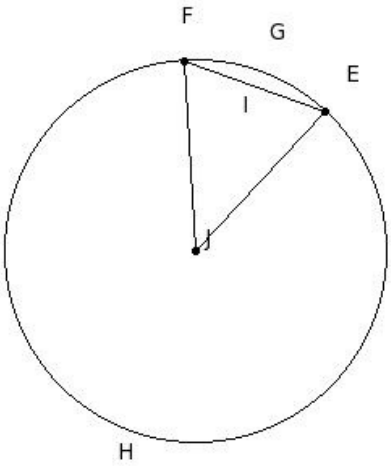
(i) EGF (ii) EHF (iii) JEGFJ (iv) JEHFJ (v) EGFIE

8. The major arc of the circle is



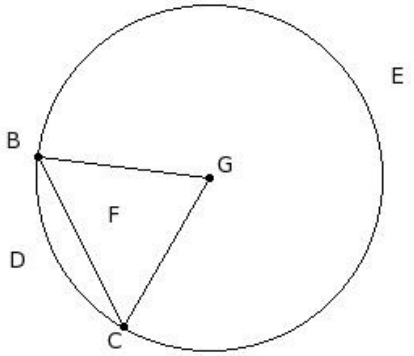
(i) ACB (ii) ADBEA (iii) FADBF (iv) ACBEA (v) ADB

9. The minor segment of the circle is



(i) JEHFJ (ii) EGFIE (iii) EHFIE (iv) JEGFJ (v) EHF

10. The major segment of the circle is

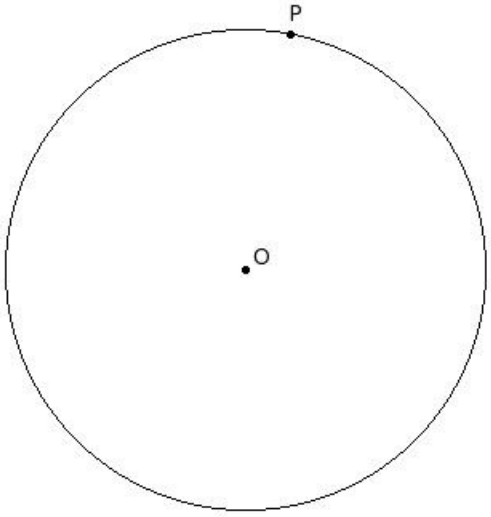


(i) GBECG (ii) BEC (iii) BDC (iv) BECFB (v) BDCFB

11. The distance around the circle is called

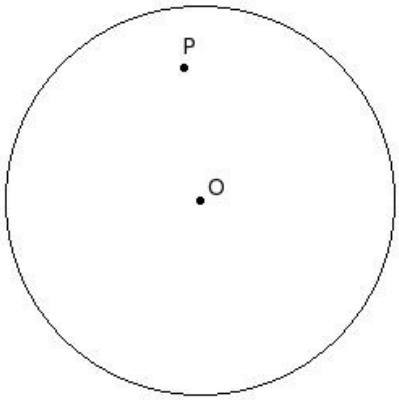
(i) diameter (ii) chord (iii) radius (iv) arc (v) circumference

12. '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



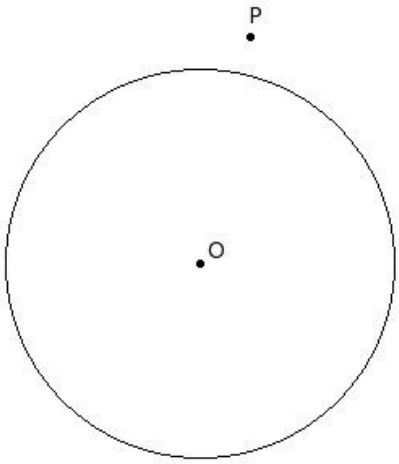
(i) outside the circle (ii) on the circle (iii) inside the circle

13. '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

14. '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

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

(i) radius (ii) segment (iii) chord (iv) major segment (v) centre

16. A line segment joining any point on the circle with its centre is called

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

17. A line segment having its end points on the circle is called a

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

18. A chord that passes through the centre of the circle is called

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

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

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

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

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

21. Half of a circle is called

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

22. The perimeter of a circle is called

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

23. Which of the following statements are true?

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

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

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) Every circle has a unique diameter.
d) An infinite number of diameters may be drawn for a circle.
e) One and only one tangent can be drawn to a circle from a point outside it.

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

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

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

26. If the diameter of a circle is 196 cm, what is its radius?

(i) 98 cm (ii) 100 cm (iii) 96 cm (iv) 99 cm (v) 97 cm

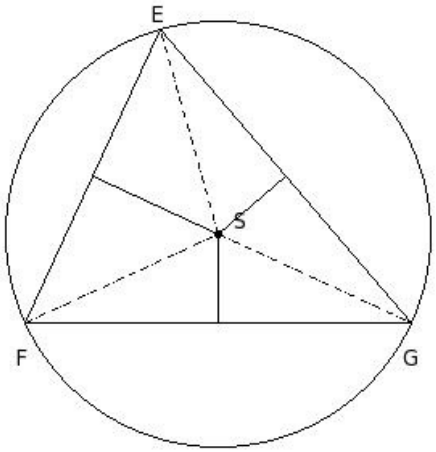
27. If the radius of a circle is 98 cm, what is its diameter?

(i) 194 cm (ii) 195 cm (iii) 196 cm (iv) 197 cm (v) 198 cm

28. If the radius of a circle is 49 cm, what is its circumference?

(i) 307 cm (ii) 309 cm (iii) 310 cm (iv) 306 cm (v) 308 cm

29. In the given triangle S is the circumcentre. If SE = 13.20 cm, find the circumference of the circumcircle



(i) 84.0 cm (ii) 85.0 cm (iii) 83.0 cm (iv) 82.0 cm (v) 81.0 cm

30. Two circles with equal radii are

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

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

(i) circumference (ii) tangent (iii) diameter (iv) segment (v) secant

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

(i) tangent (ii) segment (iii) major segment (iv) semi-circle (v) diameter

33. 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) quadrant (ii) segment (iii) diameter (iv) centre (v) circumference

34. Which of the following statements are true?

a) A chord divides a circle into two sectors.
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) The radius is the shortest chord.

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

35. Which of the following statements are true?

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

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

36. Which of the following statements are true?

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

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

37. 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 longest of all chords of a circle is called diameter.
d) A sector is the area enclosed by two radii and a chord.
e) The midpoint of any diameter of a circle is its centre.

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

38. Which of the following statements are true?

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

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

39. Which of the following statements are true?

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

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

40. Which of the following statements are true?

a) Two tangents to a circle always intersect.
b) Atmost one tangent can be drawn through a point inside the circle.
c) The sides of a triangle can be tangents to a circle.
d) Only two tangents can be drawn from a point outside the circle.
e) Only one tangent can be drawn through a point on a circle.

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

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

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

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

(i) 210° (ii) 180° (iii) 190° (iv) 195° (v) 185°

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

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

44. If the radius of the circumcircle is half the length of a side of the triangle, then the triangle is

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

45. Circles having common centre are called

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

46. If two circles are concentric, then

(i) their perimeters are same (ii) their diameters are same (iii) their radii are same

(iv) their centres are same

47. Which of the following figures represent a chord ?

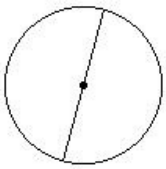


fig I

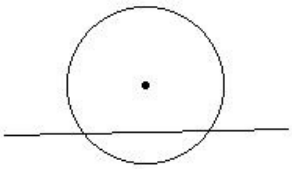


fig II

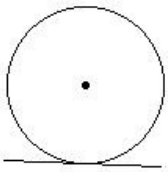


fig III

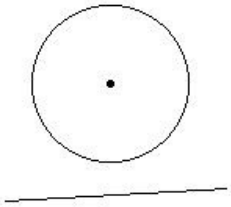


fig IV

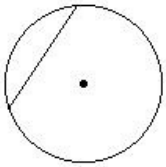


fig V

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

48. Which of the following figures represent a diameter ?

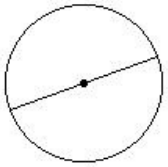


fig I

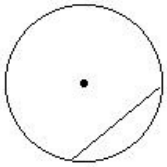


fig II

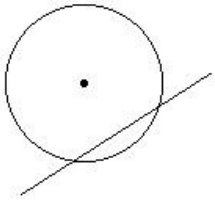


fig III

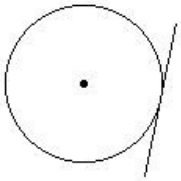


fig IV

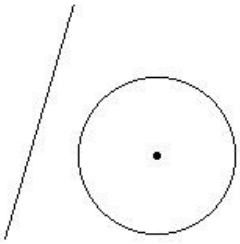


fig V

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

49. Which of the following figures represent a secant ?

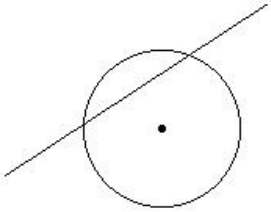


fig I

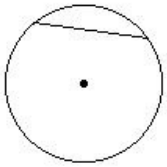


fig II

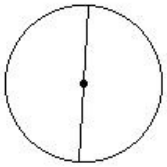


fig III

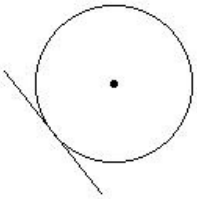


fig IV

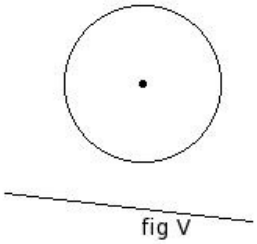


fig V

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

50. Which of the following figures represent a tangent ?

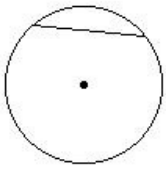


fig I

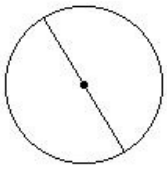


fig II

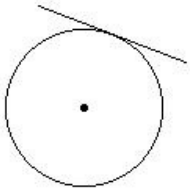


fig III

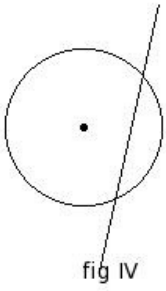


fig IV

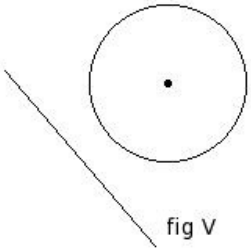


fig V

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

51. Which of the following statements are true?

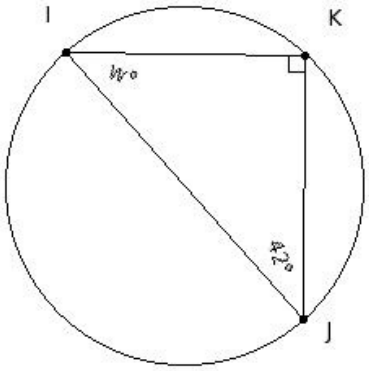
a) All diameters of a circle are chords.
b) π is a rational number.
c) All chords of a circle are diameters.
d) $\frac{22}{7}$ is a rational number.
e) A circle divides the plane into three mutually disjoint sets of points.

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

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

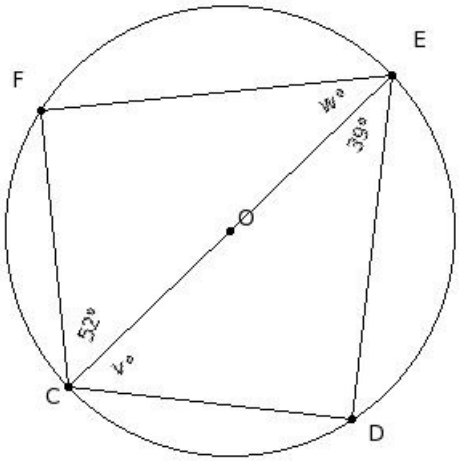
(i) Similar points (ii) Cyclic points (iii) Concurrent points (iv) Coincident points (v) Concyclic points

53. Find the missing angle in the following figure?



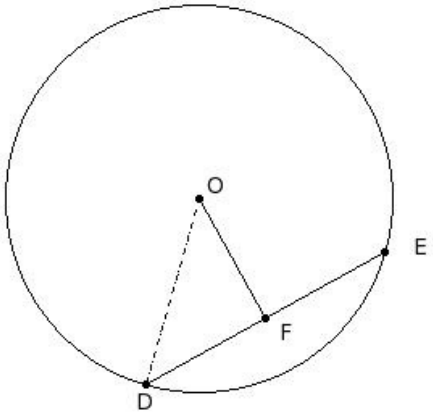
(i) 58° (ii) 63° (iii) 78° (iv) 48° (v) 53°

54. O is the centre of the circle. If ∠CED = 39° and ∠ECF = 52°, find v°, w°



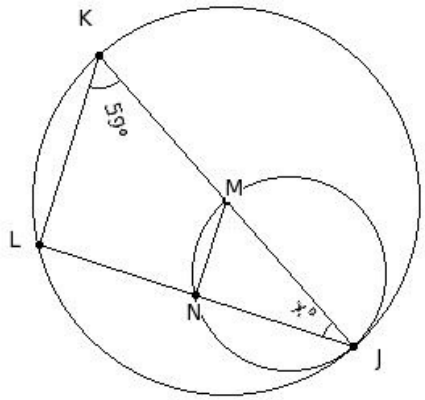
(i) 51°, 38° (ii) 68°, 71° (iii) 48°, 61° (iv) 38°, 51° (v) 28°, 51°

55. If a chord DE = 17 cm is drawn in a circle with radius OD = 12 cm, find its distance from the centre of the circle



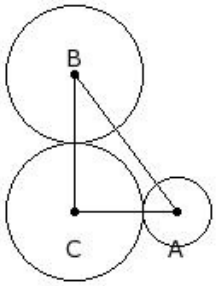
(i) 10.47 cm (ii) 8.47 cm (iii) 6.47 cm (iv) 7.47 cm (v) 9.47 cm

56. Two circles touch internally. M is the centre of the bigger circle and lies on the smaller circle. If ∠JKL = 59°, find ∠J



(i) 36° (ii) 31° (iii) 46° (iv) 61° (v) 41°

57. 'A' and 'B' are centres of circles of radii 2 cm and 4 cm such that AB = 10 cm and 'C' is the centre of the circle of radius 'r' cm which touches the above circles externally. If ∠ACB = 90°, find 'r'



(i) 5 cm (ii) 3 cm (iii) 6 cm (iv) 2 cm (v) 4 cm

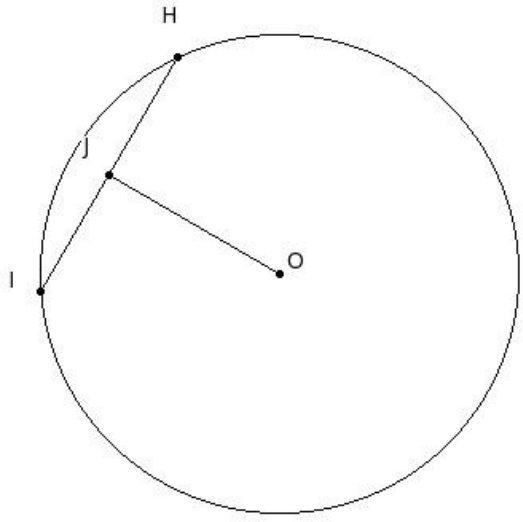
58. With the vertices of a triangle △BCD as centres, three circles are drawn touching each other externally. If the sides of the triangle are 10 cm , 17 cm and 13 cm , find the radii of the circles

(i) 3 cm , 7 cm & 15 cm respectively (ii) 8 cm , 7 cm & 10 cm respectively

(iii) 3 cm , 7 cm & 10 cm respectively (iv) 3 cm , 12 cm & 10 cm respectively

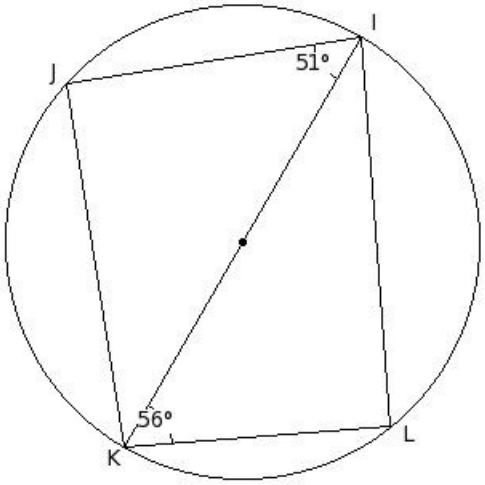
(v) 8 cm , 12 cm & 15 cm respectively

59. In the given figure, O is the centre of the circle. J is a point on chord HI such that HJ = JI. Find ∠OJH



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

60. In the given figure, find the angles of the quadrilateral.



(i) $I = 83°, J = 90°, K = 97°, L = 90°$ (ii) $I = 86°, J = 90°, K = 94°, L = 90°$ (iii) $I = 84°, J = 90°, K = 96°, L = 90°$

(iv) $I = 85°, J = 90°, K = 95°, L = 90°$ (v) $I = 87°, J = 90°, K = 93°, L = 90°$

Assignment Key

1) (i)	2) (ii)	3) (ii)	4) (v)	5) (i)	6) (iii)
7) (i)	8) (v)	9) (ii)	10) (iv)	11) (v)	12) (ii)
13) (i)	14) (ii)	15) (v)	16) (ii)	17) (iv)	18) (v)
19) (v)	20) (ii)	21) (i)	22) (iii)	23) (iii)	24) (i)
25) (i)	26) (i)	27) (iii)	28) (v)	29) (iii)	30) (iv)
31) (v)	32) (i)	33) (i)	34) (iv)	35) (iv)	36) (v)
37) (v)	38) (iv)	39) (ii)	40) (iii)	41) (ii)	42) (ii)
43) (i)	44) (iv)	45) (ii)	46) (iv)	47) (i)	48) (iv)
49) (i)	50) (iv)	51) (i)	52) (v)	53) (iv)	54) (i)
55) (ii)	56) (ii)	57) (v)	58) (iii)	59) (iv)	60) (iv)