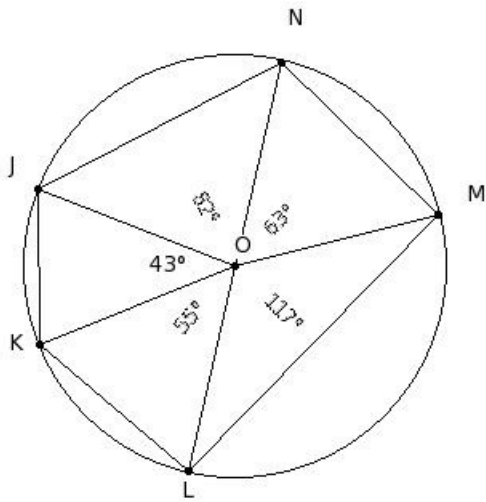


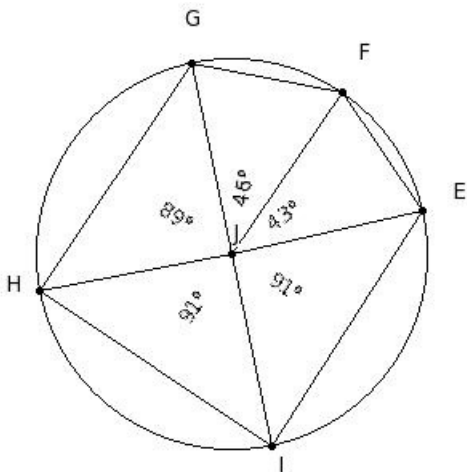


1. The centre of the circle is



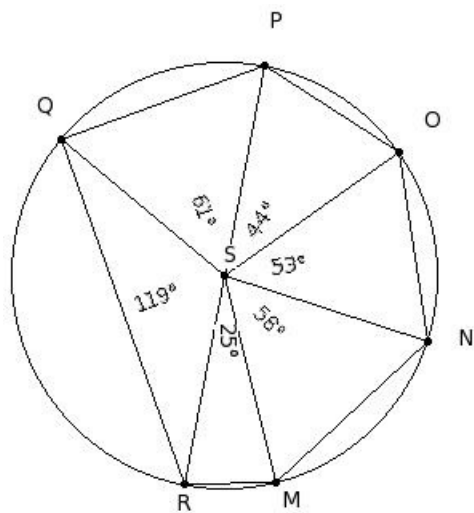
- (i) K (ii) M (iii) L (iv) O (v) J

2. The chords of the circle are



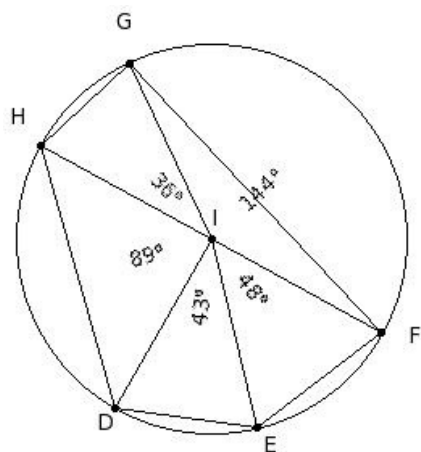
- (i) $\overline{EF}, \overline{FG}, \overline{GH}, \overline{HI}, \overline{IE}$ (ii) $\overline{EF}, \overline{FG}, \overline{GH}, \overline{HI}, \overline{IE}, \overline{GI}$ (iii) $\overline{FG}, \overline{GH}, \overline{HI}, \overline{IE}$ (iv) $\overline{EF}, \overline{FG}, \overline{GH}, \overline{HI},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

3. The diameters of the circle are



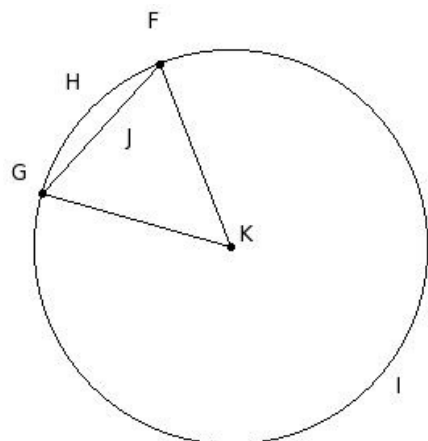
- (i) $\overline{MN}, \overline{NO}, \overline{OP}, \overline{PQ}, \overline{QR}, \overline{RM}$ (ii) $\overline{SM}, \overline{SN}, \overline{SO}, \overline{SP}, \overline{SQ}, \overline{SR}, \overline{PR}$ (iii) $\overline{MN}, \overline{NO}, \overline{OP}, \overline{PQ}, \overline{QR}, \overline{RM}, \overline{PR}$ (iv) \overline{PR}
 (v) $\overline{SM}, \overline{SN}, \overline{SO}, \overline{SP}, \overline{SQ}, \overline{SR}$

4. The radii of the circle are



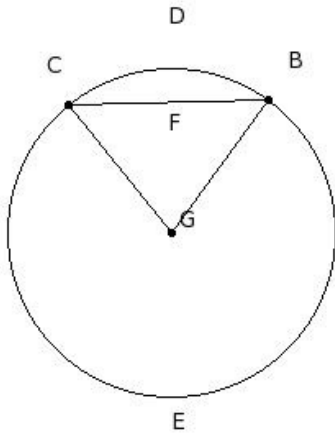
- (i) $\overline{DE}, \overline{EF}, \overline{FG}, \overline{GH}, \overline{HD}, \overline{ID}$ (ii) $\overline{DE}, \overline{EF}, \overline{FG}, \overline{GH}, \overline{HD}, \overline{FH}$ (iii) $\overline{DE}, \overline{EF}, \overline{FG}, \overline{GH}, \overline{HD}$ (iv) $\overline{ID}, \overline{IE},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

5. The minor sector of the circle is



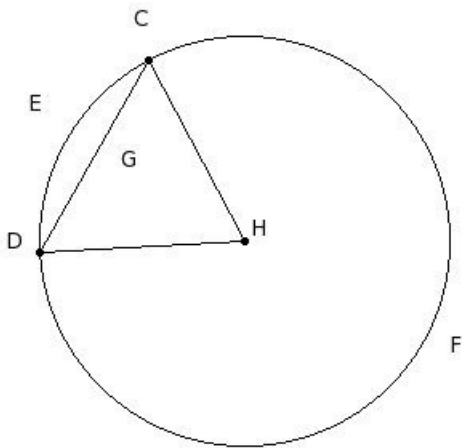
- (i) FIG (ii) KFHGK (iii) FHG (iv) FHGJF (v) FIGJF

6. The major sector of the circle is



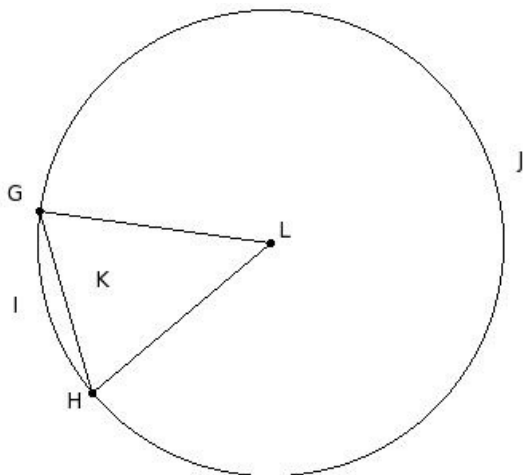
- (i) BECFB (ii) GBDCG (iii) GBECG (iv) BDCFB (v) BEC

7. The minor arc of the circle is



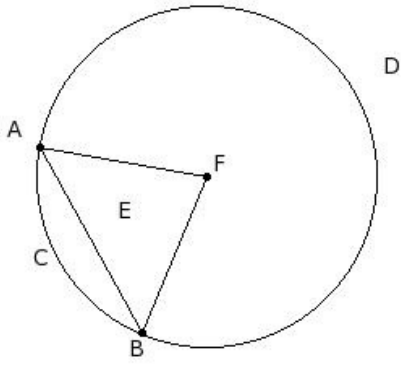
- (i) CEDGC (ii) CFDGC (iii) CED (iv) CFD (v) HCEDH

8. The major arc of the circle is



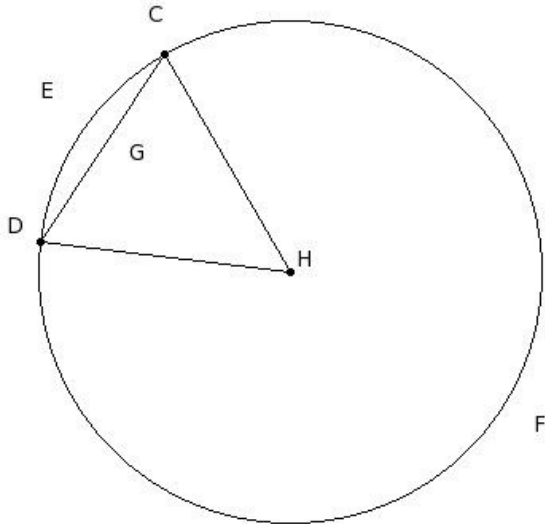
- (i) LGIHL (ii) GJHKG (iii) GIH (iv) GJH (v) GIHKG

9. The minor segment of the circle is



- (i) ACBEA (ii) ACB (iii) ADBEA (iv) ADB (v) FACBF

10. The major segment of the circle is

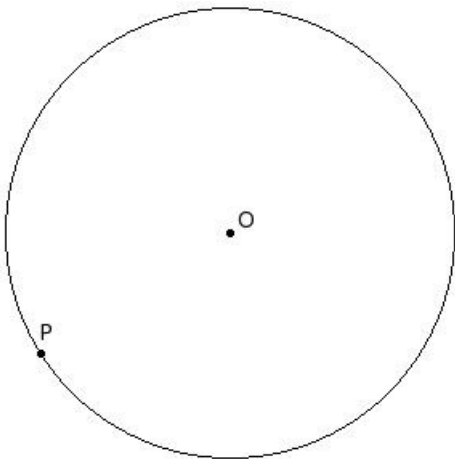


- (i) HCEDH (ii) CED (iii) CFDGC (iv) HCFDH (v) CFD

11. The distance around the circle is called

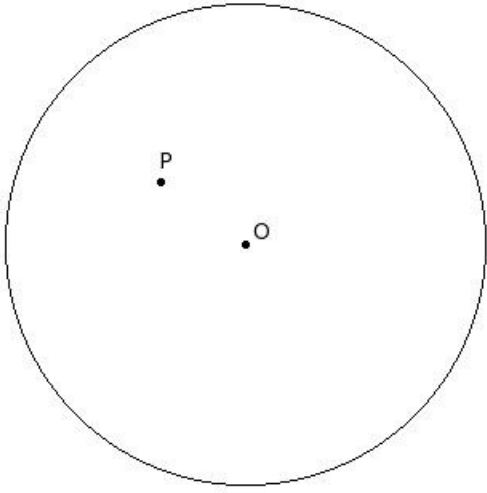
- (i) chord (ii) diameter (iii) arc (iv) radius (v) circumference

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



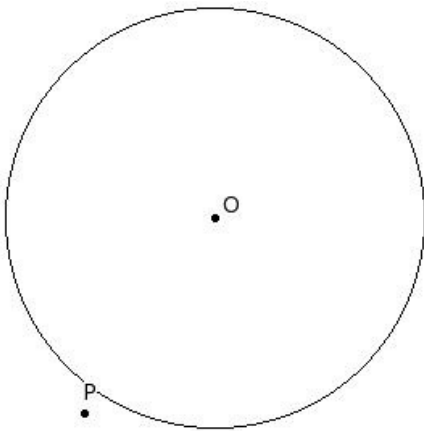
- (i) outside the circle (ii) on the circle (iii) inside the circle

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

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

- (i) circumference (ii) centre (iii) diameter (iv) radius (v) chord

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

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

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

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

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

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

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

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

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

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

21. Half of a circle is called

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

22. The perimeter of a circle is called
(i) circumference (ii) segment (iii) diameter (iv) chord (v) semi-circle

23. Which of the following statements are true?

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

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

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

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

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

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

26. If the diameter of a circle is 112 cm, what is its radius?

(i) 55 cm (ii) 54 cm (iii) 58 cm (iv) 56 cm (v) 57 cm

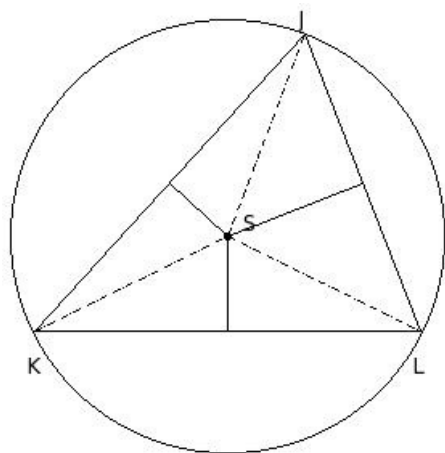
27. If the radius of a circle is 84 cm, what is its diameter?

(i) 170 cm (ii) 167 cm (iii) 168 cm (iv) 166 cm (v) 169 cm

28. If the radius of a circle is 91 cm, what is its circumference?

(i) 572 cm (ii) 570 cm (iii) 574 cm (iv) 571 cm (v) 573 cm

29. In the given triangle S is the circumcentre. If $SJ = 13.50$ cm, find the circumference of the circumcircle



- (i) 83.9 cm (ii) 82.9 cm (iii) 85.9 cm (iv) 86.9 cm (v) 84.9 cm

30. Two circles with equal radii are

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

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

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

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

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

34. Which of the following statements are true?

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

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

35. Which of the following statements are true?

- a) No two chords bisect each other.
- b) The longest chord of the circle passes through the centre of the circle.
- c) Equal length chords subtend equal angles at 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 are equidistant from the centre of the circle.

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

36. Which of the following statements are true?

- a) A sector is the area enclosed by two radii and a chord.
- 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) The area enclosed by a chord and its minor arc is called minor segment.

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

37. Which of the following statements are true?

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

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

38. Which of the following statements are true?

- a) Only one circle can be drawn passing through two points.
- b) Exactly two tangents can be drawn parallel to a secant.
- c) Infinite circles can be drawn passing through three collinear 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) {a,b} (ii) {c,d,b} (iii) {b,d} (iv) {c,d} (v) {e,a,b}

39. Which of the following statements are true?

- a) A secant and a chord are same.
- b) A tangent is the limiting case of a secant.
- 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) {a,b} (ii) {d,c} (iii) {e,a,b} (iv) {d,c,b} (v) {b,c}

40. Which of the following statements are true?

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

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

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

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

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

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

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

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

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) right angle triangle (iii) acute angled triangle (iv) obtuse angled triangle

45. Circles having common centre are called

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

46. If two circles are concentric, then

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

47. Which of the following figures represent a chord ?

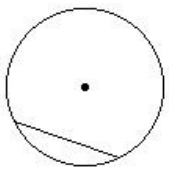


fig I

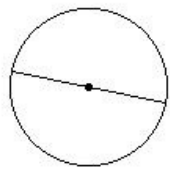


fig II

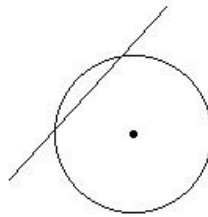


fig III

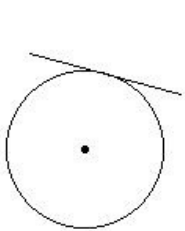


fig IV

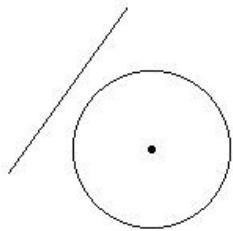


fig V

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

48. Which of the following figures represent a diameter ?

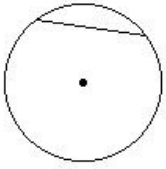


fig I

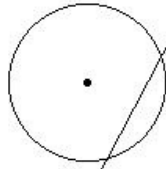


fig II

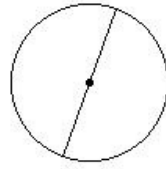


fig III

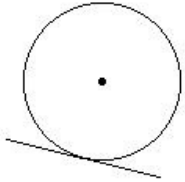


fig IV

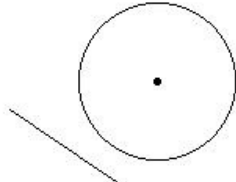


fig V

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

49. Which of the following figures represent a secant ?

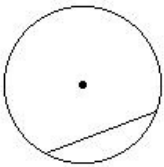


fig I

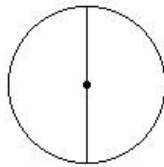


fig II

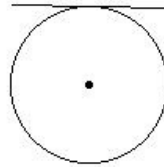


fig III

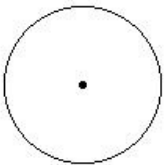


fig IV

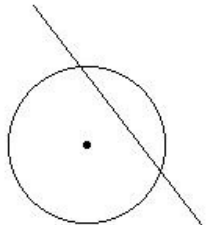


fig V

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

50. Which of the following figures represent a tangent ?

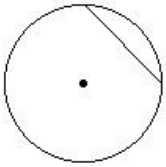


fig I

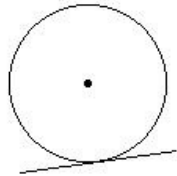


fig II

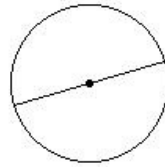


fig III

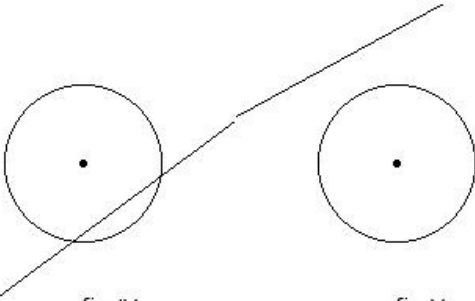


fig IV

fig V

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

51. Which of the following statements are true?

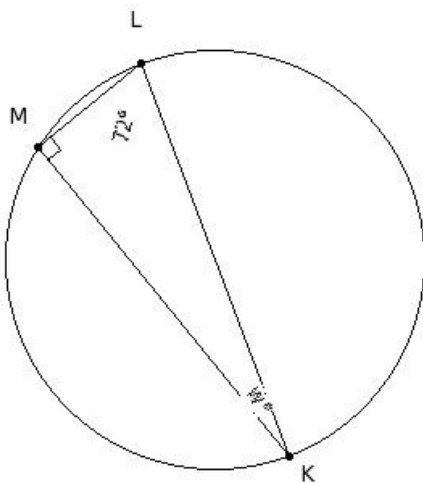
- a) π is a rational number.
- b) $\frac{22}{7}$ is a rational number.
- c) A circle divides the plane into three mutually disjoint sets of points.
- d) All chords of a circle are diameters.
- e) All diameters of a circle are chords.

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

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

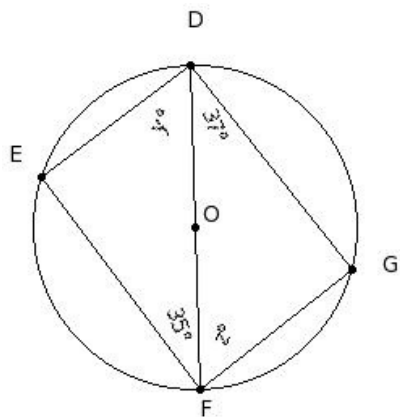
(i) Concurrent points (ii) Cyclic points (iii) Concyclic points (iv) Coincident points (v) Similar points

53. Find the missing angle in the following figure?



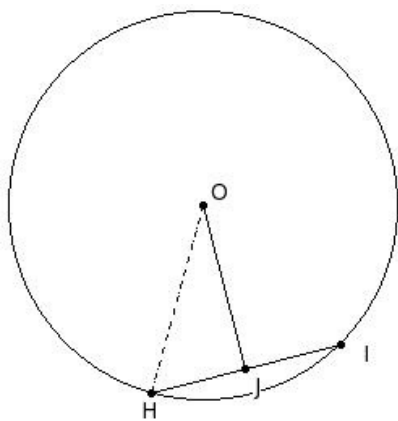
(i) 23° (ii) 18° (iii) 33° (iv) 48° (v) 28°

54. O is the centre of the circle. If $\angle DFE = 35^\circ$ and $\angle FDG = 37^\circ$, find y°, z°



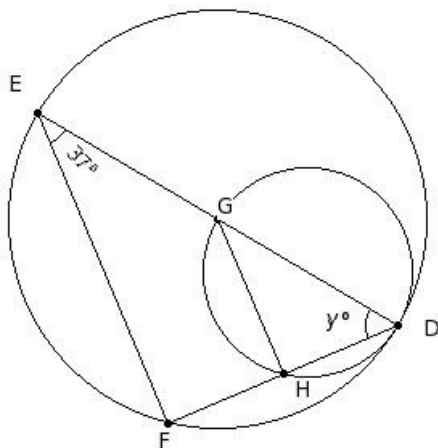
- (i) $55^\circ, 53^\circ$ (ii) $53^\circ, 55^\circ$ (iii) $63^\circ, 65^\circ$ (iv) $83^\circ, 75^\circ$ (v) $43^\circ, 55^\circ$

55. If a chord $HI = 12$ cm is drawn in a circle with radius $OH = 12$ cm, find its distance from the centre of the circle



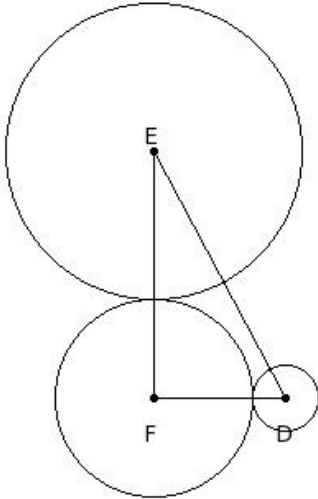
- (i) 11.39 cm (ii) 10.39 cm (iii) 12.39 cm (iv) 9.39 cm (v) 8.39 cm

56. Two circles touch internally. G is the centre of the bigger circle and lies on the smaller circle. If $\angle DEF = 37^\circ$, find $\angle D$



- (i) 68° (ii) 83° (iii) 63° (iv) 58° (v) 53°

57. 'D' and 'E' are centres of circles of radii 2 cm and 9 cm such that $DE = 17$ cm and 'F' is the centre of the circle of radius 'r' cm which touches the above circles externally. If $\angle DFE = 90^\circ$, find 'r'

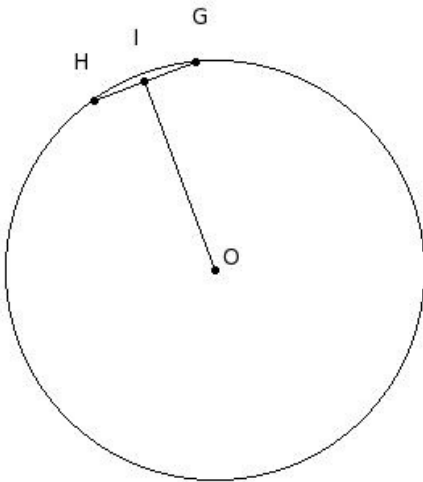


- (i) 8 cm (ii) 6 cm (iii) 7 cm (iv) 5 cm (v) 4 cm

58. With the vertices of a triangle $\triangle GHI$ as centres, three circles are drawn touching each other externally. If the sides of the triangle are 9 cm, 15 cm and 12 cm, find the radii of the circles

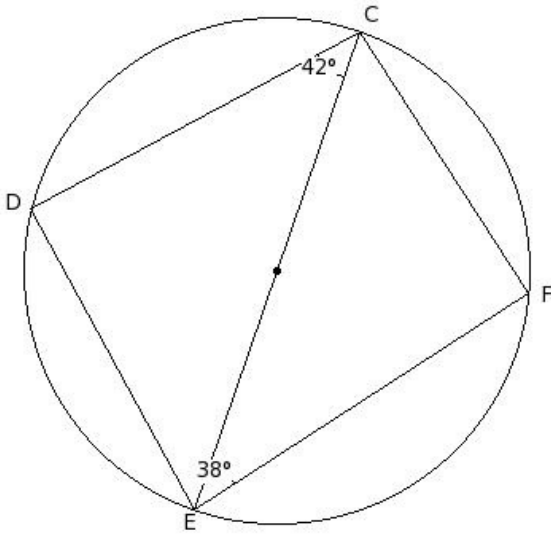
- (i) 3 cm, 11 cm & 9 cm respectively (ii) 3 cm, 6 cm & 9 cm respectively
 (iii) 3 cm, 6 cm & 14 cm respectively (iv) 8 cm, 6 cm & 9 cm respectively
 (v) 8 cm, 11 cm & 14 cm respectively

59. In the given figure, O is the centre of the circle. I is a point on chord GH such that $GI = IH$. Find $\angle OIG$



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

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



- (i) $C = 96^\circ, D = 90^\circ, E = 84^\circ, F = 90^\circ$ (ii) $C = 95^\circ, D = 90^\circ, E = 85^\circ, F = 90^\circ$ (iii) $C = 93^\circ, D = 90^\circ, E = 87^\circ, F = 90^\circ$
(iv) $C = 92^\circ, D = 90^\circ, E = 88^\circ, F = 90^\circ$ (v) $C = 94^\circ, D = 90^\circ, E = 86^\circ, F = 90^\circ$

Assignment Key

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