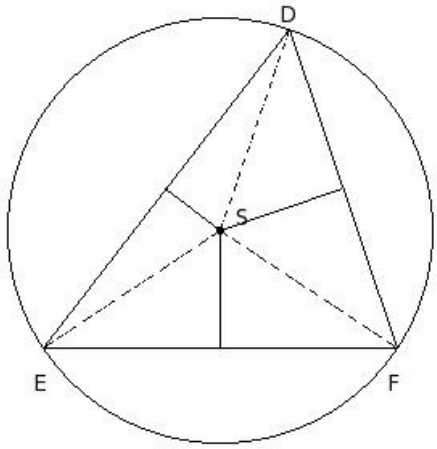
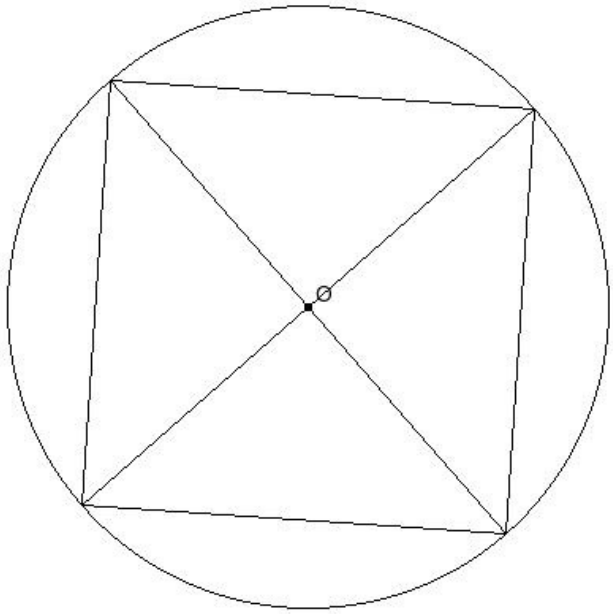
1. In the given triangle S is the circumcentre. If SD = 13.20 cm, find the circumference of the circumcircle



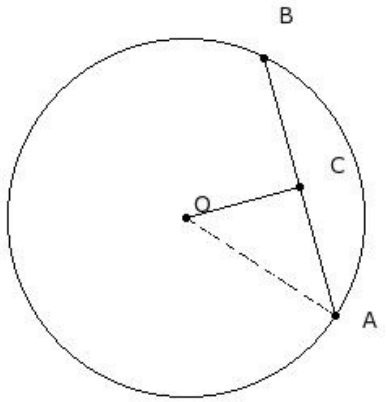
(i) 84.0 cm (ii) 82.0 cm (iii) 83.0 cm (iv) 85.0 cm (v) 81.0 cm

2. Find the side of the square in the following figure if the radius of the circle is 19.00 cm.



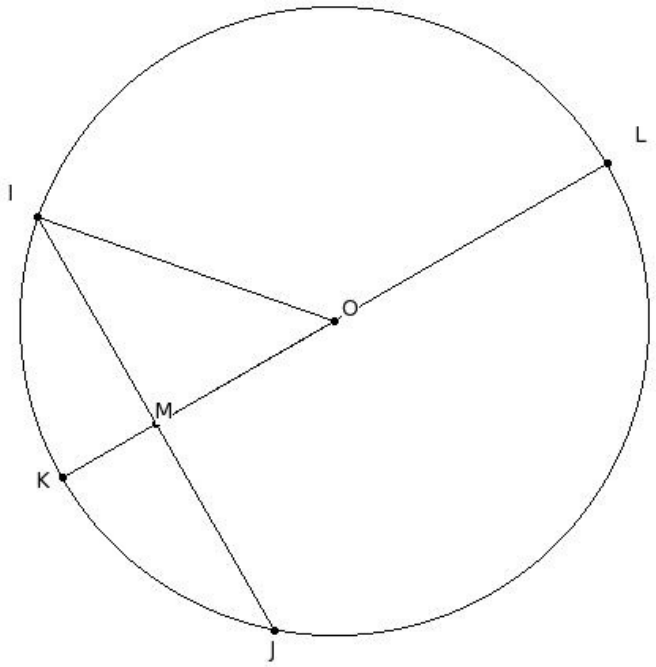
(i) 24.87 cm (ii) 27.87 cm (iii) 25.87 cm (iv) 28.87 cm (v) 26.87 cm

3. If a chord AB = 16 cm is drawn in a circle with radius OA = 11 cm, find its distance from the centre of the circle



(i) 6.55 cm (ii) 5.55 cm (iii) 8.55 cm (iv) 7.55 cm (v) 9.55 cm

4. The diameter KL of a circle with centre 'O' is perpendicular to the chord IJ. If IJ = 30.00 cm and KM = 6.85 cm, find the radius of the circle.



(i) 18.85 cm (ii) 19.85 cm (iii) 20.85 cm (iv) 17.85 cm (v) 21.85 cm

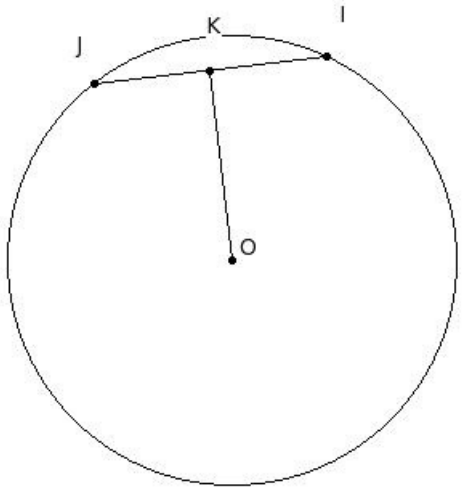
5. With the vertices of a triangle △FGH as centres, three circles are drawn touching each other externally. If the sides of the triangle are 10 cm , 16 cm and 14 cm , find the radii of the circles

(i) 4 cm , 6 cm & 15 cm respectively (ii) 9 cm , 11 cm & 15 cm respectively

(iii) 4 cm , 6 cm & 10 cm respectively (iv) 4 cm , 11 cm & 10 cm respectively

(v) 9 cm , 6 cm & 10 cm respectively

6. In the given figure, O is the centre of the circle. K is a point on chord IJ such that IK = KJ. Find ∠OKI



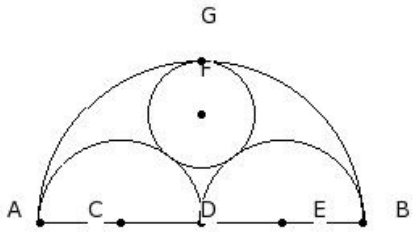
(i) 90° (ii) 105° (iii) 95° (iv) 120° (v) 100°

7. Which of the following statements are true?

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

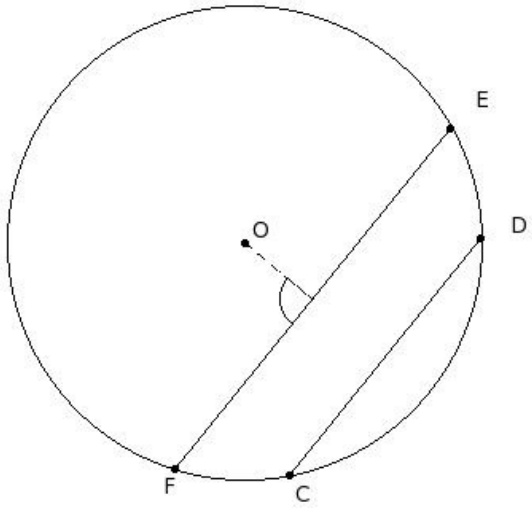
(i) {d,c} (ii) {a,b,c} (iii) {b,c,e} (iv) {a,b} (v) {a,d,e}

8. AB is a line segment and D is its mid-point. Three semi-circles are drawn with AD , DB and AB as diameters. C , E and D respectively are the centres of these semi-circles. A new circle is drawn touching these three semi-circles. Find its radius, given AC = 5 cm



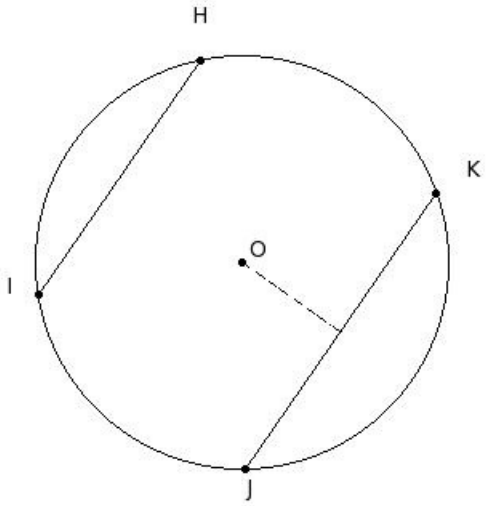
(i) 2.33 cm (ii) 4.33 cm (iii) 1.33 cm (iv) 5.33 cm (v) 3.33 cm

9. In the given figure, CD ∥ EF. Length of chords CD = 19 cm and EF = 28 cm. If the distance between the chords is 6 cm , find the radius of the circle



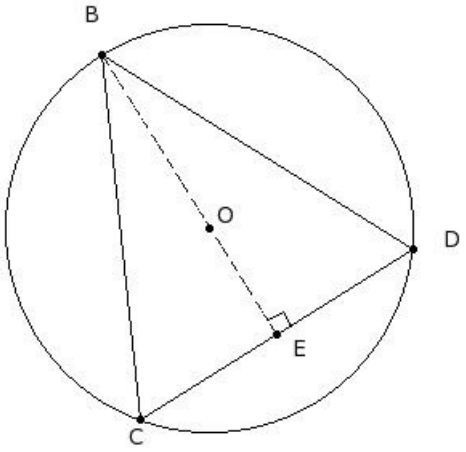
(i) 14.16 cm (ii) 16.16 cm (iii) 13.16 cm (iv) 17.16 cm (v) 15.16 cm

10. In the given figure, HI ∥ JK. Length of chords HI = 18 cm and JK = 21 cm. If the distance between the chords is 17 cm , find the radius of the circle



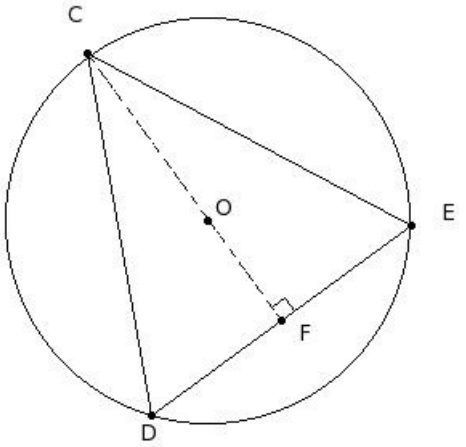
(i) 12.99 cm (ii) 13.99 cm (iii) 11.99 cm (iv) 14.99 cm (v) 10.99 cm

11. In the given figure, △BCD is inscribed in a circle. If BC = BD = 23 cm and CD = 20 cm, find the radius of the circle



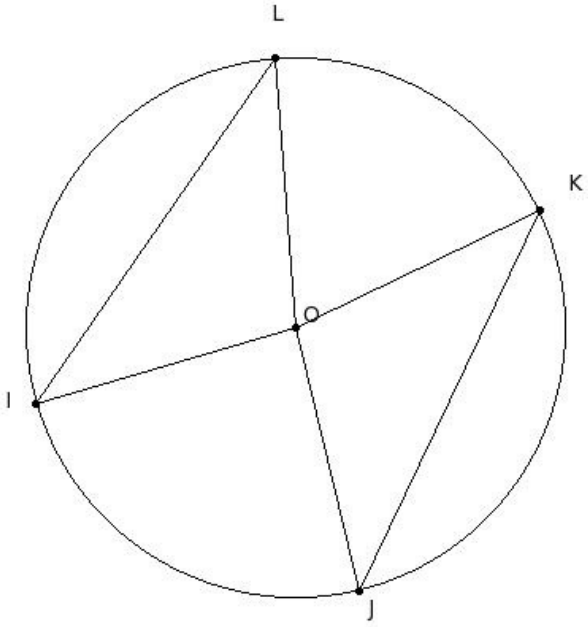
(i) 11.77 cm (ii) 14.77 cm (iii) 13.77 cm (iv) 10.77 cm (v) 12.77 cm

12. In the given figure, △CDE is an isosceles such that CD = CE. Given CO = 13 cm, CD = CE = 23 cm, find DE



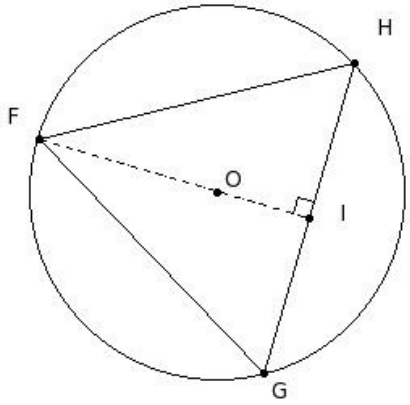
(i) 21.45 cm (ii) 19.45 cm (iii) 23.45 cm (iv) 22.45 cm (v) 20.45 cm

13. In the given figure, IL & JK are two chords of equal length. Given ∠OLI = 39°, find ∠KOJ



(i) 117° (ii) 132° (iii) 107° (iv) 112° (v) 102°

14. In the given figure, △FGH is equilateral. Given FO = 12 cm, find FH

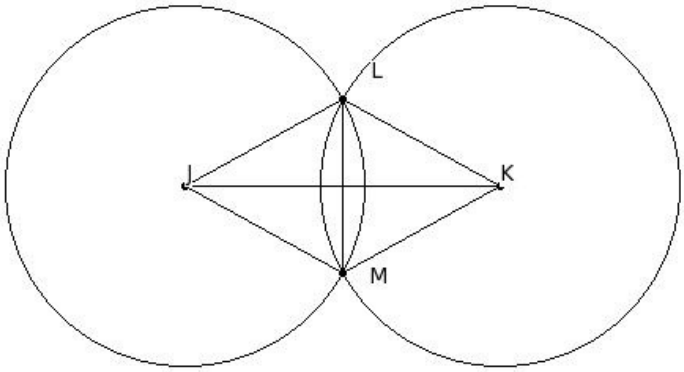


(i) 21.78 cm (ii) 18.78 cm (iii) 22.78 cm (iv) 20.78 cm (v) 19.78 cm

15. Two concentric circles are of radii 19 cm and 12 cm. Find the length of the chord of the outer circle that touches the inner circle

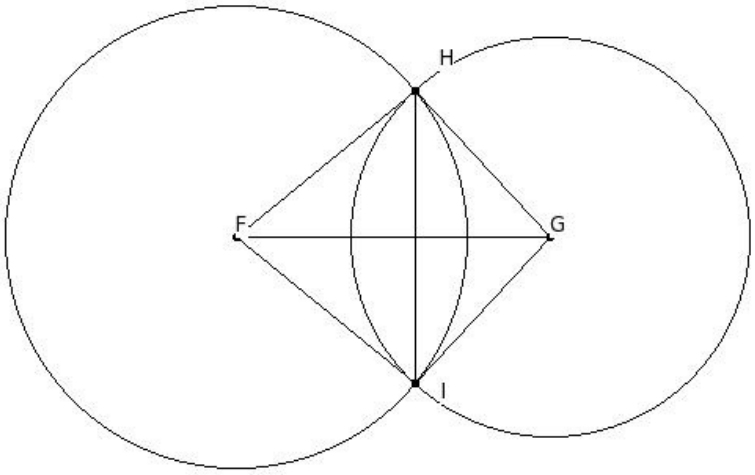
(i) 29.46 cm (ii) 27.46 cm (iii) 31.46 cm (iv) 28.46 cm (v) 30.46 cm

16. In the given figure, J and K are centres of two circles with equal radii intersecting at L and M. If JK = 20 cm and LM = 11 cm, find the radii of the circles



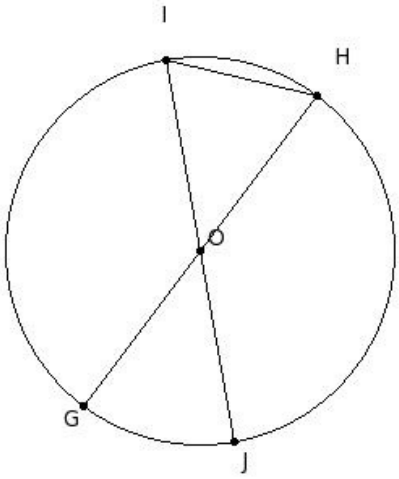
(i) 13.41 cm (ii) 12.41 cm (iii) 11.41 cm (iv) 10.41 cm (v) 9.41 cm

17. In the given figure, two circles of radii FH = 14.7 cm & GH = 12.7 cm intersect at H & I. The distance between the centres FG = 20 cm, find the length of HI



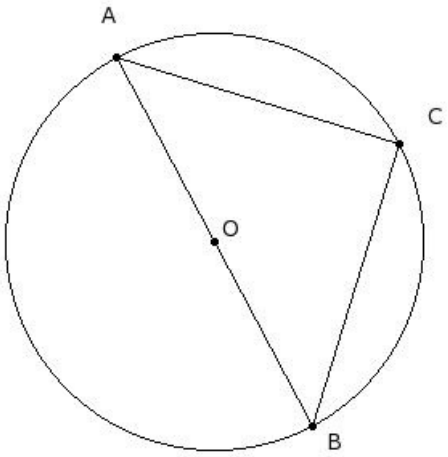
(i) 18.63 cm (ii) 17.63 cm (iii) 20.63 cm (iv) 19.63 cm (v) 16.63 cm

18. In the given figure, GH & IJ are diameters of the circle. If ∠GHI = 66.5° find, ∠HOI



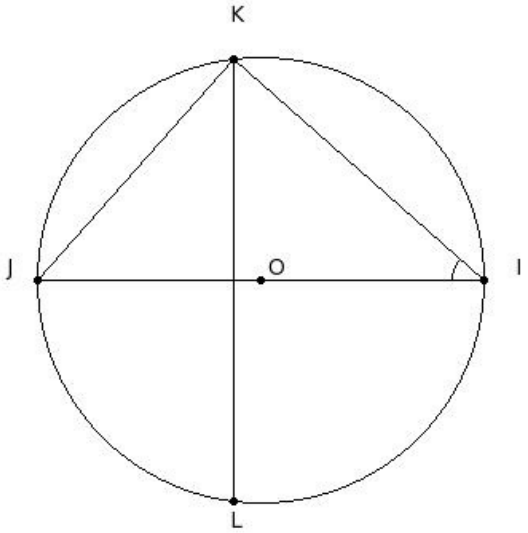
(i) 52° (ii) 47° (iii) 62° (iv) 77° (v) 57°

19. In the given figure AC & BC are equal length chords of the circle. Find ∠CAB



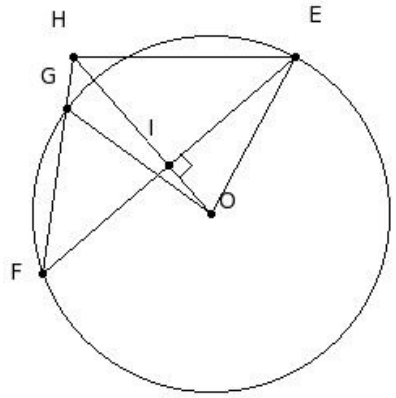
(i) 50° (ii) 55° (iii) 75° (iv) 60° (v) 45°

20. In the given figure, IJ is a diameter of the circle with centre O. If ∠JIK = 41.52° and JK = JL, find ∠LKI



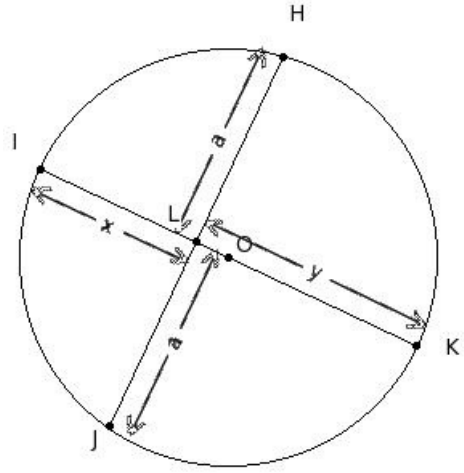
(i) 78.48° (ii) 53.48° (iii) 63.48° (iv) 58.48° (v) 48.48°

21. In the given figure, O is the centre of the circle, and OI ⊥ EF. If ∠EFG = 41°, find ∠OHG



(i) 49° (ii) 79° (iii) 64° (iv) 59° (v) 54°

22. In the given figure, if x = 11 cm and y = 15 cm, find a



(i) 12.85 cm (ii) 11.85 cm (iii) 10.85 cm (iv) 13.85 cm (v) 14.85 cm

Assignment Key

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