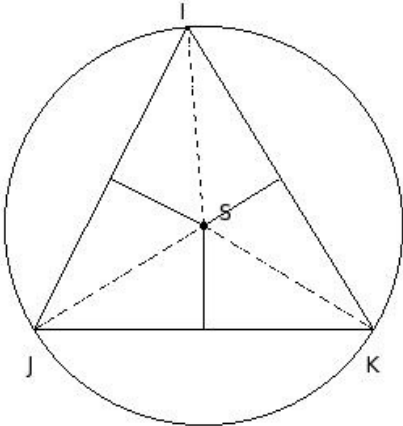


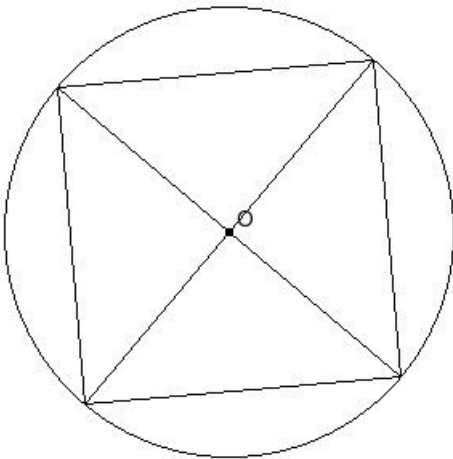


1. In the given triangle S is the circumcentre. If $SI = 12.30$ cm, find the circumference of the circumcircle



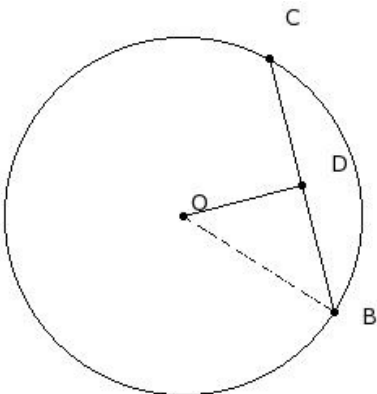
- (i) 78.3 cm (ii) 77.3 cm (iii) 76.3 cm (iv) 79.3 cm (v) 75.3 cm

2. Find the side of the square in the following figure if the radius of the circle is 14.00 cm.



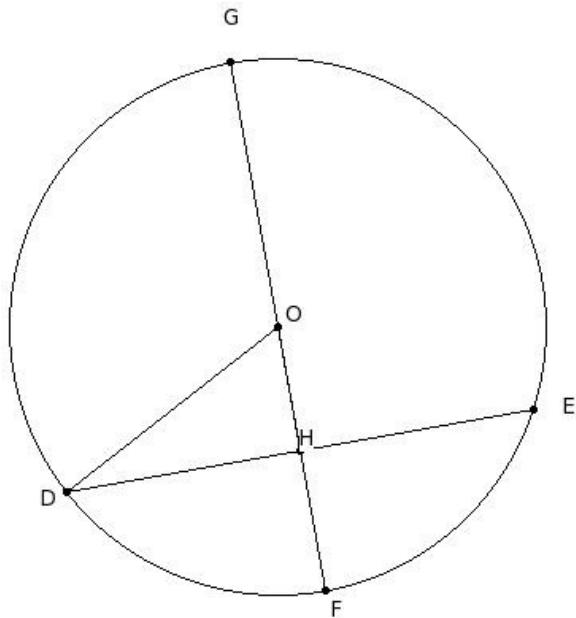
- (i) 21.80 cm (ii) 17.80 cm (iii) 18.80 cm (iv) 20.80 cm (v) 19.80 cm

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



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

4. The diameter FG of a circle with centre 'O' is perpendicular to the chord DE . If $DE = 30.00$ cm and $FH = 9.00$ cm, find the radius of the circle.

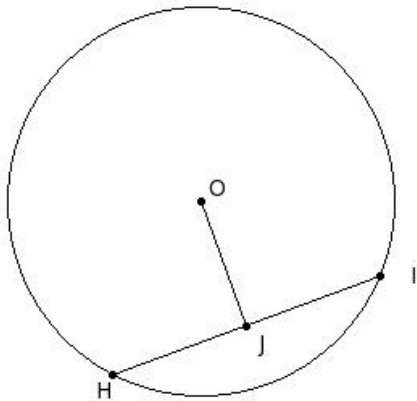


- (i) 16.00 cm (ii) 19.00 cm (iii) 15.00 cm (iv) 18.00 cm (v) 17.00 cm

5. With the vertices of a triangle $\triangle CDE$ as centres, three circles are drawn touching each other externally. If the sides of the triangle are 10 cm, 13 cm and 13 cm, find the radii of the circles

- (i) 5 cm, 5 cm & 8 cm respectively (ii) 10 cm, 10 cm & 13 cm respectively
 (iii) 10 cm, 5 cm & 8 cm respectively (iv) 5 cm, 5 cm & 13 cm respectively
 (v) 5 cm, 10 cm & 8 cm respectively

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



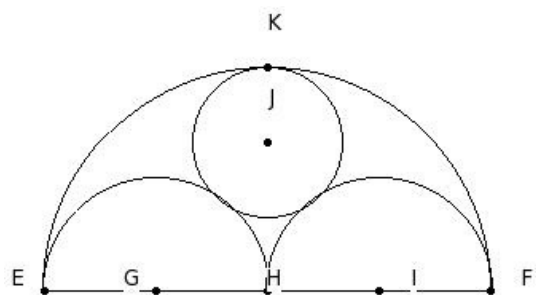
- (i) 105° (ii) 90° (iii) 95° (iv) 120° (v) 100°

7. Which of the following statements are true?

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

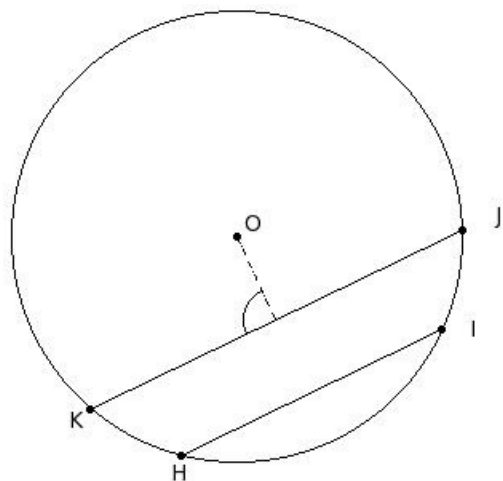
- (i) {a,d,e} (ii) {d,c} (iii) {a,b} (iv) {b,c,e} (v) {a,b,c}

8. EF is a line segment and H is its mid-point. Three semi-circles are drawn with EH , HF and EF as diameters. G , I and J respectively are the centres of these semi-circles. A new circle is drawn touching these three semi-circles. Find its radius, given EG = 7 cm



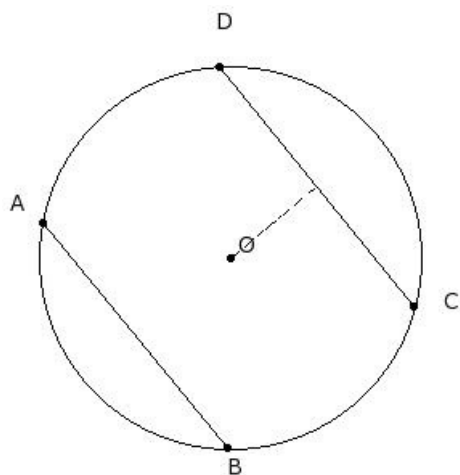
- (i) 5.67 cm (ii) 2.67 cm (iii) 4.67 cm (iv) 6.67 cm (v) 3.67 cm

9. In the given figure, HI \parallel JK. Length of chords HI = 18 cm and JK = 26 cm. If the distance between the chords is 5 cm, find the radius of the circle



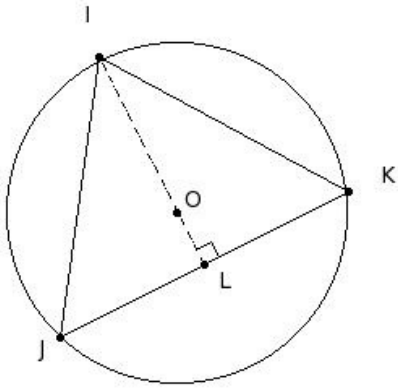
- (i) 13.45 cm (ii) 12.45 cm (iii) 15.45 cm (iv) 14.45 cm (v) 16.45 cm

10. In the given figure, AB \parallel CD. Length of chords AB = 18 cm and CD = 19 cm. If the distance between the chords is 15 cm, find the radius of the circle



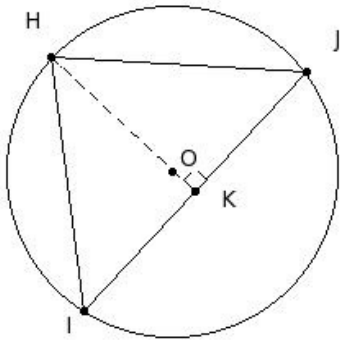
- (i) 10.92 cm (ii) 12.92 cm (iii) 13.92 cm (iv) 11.92 cm (v) 9.92 cm

11. In the given figure, $\triangle IJK$ is inscribed in a circle. If $IJ = IK = 18$ cm and $JK = 20$ cm, find the radius of the circle



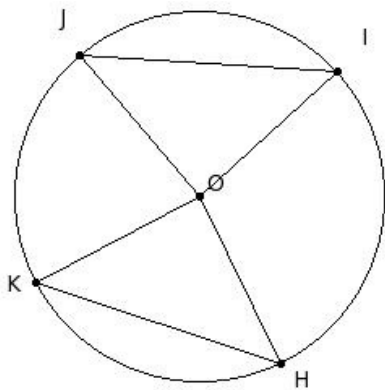
- (i) 10.82 cm (ii) 8.82 cm (iii) 12.82 cm (iv) 11.82 cm (v) 9.82 cm

12. In the given figure, $\triangle HIJ$ is an isosceles such that $HI = HJ$. Given $HO = 10$ cm, $HI = HJ = 16$ cm, find IJ



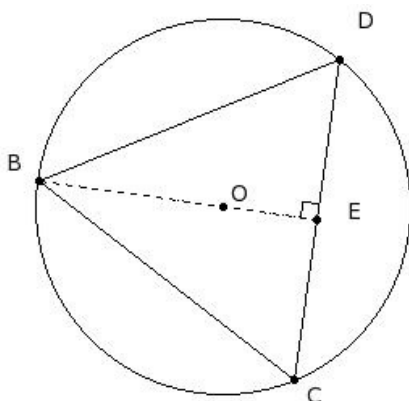
- (i) 21.20 cm (ii) 17.20 cm (iii) 19.20 cm (iv) 20.20 cm (v) 18.20 cm

13. In the given figure, HK & IJ are two chords of equal length. Given $\angle OIJ = 46^\circ$, find $\angle HOK$



- (i) 93° (ii) 88° (iii) 118° (iv) 103° (v) 98°

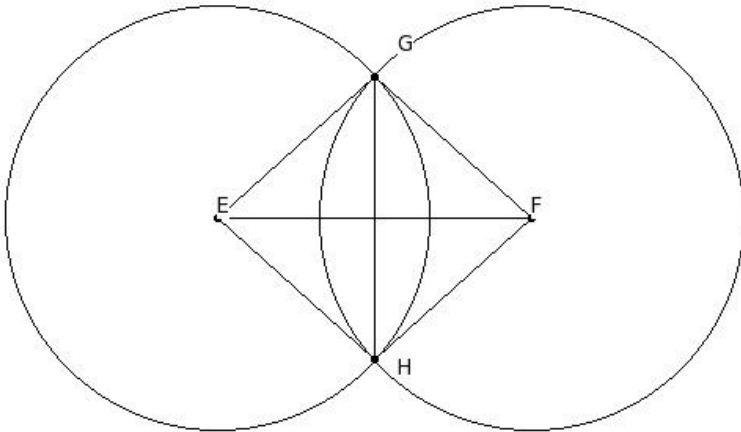
14. In the given figure, $\triangle BCD$ is equilateral. Given $BO = 12$ cm, find CD



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

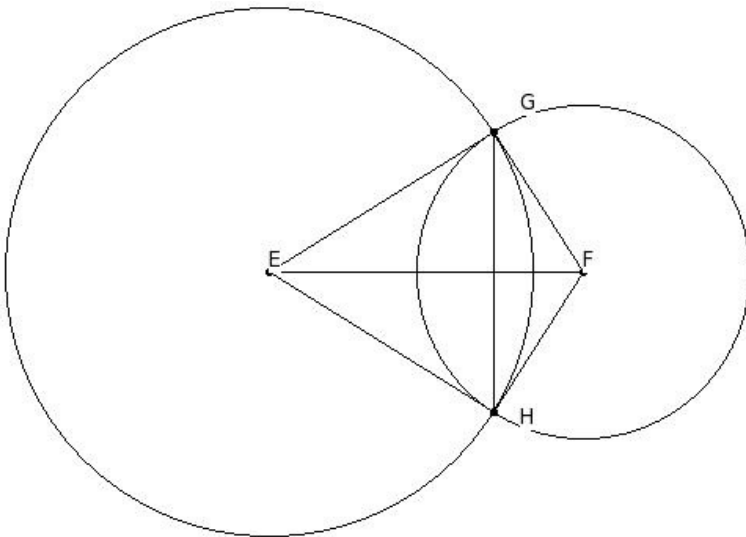
15. Two concentric circles are of radii 23 cm and 12 cm. Find the length of the chord of the outer circle that touches the inner circle
- (i) 39.24 cm (ii) 40.24 cm (iii) 37.24 cm (iv) 41.24 cm (v) 38.24 cm

16. In the given figure, E and F are centres of two circles with equal radii intersecting at G and H. If $EF = 20$ cm and $GH = 18$ cm, find the radii of the circles



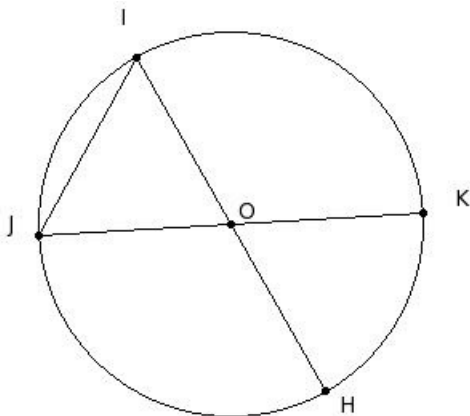
- (i) 12.45 cm (ii) 14.45 cm (iii) 13.45 cm (iv) 11.45 cm (v) 15.45 cm

17. In the given figure, two circles of radii $EG = 16.8$ cm & $FG = 10.6$ cm intersect at G & H. The distance between the centres $EF = 20$ cm, find the length of GH



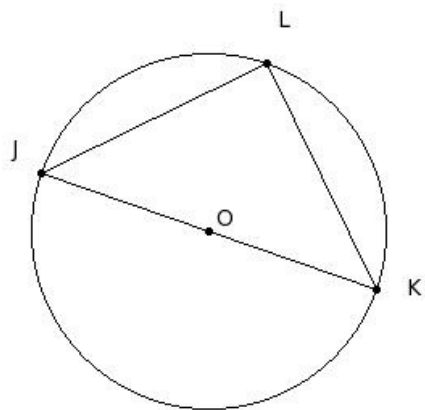
- (i) 19.81 cm (ii) 16.81 cm (iii) 17.81 cm (iv) 18.81 cm (v) 15.81 cm

18. In the given figure, HI & JK are diameters of the circle. If $\angle HIJ = 58^\circ$ find, $\angle IOJ$



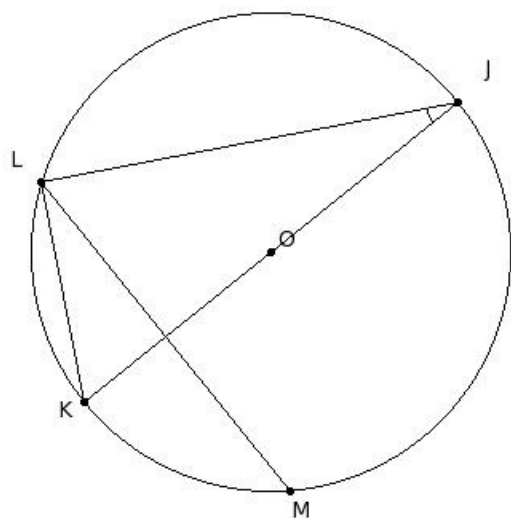
- (i) 64° (ii) 69° (iii) 79° (iv) 74° (v) 94°

19. In the given figure JL & KL are equal length chords of the circle. Find $\angle LJK$



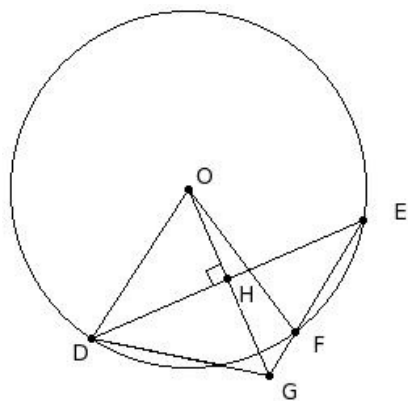
- (i) 45° (ii) 50° (iii) 55° (iv) 75° (v) 60°

20. In the given figure, JK is a diameter of the circle with centre O. If $\angle KJL = 27.93^\circ$ and $KL = KM$, find $\angle MLJ$



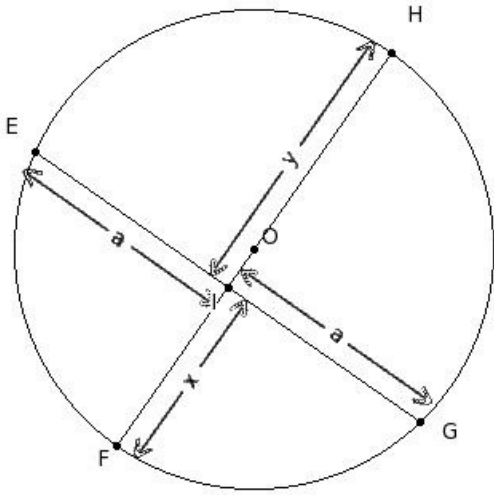
- (i) 67.07° (ii) 92.07° (iii) 72.07° (iv) 62.07° (v) 77.07°

21. In the given figure, O is the centre of the circle, and $OH \perp DE$. If $\angle DEF = 35^\circ$, find $\angle OGF$



- (i) 70° (ii) 55° (iii) 65° (iv) 60° (v) 85°

22. In the given figure, if $x = 12$ cm and $y = 18$ cm, find a



- (i) 16.70 cm (ii) 15.70 cm (iii) 13.70 cm (iv) 12.70 cm (v) 14.70 cm

Assignment Key

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