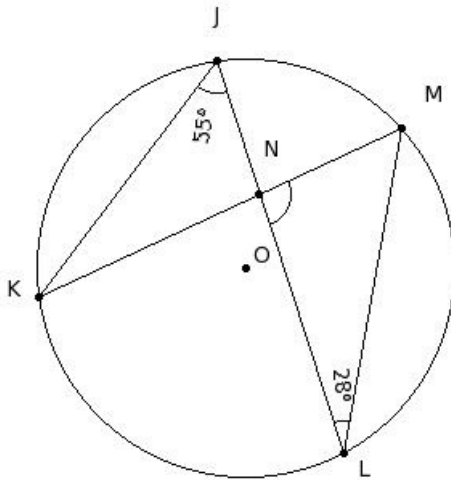




1. In the given figure, O is the centre of the circle. If $\angle KJL = 55^\circ$ and $\angle JLM = 28^\circ$, find $\angle LNM$

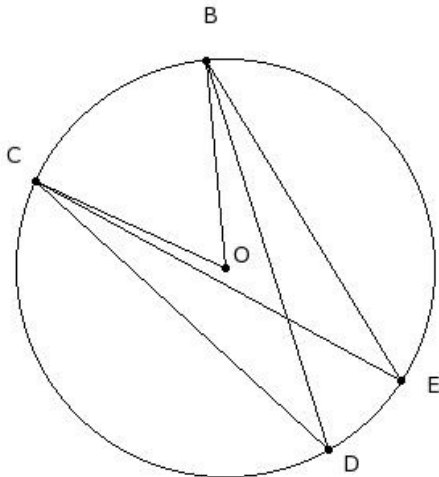


- (i) 107° (ii) 112° (iii) 127° (iv) 97° (v) 102°

2. An arc subtends 59° in its alternate segment. Its corresponding major arc subtends what angle in its (major arc) alternate segment?

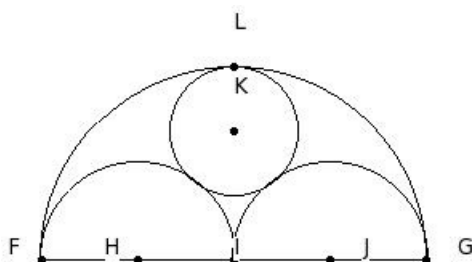
- (i) 151° (ii) 126° (iii) 121° (iv) 131° (v) 136°

3. O is the centre of the circle. If $\angle BOC = 60^\circ$, find the angle $\angle E$



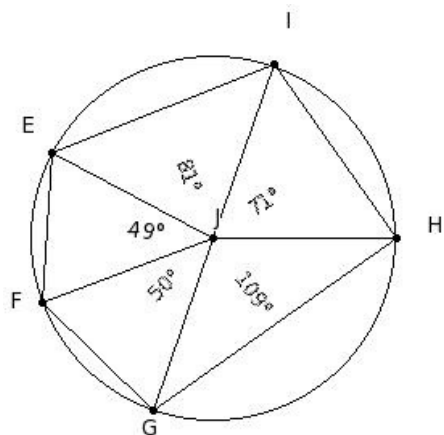
- (i) 60° (ii) 45° (iii) 40° (iv) 30° (v) 35°

4. FG is a line segment and I is its mid-point. Three semi-circles are drawn with FI, IG and FG as diameters. H, J and I respectively are the centres of these semi-circles. A new circle is drawn touching these three semi-circles. Find its radius, given $FH = 6$ cm



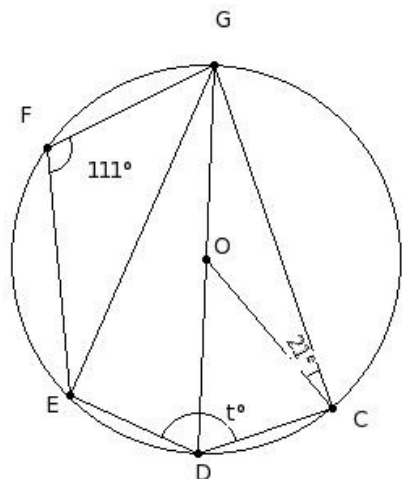
- (i) 3.00 cm (ii) 2.00 cm (iii) 4.00 cm (iv) 6.00 cm (v) 5.00 cm

5. The chords of the circle are



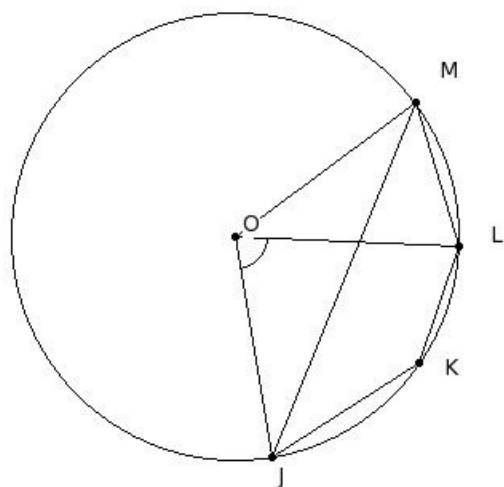
- (i) $\overline{EF}, \overline{FG}, \overline{GH}, \overline{HI}, \overline{IE}, \overline{JI}$ (ii) $\overline{FG}, \overline{GH}, \overline{HI}, \overline{IE}$ (iii) $\overline{EF}, \overline{FG}, \overline{GH}, \overline{HI}, \overline{IE}, \overline{GI}$ (iv) $\overline{JE}, \overline{JF}, \overline{JG},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

6. In the given figure, O is the centre of the circle and chord CD is equal to chord DE and DG is a diameter. If $\angle GCO = 21^\circ$ and $\angle EFG = 111^\circ$, find $\angle CDE$



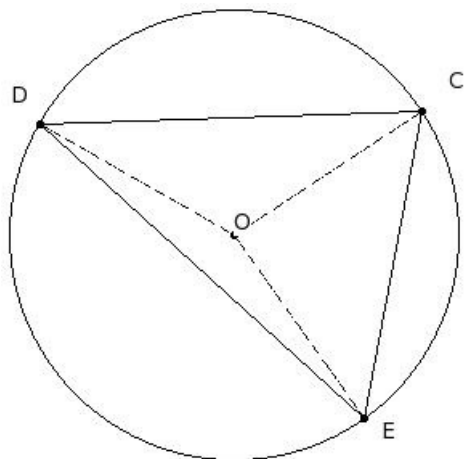
- (i) 143° (ii) 138° (iii) 168° (iv) 148° (v) 153°

7. O is the centre of the circle. If Arc JL = 2 Arc LM and $\angle JOL = 78^\circ$, find $\angle JKL$



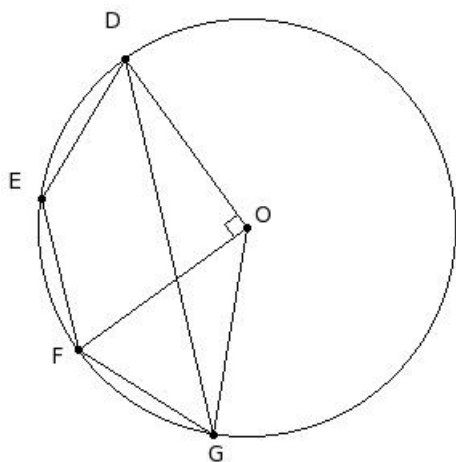
- (i) 156° (ii) 141° (iii) 146° (iv) 151° (v) 171°

8. $\triangle CDE$ is inscribed in a circle with centre O . If $\angle COD = 117^\circ$ and $\angle DOE = 155^\circ$, find $\angle CED$



- (i) 92.5° (ii) 82.5° (iii) 87.5° (iv) 77.5° (v) 107.5°

9. O is the centre of the circle. If Arc $DF = 2$ Arc FG and $\angle DOF = 90^\circ$, find $\angle GDF$

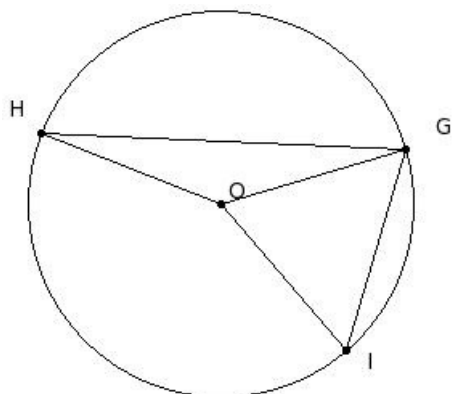


- (i) 52.5° (ii) 27.5° (iii) 37.5° (iv) 22.5° (v) 32.5°

10. The perimeter of a circle is called

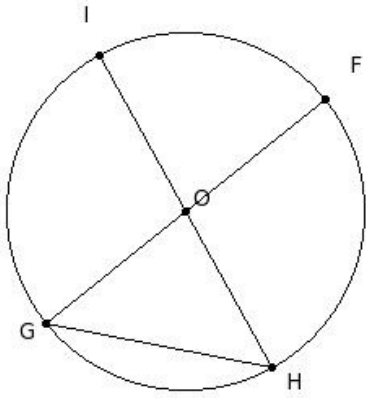
- (i) radius (ii) chord (iii) segment (iv) major segment (v) circumference

11. O is the centre of the circle. If $\angle HOG = 142^\circ$ and $\angle IOG = 66^\circ$, find $\angle HGI$



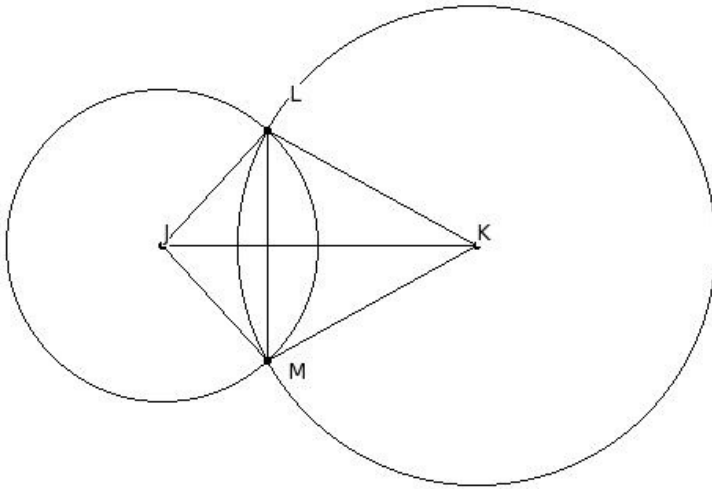
- (i) 106° (ii) 91° (iii) 76° (iv) 86° (v) 81°

12. In the given figure, FG & HI are diameters of the circle. If $\angle FGH = 50^\circ$ find, $\angle GOH$



- (i) 95° (ii) 80° (iii) 110° (iv) 85° (v) 90°

13. In the given figure, two circles of radii $JL = 9.9$ cm & $KL = 15.2$ cm intersect at L & M. The distance between the centres $JK = 20$ cm, find the length of LM



- (i) 14.62 cm (ii) 15.62 cm (iii) 12.62 cm (iv) 13.62 cm (v) 16.62 cm

14. BC, DE, FG, HI are chords of a circle with $BC = 7$ cm, $DE = 4$ cm, $FG = 7.4$ cm and $HI = 4.05$ cm. The chord farthest from the centre of the circle is

- (i) $FG = 7.4$ cm (ii) $HI = 4.05$ cm (iii) $DE = 4$ cm (iv) $BC = 7$ cm

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

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

16. Which of the following statements are true?

- a) If two chords are equal, then they are equidistant from the centre of the circle.
- b) Angle subtended by the major arc at the centre is acute.
- c) The angle subtended in a semicircle is a right angle.
- d) Angle subtended by the major arc in its alternate segment is obtuse.
- e) Angle subtended in the major segment is obtuse.

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

17. Which of the following figures represent a chord ?

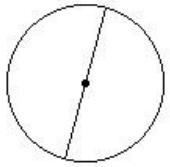


fig I

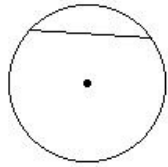


fig II

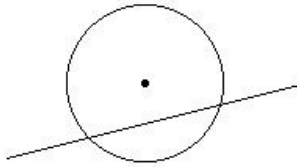


fig III

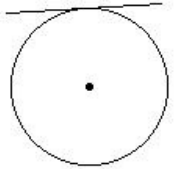


fig IV

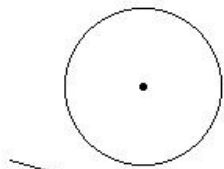
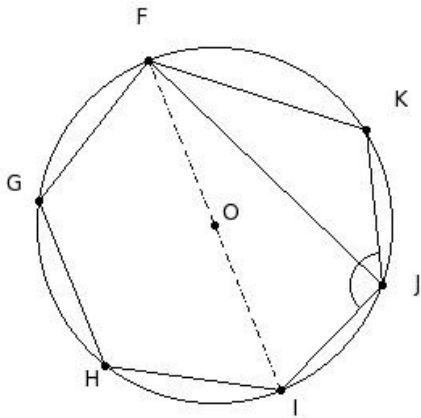


fig V

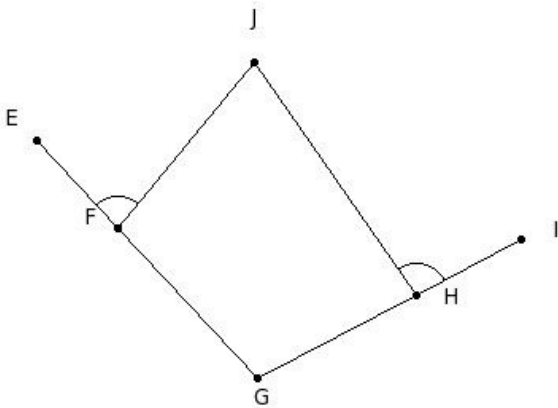
(i) fig III (ii) fig V (iii) fig IV (iv) fig I (v) fig II

18. In the given figure, a hexagon is inscribed in a circle with centre O. Given $FG = GH = HI$ and $\angle IJK = 129.95^\circ$. Find $\angle FJK$



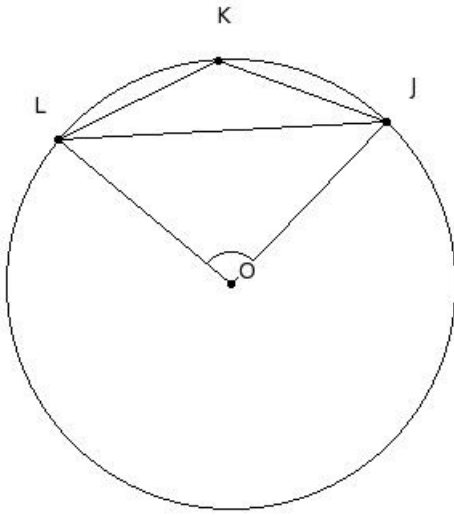
(i) 44.95° (ii) 69.95° (iii) 39.95° (iv) 49.95° (v) 54.95°

19. In the given figure, $FGHJ$ is a cyclic quadrilateral where GH and GF are produced to I and E respectively. If $\angle EFJ = 83^\circ$, find $\angle IHJ$



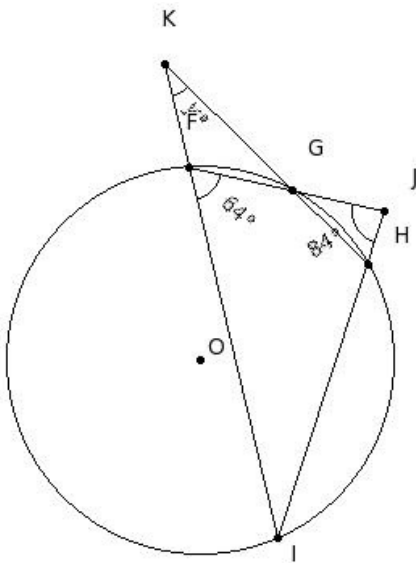
(i) 102° (ii) 112° (iii) 127° (iv) 97° (v) 107°

20. O is the centre of the circle. If $\angle LO = 94^\circ$, find $\angle K$



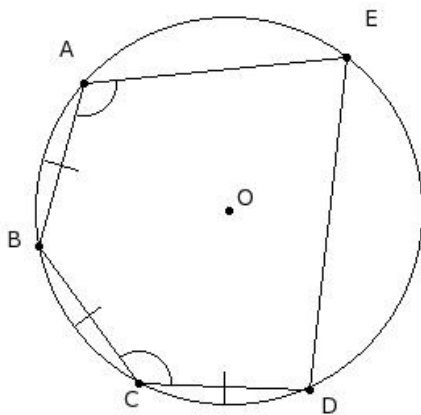
- (i) 143° (ii) 163° (iii) 138° (iv) 133° (v) 148°

21. In the given figure, O is the centre of the circle. If $\angle GJH = 84^\circ$ and $\angle GFI = 64^\circ$, find $\angle FKG$



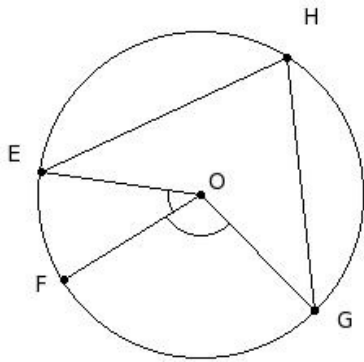
- (i) 47° (ii) 37° (iii) 32° (iv) 42° (v) 62°

22. In the given figure, a pentagon is inscribed in a circle with centre O. Given $AB = BC = CD$, $\angle BCD = 104^\circ$ and $\angle EAB = 111^\circ$. Find $\angle EAD$



- (i) 50° (ii) 45° (iii) 40° (iv) 65° (v) 35°

23. In the given figure, O is the centre of the circle. Given $\angle EHG = 71.5^\circ$ & $\angle EOF = 40^\circ$, find $\angle FOG$



- (i) 108° (ii) 113° (iii) 103° (iv) 118° (v) 133°

24. Which of the following figures represent a diameter ?

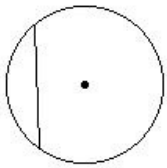


fig I

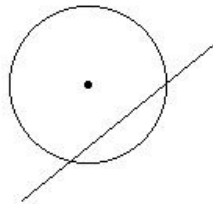


fig II

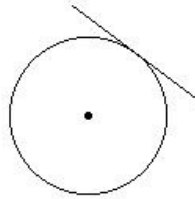


fig III

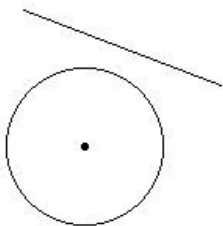


fig IV

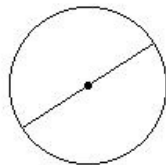
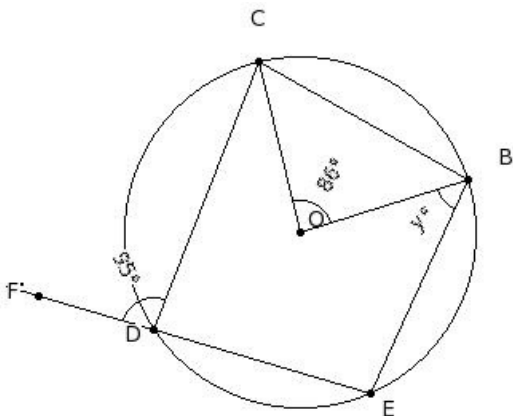


fig V

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

25. In the given figure, O is the centre of the circle. If $\angle BOC = 86^\circ$ and $\angle CDF = 95^\circ$, find $\angle EBO$



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

Assignment Key

1) (iv)	2) (iii)	3) (iv)	4) (iii)	5) (v)	6) (ii)
7) (ii)	8) (iv)	9) (iv)	10) (v)	11) (iii)	12) (ii)
13) (i)	14) (iii)	15) (v)	16) (ii)	17) (v)	18) (iii)
19) (iv)	20) (iv)	21) (iii)	22) (v)	23) (iii)	24) (v)
25) (iv)					