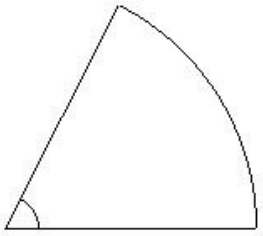
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Area Related to Circles

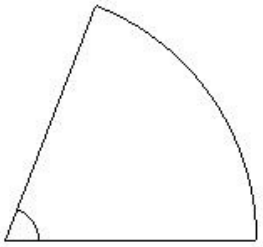
Grade : CBSE Grade X

1. If the length of the arc of a sector is 16.50 cm and the area of the circle is 707.14 sq.cm, the perimeter of the sector is



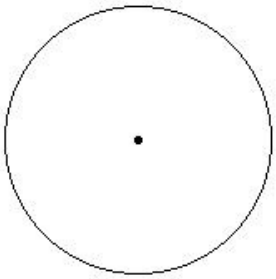
(i) 51.50 cm (ii) 46.50 cm (iii) 43.50 cm (iv) 49.50 cm (v) 41.50 cm

2. If the length of the arc of a sector is 18.07 cm and the perimeter of the circle is 94.29 cm, the radius of the circle is



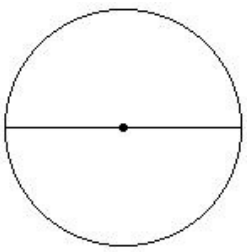
(i) 15.00 cm (ii) 18.00 cm (iii) 12.00 cm (iv) 20.00 cm (v) 10.00 cm

3. If area of the circle is 201.14 sq.cm, the area of the semicircle is



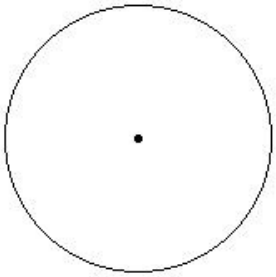
(i) 83.57 sq.cm (ii) 126.57 sq.cm (iii) 100.57 sq.cm (iv) 86.57 sq.cm (v) 115.57 sq.cm

4. If area of the circle is 154.00 sq.cm, the diameter of the circle is



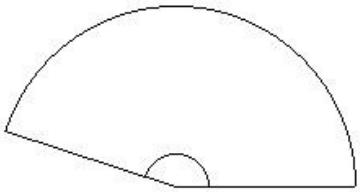
(i) 19.00 cm (ii) 9.00 cm (iii) 11.00 cm (iv) 14.00 cm (v) 17.00 cm

5. If area of the circle is 201.14 sq.cm, the circumference of the circle is



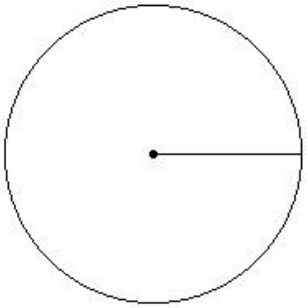
(i) 47.29 cm (ii) 53.29 cm (iii) 50.29 cm (iv) 45.29 cm (v) 55.29 cm

6. If the radius of a circle is 11.00 cm and the perimeter of a sector is 53.11 cm, the angle subtended at the center by the arc of the sector is



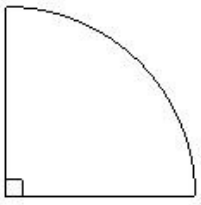
(i) 167.00° (ii) 144.00° (iii) 148.00° (iv) 162.00° (v) 174.00°

7. If radius of the circle is 9.00 cm, the area of the semicircle is



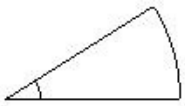
(i) 127.29 sq.cm (ii) 123.29 sq.cm (iii) 145.29 sq.cm (iv) 100.29 sq.cm (v) 140.29 sq.cm

8. If the area of a sector of a circle is 95.07 sq.cm and the length of the arc of the sector is 17.29 cm, the perimeter of the circle is



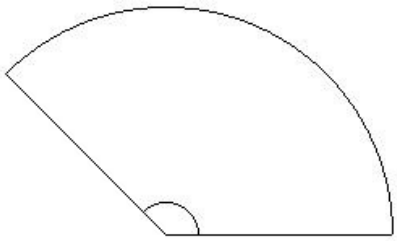
(i) 69.14 cm (ii) 64.14 cm (iii) 74.14 cm (iv) 72.14 cm (v) 66.14 cm

9. If the length of the arc of a sector is 5.59 cm and the perimeter of the circle is 62.86 cm, the perimeter of the sector is



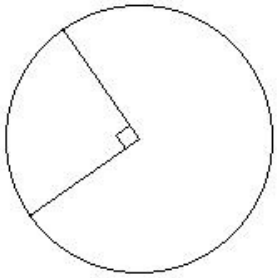
(i) 22.59 cm (ii) 30.59 cm (iii) 28.59 cm (iv) 20.59 cm (v) 25.59 cm

10. If the area of a sector of a circle is 231.00 sq.cm and the area of the circle is 616.00 sq.cm, the perimeter of the circle is



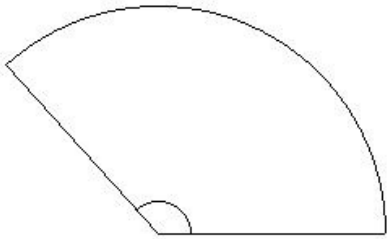
(i) 83.00 cm (ii) 88.00 cm (iii) 91.00 cm (iv) 93.00 cm (v) 85.00 cm

11. In the given figure, the radius of the circle is 8 cm. Find the area of the minor sector



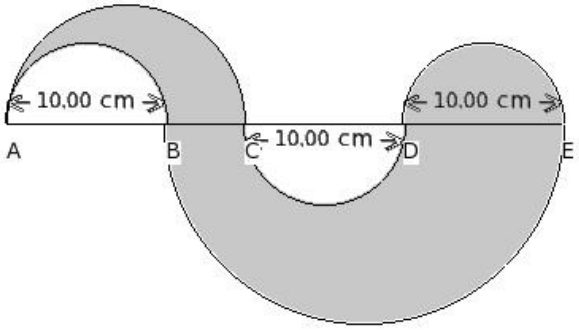
(i) 55.28 sq.cm (ii) 53.28 sq.cm (iii) 45.28 sq.cm (iv) 50.28 sq.cm (v) 47.28 sq.cm

12. If the area of a sector of a circle is 225.87 sq.cm and the area of the circle is 616.00 sq.cm, the length of the arc of the sector is



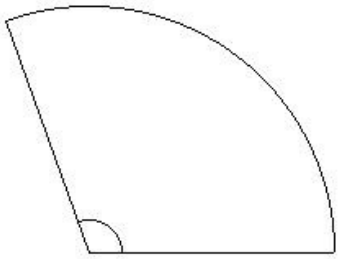
(i) 29.27 cm (ii) 35.27 cm (iii) 37.27 cm (iv) 32.27 cm (v) 27.27 cm

13. In the given figure, BC = 5.00 cm. Find the area of the shaded region



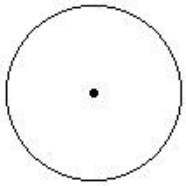
(i) 286.64 sq.cm (ii) 294.64 sq.cm (iii) 307.64 sq.cm (iv) 279.64 sq.cm (v) 301.64 sq.cm

14. If the length of the arc of a sector is 28.81 cm and the area of the circle is 707.14 sq.cm, the area of the sector is



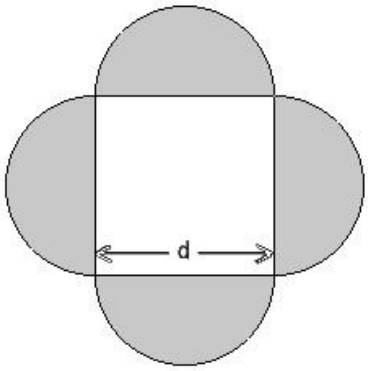
(i) 216.07 sq.cm (ii) 220.07 sq.cm (iii) 189.07 sq.cm (iv) 204.07 sq.cm (v) 241.07 sq.cm

15. If area of the circle is 78.57 sq.cm, the perimeter of the semicircle is



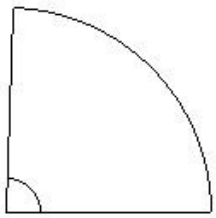
(i) 25.71 cm (ii) 22.71 cm (iii) 20.71 cm (iv) 30.71 cm (v) 28.71 cm

16. In the given figure, d = 11.00 cm is the diameter of the semi-circles. Find the area of the shaded region



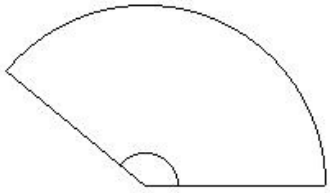
(i) 184.14 sq.cm (ii) 168.14 sq.cm (iii) 205.14 sq.cm (iv) 203.14 sq.cm (v) 190.14 sq.cm

17. If the length of the arc of a sector is 18.44 cm and the angle subtended at the center by the arc of the sector is 88.00°, the radius of the circle is



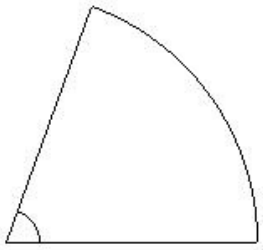
(i) 9.00 cm (ii) 7.00 cm (iii) 12.00 cm (iv) 15.00 cm (v) 17.00 cm

18. If the area of a sector of a circle is 147.89 sq.cm and the length of the arc of the sector is 26.89 cm, the area of the circle is



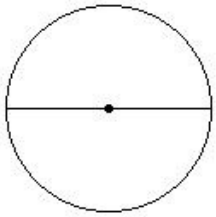
(i) 365.29 sq.cm (ii) 380.29 sq.cm (iii) 378.29 sq.cm (iv) 393.29 sq.cm (v) 394.29 sq.cm

19. If the radius of a circle is 15.00 cm and the length of the arc of a sector is 18.33 cm, the angle subtended at the center by the arc of the sector is



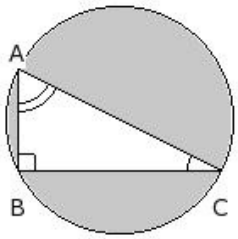
(i) 75.00° (ii) 70.00° (iii) 67.00° (iv) 73.00° (v) 65.00°

20. If diameter of the circle is 12.00 cm, the area of the semicircle is



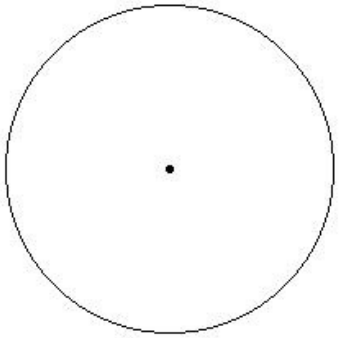
(i) 59.57 sq.cm (ii) 61.57 sq.cm (iii) 53.57 sq.cm (iv) 56.57 sq.cm (v) 51.57 sq.cm

21. In the given figure, BC = 12 cm and AB = 6 cm. Find the perimeter of the shaded region



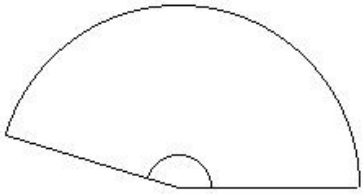
(i) 73.58 cm (ii) 70.58 cm (iii) 78.58 cm (iv) 76.58 cm (v) 68.58 cm

22. If circumference of the circle is 62.86 cm, the area of the circle is



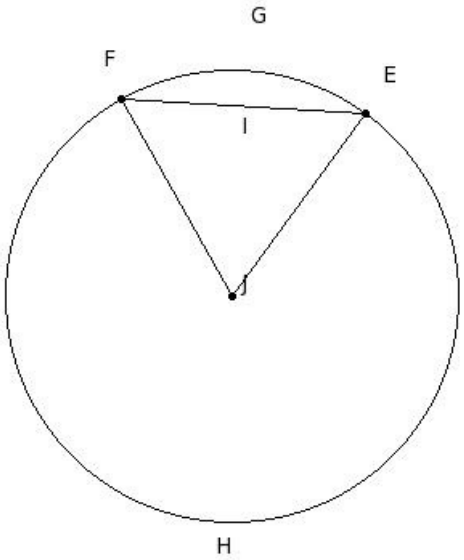
(i) 289.29 sq.cm (ii) 337.29 sq.cm (iii) 314.29 sq.cm (iv) 312.29 sq.cm (v) 326.29 sq.cm

23. If the radius of a circle is 11.00 cm and the length of the arc of a sector is 31.31 cm, the perimeter of the circle is



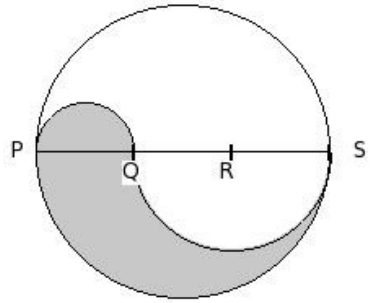
(i) 69.14 cm (ii) 74.14 cm (iii) 66.14 cm (iv) 64.14 cm (v) 72.14 cm

24. The major arc of the circle is



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

25. In the given figure ,PQRS is the diameter of the circle of radius 3.00 cm and PQ = QR = RS. Find the area of the shaded region



(i) 8.43 sq.cm (ii) 7.43 sq.cm (iii) 9.43 sq.cm (iv) 11.43 sq.cm (v) 10.43 sq.cm

Assignment Key

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