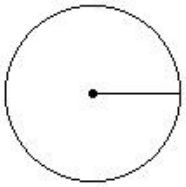
EduSahara™ Assignment

Name : Perimeter and Area of Circles

Chapter : Perimeter and Area of Plane Figures

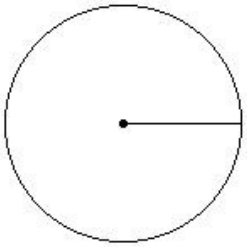
Grade : ICSE Grade IX

1. If radius of the circle is 5.00 cm, the area of the circle is



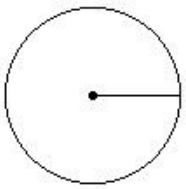
(i) 73.57 sq.cm (ii) 81.57 sq.cm (iii) 75.57 sq.cm (iv) 83.57 sq.cm (v) 78.57 sq.cm

2. If radius of the circle is 7.00 cm, the area of the semicircle is



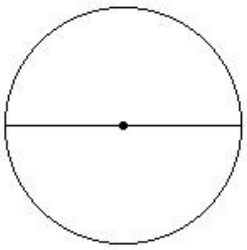
(i) 74.00 sq.cm (ii) 82.00 sq.cm (iii) 80.00 sq.cm (iv) 72.00 sq.cm (v) 77.00 sq.cm

3. If radius of the circle is 5.00 cm, the perimeter of the semicircle is



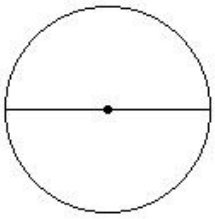
(i) 25.71 cm (ii) 20.71 cm (iii) 22.71 cm (iv) 30.71 cm (v) 28.71 cm

4. If diameter of the circle is 14.00 cm, the area of the circle is



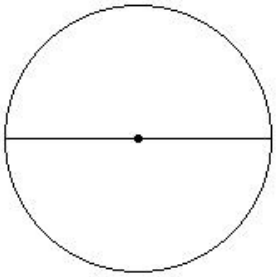
(i) 149.00 sq.cm (ii) 166.00 sq.cm (iii) 154.00 sq.cm (iv) 180.00 sq.cm (v) 131.00 sq.cm

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



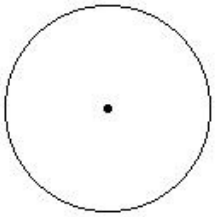
(i) 53.57 sq.cm (ii) 51.57 sq.cm (iii) 59.57 sq.cm (iv) 61.57 sq.cm (v) 56.57 sq.cm

6. If diameter of the circle is 16.00 cm, the perimeter of the semicircle is



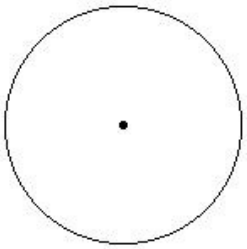
(i) 46.14 cm (ii) 41.14 cm (iii) 36.14 cm (iv) 38.14 cm (v) 44.14 cm

7. If circumference of the circle is 37.71 cm, the area of the circle is



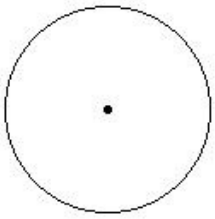
(i) 137.14 sq.cm (ii) 113.14 sq.cm (iii) 129.14 sq.cm (iv) 108.14 sq.cm (v) 90.14 sq.cm

8. If circumference of the circle is 44.00 cm, the area of the semicircle is



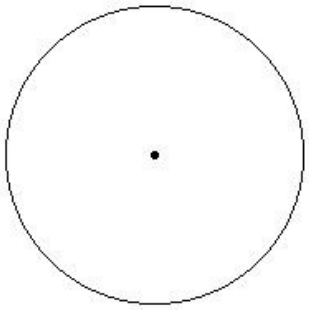
(i) 82.00 sq.cm (ii) 72.00 sq.cm (iii) 80.00 sq.cm (iv) 74.00 sq.cm (v) 77.00 sq.cm

9. If circumference of the circle is 37.71 cm, the perimeter of the semicircle is



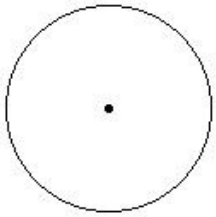
(i) 27.86 cm (ii) 30.86 cm (iii) 33.86 cm (iv) 25.86 cm (v) 35.86 cm

10. If area of the circle is 254.57 sq.cm, the area of the semicircle is



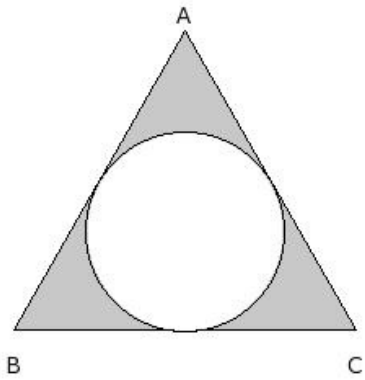
(i) 120.29 sq.cm (ii) 127.29 sq.cm (iii) 112.29 sq.cm (iv) 130.29 sq.cm (v) 145.29 sq.cm

11. If area of the circle is 113.14 sq.cm, the perimeter of the semicircle is



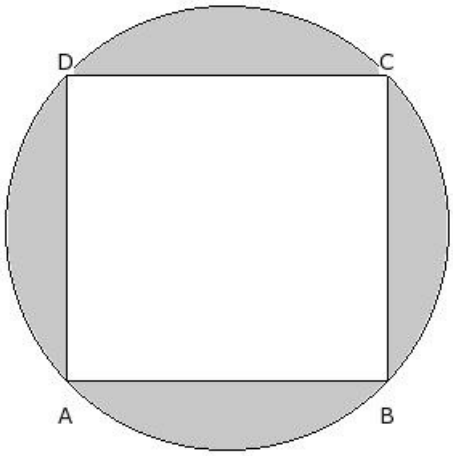
(i) 35.86 cm (ii) 30.86 cm (iii) 33.86 cm (iv) 27.86 cm (v) 25.86 cm

12. In the given figure, a circle is inscribed touching the sides of an equilateral triangle of side 21 cm. Find the area of the shaded region



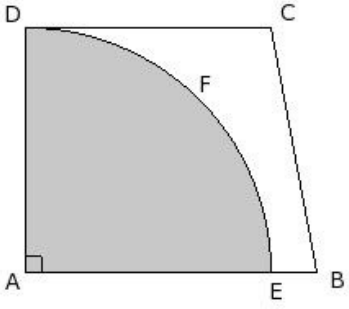
(i) 72.46 sq.cm (ii) 75.46 sq.cm (iii) 70.46 sq.cm (iv) 80.46 sq.cm (v) 78.46 sq.cm

13. In the given figure, the circle circumscribes a rectangle with sides 20.00 cm and 19.00 cm. Find the area of the remaining portion other than the rectangle



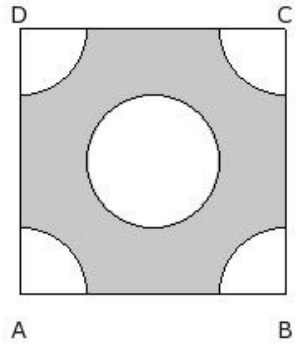
(i) 225.93 sq.cm (ii) 245.93 sq.cm (iii) 217.93 sq.cm (iv) 202.93 sq.cm (v) 211.93 sq.cm

14. In the given figure , ABCD is a trapezium. A quarter circle AEFD is removed from the trapezium. If AD = CD = 15 and EB = 2.8 , find the area of the remaining portion



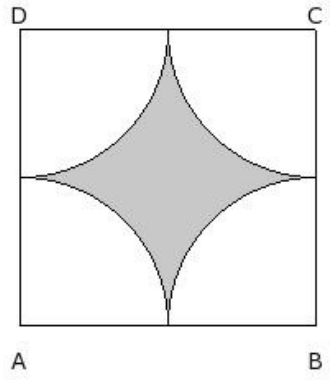
(i) 74.21 sq.cm (ii) 66.21 sq.cm (iii) 64.21 sq.cm (iv) 72.21 sq.cm (v) 69.21 sq.cm

15. In the given figure, ABCD is a square of side 16.00 cm . At the centre there is a circle with radius 4.00 cm and the same circle quadrants are at the four corners. Find the area of the shaded region.



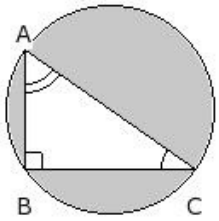
(i) 170.43 sq.cm (ii) 143.43 sq.cm (iii) 155.43 sq.cm (iv) 169.43 sq.cm

16. In the given figure, ABCD is a square of side 18.00 cm and A, B, C, D are the centres of circular arcs, each of radius 9.00 cm. Find the area of the shaded region



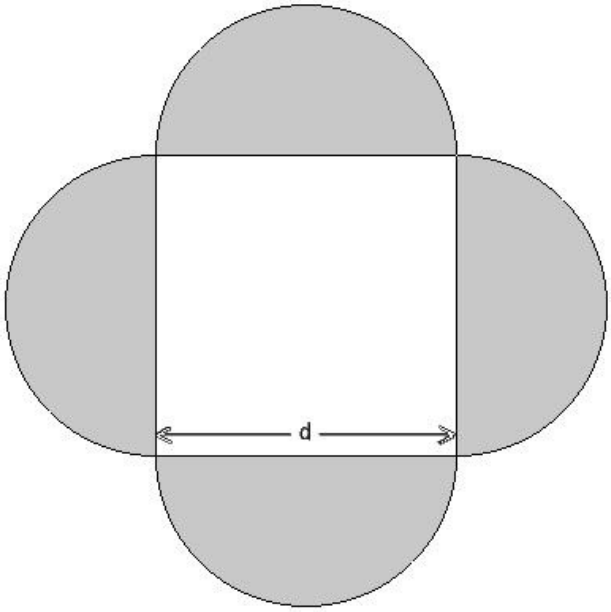
(i) 72.43 sq.cm (ii) 64.43 sq.cm (iii) 74.43 sq.cm (iv) 69.43 sq.cm (v) 66.43 sq.cm

17. In the given figure, BC = 10 cm and AB = 7 cm. Find the perimeter of the shaded region



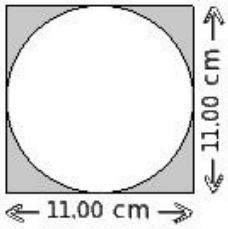
(i) 67.57 cm (ii) 64.57 cm (iii) 70.57 cm (iv) 62.57 cm (v) 72.57 cm

18. In the given figure, d = 19.00 cm is the diameter of the semi-circles. Find the area of the shaded region



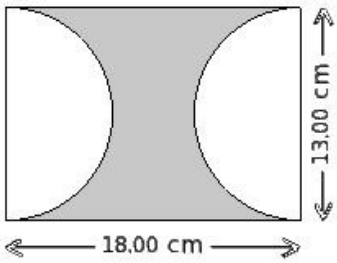
(i) 567.29 sq.cm (ii) 582.29 sq.cm (iii) 570.29 sq.cm (iv) 559.29 sq.cm (v) 553.29 sq.cm

19. Find the area of the shaded region



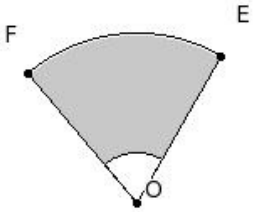
(i) 30.93 sq.cm (ii) 25.93 sq.cm (iii) 28.93 sq.cm (iv) 22.93 sq.cm (v) 20.93 sq.cm

20. Find the area of the shaded region



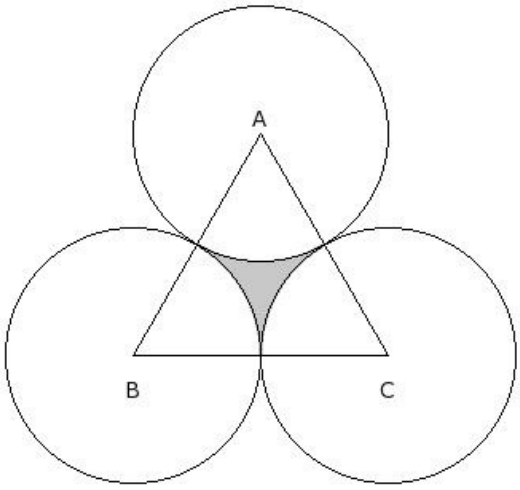
(i) 119.21 sq.cm (ii) 101.21 sq.cm (iii) 115.21 sq.cm (iv) 73.21 sq.cm (v) 98.21 sq.cm

21. In the given figure, arcs of two concentric circles of radii 10.00 cm and 3.00 cm are drawn with center O. If ∠EOF = 70°, find the area of the shaded region



(i) 50.61 sq.cm (ii) 52.61 sq.cm (iii) 55.61 sq.cm (iv) 60.61 sq.cm (v) 58.61 sq.cm

22. In the given figure △ABC is an equilateral triangle whose area is 110.85 sq.cm. With each vertex of the triangle as center, a circle is drawn with radius equal to half the length of the side of the triangle . Find the area of the shaded region



(i) 5.28 sq.cm (ii) 10.28 sq.cm (iii) 15.28 sq.cm (iv) 13.28 sq.cm (v) 7.28 sq.cm

Assignment Key

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