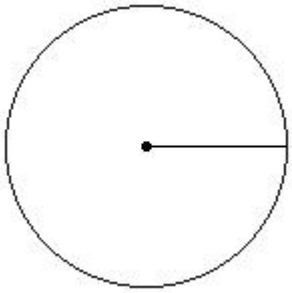
EduSahara™ Learning Center Assignment

Grade : Class IX, ICSE
Chapter : Perimeter and Area of Plane Figures
Name : Perimeter and Area of Circles

---

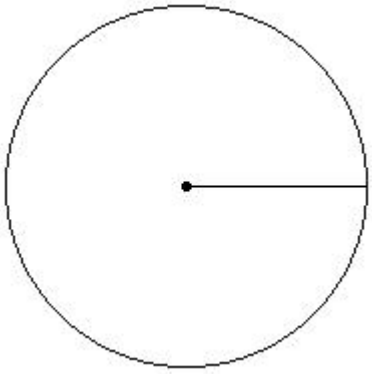
1. If radius of the circle is 7.00 cm, the area of the circle is



(i) 181.00 sq.cm (ii) 146.00 sq.cm (iii) 154.00 sq.cm (iv) 156.00 sq.cm (v) 137.00 sq.cm

---

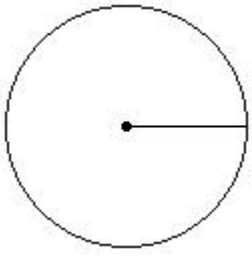
2. If radius of the circle is 9.00 cm, the area of the semicircle is



(i) 113.29 sq.cm (ii) 149.29 sq.cm (iii) 127.29 sq.cm (iv) 125.29 sq.cm (v) 134.29 sq.cm

---

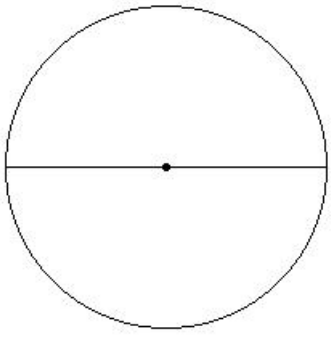
3. If radius of the circle is 6.00 cm, the perimeter of the semicircle is



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

---

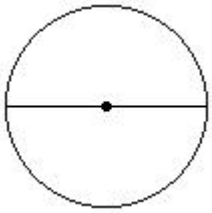
4. If diameter of the circle is 20.00 cm, the area of the circle is



(i) 299.29 sq.cm (ii) 330.29 sq.cm (iii) 314.29 sq.cm (iv) 312.29 sq.cm (v) 331.29 sq.cm

---

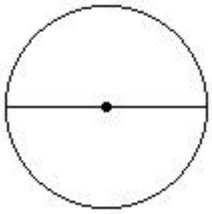
5. If diameter of the circle is 10.00 cm, the area of the semicircle is



(i) 34.29 sq.cm (ii) 36.29 sq.cm (iii) 44.29 sq.cm (iv) 39.29 sq.cm (v) 42.29 sq.cm

---

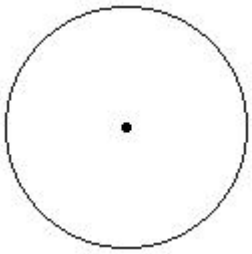
6. If diameter of the circle is 10.00 cm, the perimeter of the semicircle is



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

---

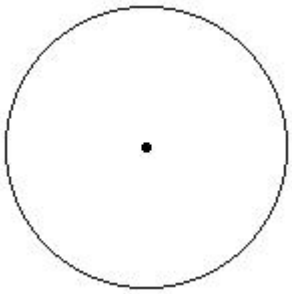
7. If circumference of the circle is 37.71 cm, the area of the circle is



(i) 113.14 sq.cm (ii) 118.14 sq.cm (iii) 91.14 sq.cm (iv) 126.14 sq.cm (v) 111.14 sq.cm

---

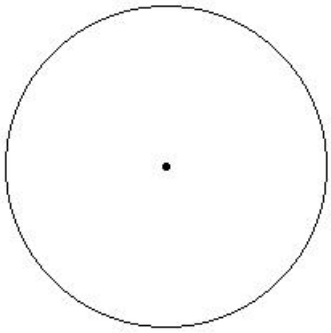
8. If circumference of the circle is 44.00 cm, the area of the semicircle is



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

---

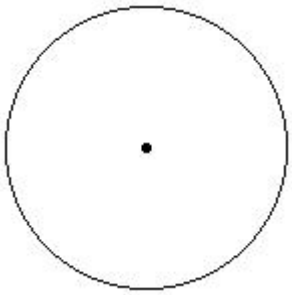
9. If circumference of the circle is 62.86 cm, the perimeter of the semicircle is



(i) 48.43 cm (ii) 56.43 cm (iii) 46.43 cm (iv) 54.43 cm (v) 51.43 cm

---

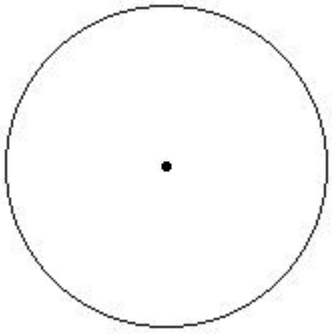
10. If area of the circle is 154.00 sq.cm, the area of the semicircle is



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

---

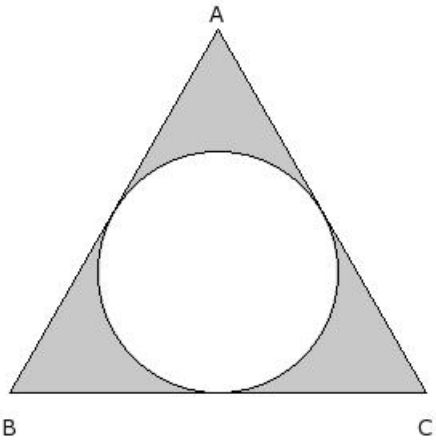
11. If area of the circle is 201.14 sq.cm, the perimeter of the semicircle is



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

---

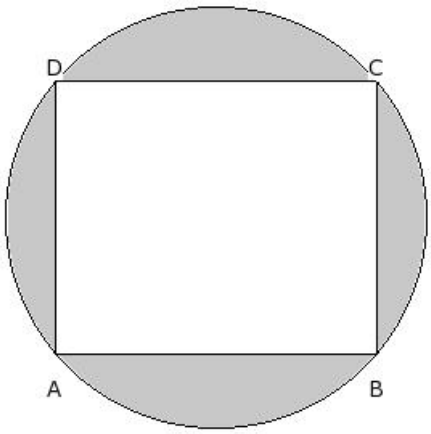
12. In the given figure, a circle is inscribed touching the sides of an equilateral triangle of side 26 cm. Find the area of the shaded region



(i) 99.67 sq.cm (ii) 115.67 sq.cm (iii) 110.67 sq.cm

(iv) 128.67 sq.cm

13. In the given figure, the circle circumscribes a rectangle with sides 20.00 cm and 17.00 cm. Find the area of the remaining portion other than the rectangle

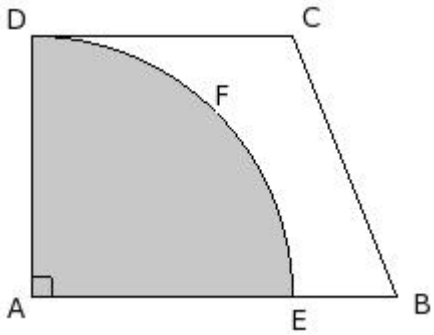


(i) 215.36 sq.cm (ii) 186.36 sq.cm (iii) 201.36 sq.cm

(iv) 193.36 sq.cm (v) 207.36 sq.cm

---

14. In the given figure , ABCD is a trapezium. A quarter circle AEFD is removed from the trapezium. If AD = CD = 13 and EB = 5.2 , find the area of the remaining portion

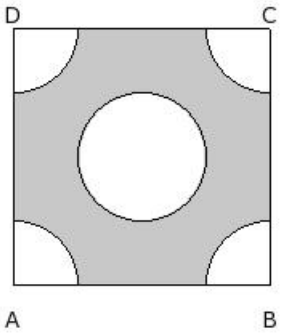


(i) 65.01 sq.cm (ii) 67.01 sq.cm (iii) 73.01 sq.cm

(iv) 75.01 sq.cm (v) 70.01 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.

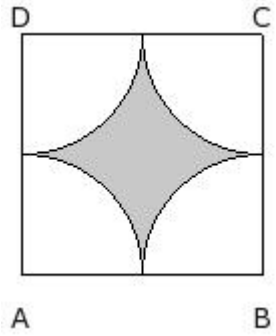


(i) 167.43 sq.cm (ii) 155.43 sq.cm (iii) 150.43 sq.cm

(iv) 128.43 sq.cm (v) 159.43 sq.cm

---

16. In the given figure, ABCD is a square of side 12.00 cm and A, B, C, D are the centres of circular arcs, each of radius 6.00 cm. Find the area of the shaded region

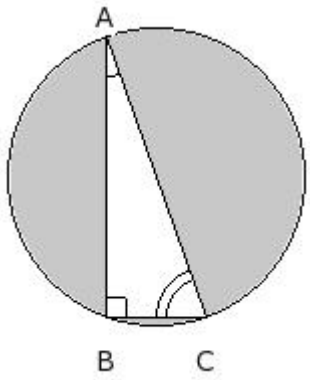


(i) 25.86 sq.cm (ii) 27.86 sq.cm (iii) 35.86 sq.cm

(iv) 30.86 sq.cm (v) 33.86 sq.cm

---

17. In the given figure, BC = 5 cm and AB = 14 cm. Find the perimeter of the shaded region

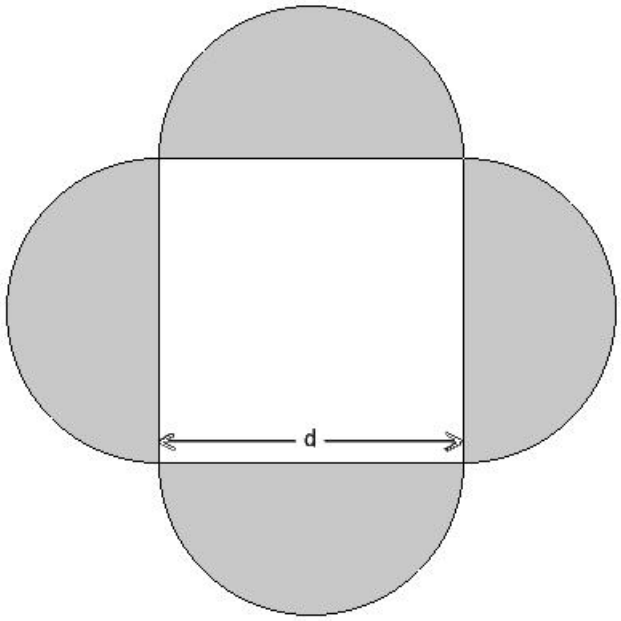


(i) 77.59 cm (ii) 85.59 cm (iii) 83.59 cm

(iv) 75.59 cm (v) 80.59 cm

---

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

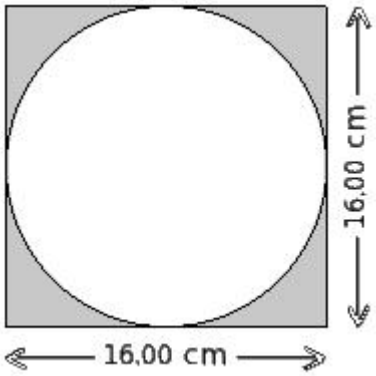


(i) 543.29 sq.cm (ii) 594.29 sq.cm (iii) 567.29 sq.cm

(iv) 562.29 sq.cm (v) 580.29 sq.cm

---

19. Find the area of the shaded region

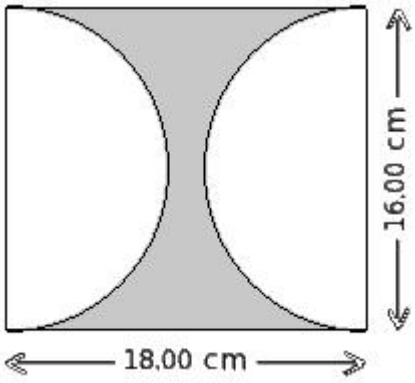


(i) 54.86 sq.cm (ii) 57.86 sq.cm (iii) 51.86 sq.cm

(iv) 59.86 sq.cm (v) 49.86 sq.cm

---

20. Find the area of the shaded region

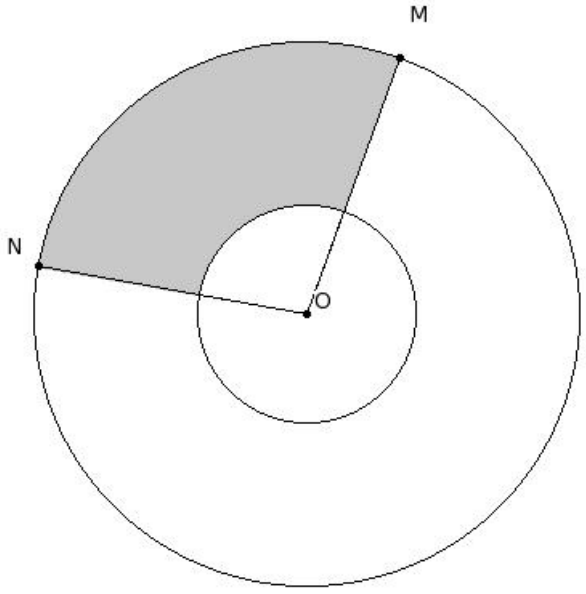


(i) 81.86 sq.cm (ii) 91.86 sq.cm (iii) 83.86 sq.cm

(iv) 89.86 sq.cm (v) 86.86 sq.cm

---

21. In the given figure, arcs of two concentric circles of radii 17.00 cm and 6.80 cm are drawn with center O. If $\angle MON = 100°$, find the area of the shaded region



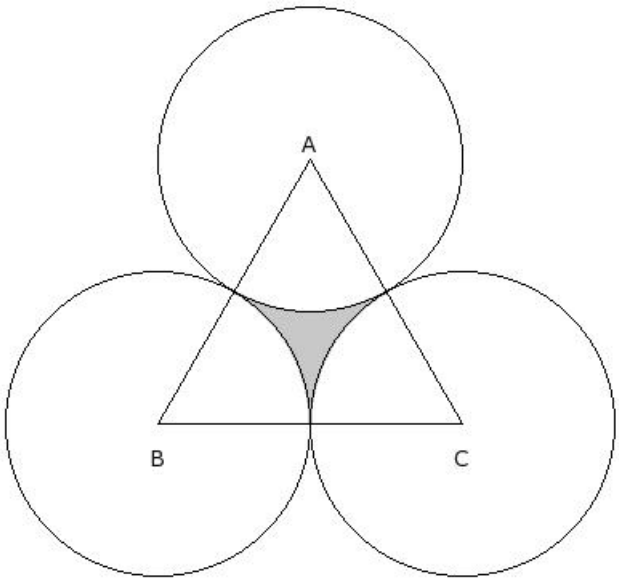
(i) 184.93 sq.cm (ii) 219.93 sq.cm (iii) 198.93 sq.cm

(iv) 237.93 sq.cm (v) 211.93 sq.cm

---

22. In the given figure $\triangle ABC$ is an equilateral triangle whose area is 156.32 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) 17.50 sq.cm (ii) 14.50 sq.cm (iii) 19.50 sq.cm

(iv) 11.50 sq.cm (v) 9.50 sq.cm

Assignment Key

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