JSUNIL TUTORIAL
A CBSE Coaching for Mathematics and Science

Questions from CBSE Examination Papers- Mathematics Class X

Chapter - Area Related To Circle
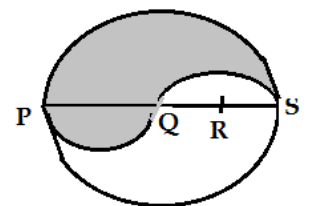
1 mark Question

1. If the diameter of a semicircular protractor is 14 cm, then the perimeter of the protractor is :
(a) 26 cm (b) 14 cm (c) 28 cm (d) 36 cm

2. The perimeter of a quadrant of a circle of radius 3.5 cm is
(a) 3.5 cm (b) 5.5 cm (c) 7.5 cm (d) 12.5 cm

3. The circumference of a circle is 100 cm. The side of a square inscribed in the circle is :
(a) 50 $\sqrt{2}$ cm (b) 100/p cm (c) 50 $\sqrt{2}$/ p cm (d) 100$\sqrt{2}$/p cm

4. The diameter of a circle whose area is equal to the sum of the areas of the two circles of radii
40 cm and 9 cm is : (a) 41 cm (b) 49 cm (c) 82 cm (d) 62 cm

2 marks Question

5. The length of the minute hand of a clock is 7 cm. Find the area swept by the minute hand from
6.00 pm to 6.10 pm.

6. Find the perimeter of the given figure, where AED is a semi-circle and ABCD is a rectangle
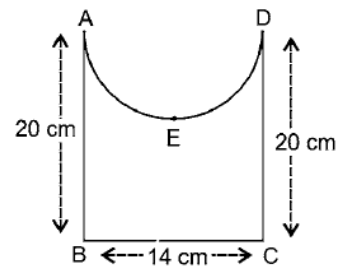
7. PQRS is a diameter of a circle of radius 6 cm. The lengths PQ, QR and RS are equal. Semi-circles are drawn on PQ and QS as diameters. Find the perimeter of the shaded region.
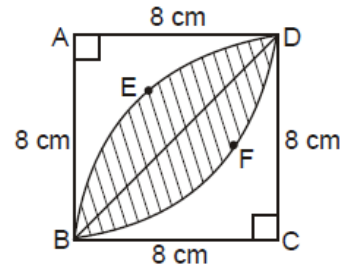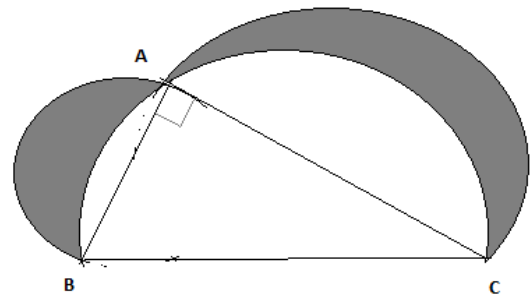

3 marks Question

8. In the figure, diameter AB is 12 cm long. AB is trisected at points P and Q. Find the area of the shaded region.
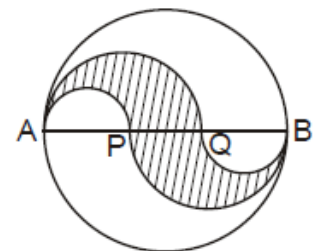
9. In the figure, ABCD is a square of side 8 cm. CBED and ADFB are quadrants of circle. Find the area of the shaded region. (Use p = 3.14)

10. ABC is a right angled triangle in which < A=90 , AB=21cm and AC=28cm. Semicircles are described on AB , BC and AC as diameters . Find the area of shaded region.
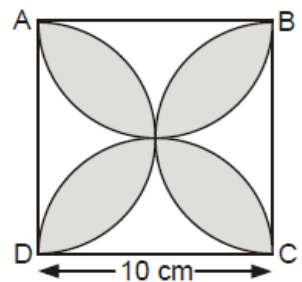
11. A round table cover has six equal designs as shown in figure. If the radius of the cover is 28 cm, find the cost of making the designs at the rate of Rs 0.35 per cm2.
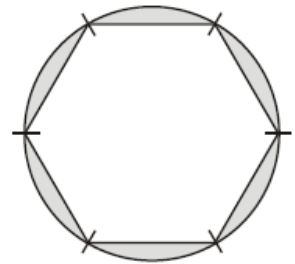
3 marks Question

12. In the figure, find the area of the shaded design, where ABCD is a square of side 10 cm and semi circles are drawn with each side of the square as diameter. (Use π = 3.14)

13. In the figure, ABC is a quadrant of a circle of radius 14 cm and a semi circle is drawn with BC as diameter. Find the area of shaded region.