CLASS 8

SUBJECT : Arithmetic

Work sheet 17

Marks:15

Circles(Area)

Date:25.4.2020

Answer all the following questions(1×15=15)

1. The area of the circle is 154 cm^2. The radius of the circle is
   (a) 7 cm
   (b) 14 cm
   (c) 3.5 cm
   d) 17.5 cm

2. The area of a quadrant of a circle whose circumference is 22 cm, is

   (a) $\dfrac{11}{8}$ cm^2 (b) $\dfrac{77}{2}$ cm^2 (c) $\dfrac{77}{4}$ cm^2 (d) $\dfrac{77}{8}$ cm^2

3. Area of circular ring is
   (a) $\pi(R^2 - r^2)$
   (b) πRr
   (c) $\pi(R+r)$
   (d) $\pi(R-r)$

4. The area of the circle whose diameter is 21 cm is
   (a) 346.5 cm²
   (b) 37.68 cm²
   (c) 18.84 cm²
   (d) 19.84 cm²

5. The area of a circle whose circumference is 22 cm, is
   (a) 11 cm²
   (b) 38.5 cm²
   (c) 22 cm²
   (d) 77 cm²

6. The area of a circle is 154 cm^2 Its diameter is
   (a) 7 cm
   (b) 14 cm
   (c) 21 cm
   (d) 28 cm

7. The area of the circle that can be inscribed in a square of side 6 cm, is
   (a) 18π cm²
   (b) 12π cm²
   (c) 9π cm²
   (d) 14π cm²

8. The radii of two circles are 4 cm and 3 cm respectively. The diameter of the circle having area equal to the sum of the areas of the two circles (in cm) is
   (a) 5
   (b) 7
   (c) 10
   (d) 14

9. If the area of a circle is numerically equal to twice its circumference, then the diameter of the circle is
   (a) 4 units
   (b) 10 units
   (c) 8 units
   (d) 2 units

10. If the circumference of a circle is 352 metres, then its area in square metres is
    (a) 5986
    (b) 6589
    (c) 7952
    (d) 9856

11. Area of the largest triangle that can be inscribed in a semi-circle of radius r units is
    (a) r² sq. units
    (b) 12 r² sq. units
    (c) 2 r² sq. units
    (d) √2 r² sq. units

12. If the circumferences of two circles are in the ratio 4 : 9, then the ratio in their area is
    (a) 9 : 4

(b) 4 : 9
(c) 2 : 3
(d) 16 : 81

13. The ratio of the areas of the incircle and circumcircle of a square is
(a) 1 : 2
(b) 1 : 3
(c) 1 : 4
(d) 1 : √2

14. Area of quadrant of a circle is
(a) $\pi r^2 / 4$
(b) πr
(c) $\pi /4$
(d) 4π

15.Area of semi circle is

(a) $\pi r^2 /2$

(b)2π

(c) $\pi / 2r$

(d) πr

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