ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

CLASS 8

SUBJECT :Arithmetic Work sheet27

Marks:15Circle

Date:29.5.21

Answer all thefollowing questions(1×15=15)

1. The radii of two circles are 19 cm and 9 cm respectively. The radius of the circle which has circumference equal to the sum of the circumference of two circles is
   (a) 35 cm
   (b) 10 cm
   (c) 21 cm
   (d) 28 cm

2. The perimeter (in cm) of a square circumscribing a circle of radius a cm, is
   (a) 8 a
   (b) 4 a
   (c) 2 a
   (d) 16 a

3. The diameter of a wheel is 1.26 m. The distance travelled in 500 revolutions is
   (a) 2670 m
   (b) 2880 m
   (c) 1980 m
   (d) 1596 m

4. If the sum of the circumferences of two circles with radii R_1 and R_2 is equal to the circumference of a circle of radius R, then
   (a) $R_1 + R_2 = R$
   (b) $R_1 + R_2 > R$
   (C) $R_1 + R_2 < R$
   (d) nothing definite can be said about the relation among R_1 ,R_2 and R
   .

5. If the circumference of a circle is 2π units , then diameter of circle is
   (a) 4
   (b)2
   (c)1
   (d)5

6. If the difference between the diameter and the radius of a circle is 37 cm, then using π = 22/7 the circumference (in cm) of the circle is:
   (a) 154
   (b) 44
   (c) 14
   (d) 7

7. If π is taken as 22/7, the distance (in metres) covered by a wheel of diameter 35 cm, in one revolution, is
   (a) 2.2
   (b) 1.1
   (c) 9.625
   (d) 96.25

8. A circular wire of radius 42 cm is cut and bent into the form of a rectangle whose sides are in the ratio of 6 : 5. The smaller side of the rectangle is
   (a) 30 cm
   (b) 60 cm
   (c) 70 cm
   (d) 80 cm

9. The diameter of the wheel of a bus is 1.4 m. The wheel makes 10 revolutions in 5 seconds. The speed of the vehicle (in kmph) is _____ .
   (a)31.68 km/hr
   (b)30 km/hr
   (c)28 km/hr
   (d)25km/hr

10. If the wheel of an engine of a train is 30/7 m in circumference makes seven revolutions in 4 seconds, then the speed of the train is _____ km/h

   (a) 27 km/hr
   (b)30 km/hr
   (c)28 km/hr
   (d)25km/hr

11. A bicycle wheel makes 5000 revolutions in moving 11 km.The diameter of the wheelis

(a)70cm
(b)60cm
(c)50 cm
(d)25cm

12. If the diameter of a semicircular protractor is 14 cm, then its perimeter is

(a)36cm
(b)30cm
(c)40cm
(d)45cm

13.Perimeter of semi circle of radius r is

(a)πr +2r
b)3r
(c)π+r
(d)π-2r

14.Value of π is

(a) 3.14
(b) 3.20
(c)3.41
(d) 31.4

15.Perimeter of quadrant of a circle of radius r is

(a)πr/2 +2r
(b)3r
(c)π+r
(d)π-2r

Indranil Ghosh