



ST. LAWRENCE HIGH SCHOOL



A JESUIT CHRISTIAN MINORITY INSTITUTION

CLASS 8

SUBJECT :ArithmeticWork sheet16

Marks:15 Circle(Circumference)

Date:24.4.2020

Answer all the following 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) $8a$
 - (b) $4a$
 - (c) $2a$
 - (d) $16a$
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 $\pi = \frac{22}{7}$ the circumference (in cm) of the circle is:
(a) 154
(b) 44
(c) 14
(d) 7
7. If π is taken as $\frac{22}{7}$, 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) 25 km/hr
10. If the wheel of an engine of a train is $\frac{30}{7}$ 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) 25 km/hr

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

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

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

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

13. Perimeter of semi circle of radius r is

- (a) $\pi r + 2r$
- (b) $3r$
- (c) $\pi + r$
- (d) $\pi - 2r$

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) $\pi r/2 + 2r$
- (b) $3r$
- (c) $\pi + r$
- (d) $\pi - 2r$

