ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

CLASS 8
SUBJECT :ArithmeticWork sheet24
Marks:15Revision - Area \& Perimeter of Circle
Date:11.5.2020

## Answer all thefollowing questions( $1 \times 15=15$ )

1. If the radius of a circle is decreased by $50 \%$, find the percentage decrease in its area.
A) $55 \%$
B) $65 \%$
C) $75 \%$
D) $85 \%$
2. The area of the largest circle that can be drawn inside a rectangle with sides 18 cm by 14 cm is
A) 49
B) 154
C) 378
D) 1078
3. A wire can be bent in the form of a circle of radius 56 cm . If it is bent in the form of a square, then its area will be
A) 7744
B) 8844
C) 5544
D) 4444
4. Find the ratio of the areas of the incircle and circumcircle of a square.
A) $1: 1$
B) $1: 2$
C) $1: 3$
D) $1: 4$
5. The diameter of the driving wheel of a bus is 140 cm . How many revolution, per minute must the wheel make in order to keep a speed of 66 kmph ?
A) 150
B) 250
C) 350
D) 550
6. Find the length of a rope by which a cow must be tethered in order that it may be able to graze an area of 9856 sq meters.
A) 56 m
B) 16 m
C) 14 m
D) 76 m
7. The inner circumference of a circular race track, 14 m wide, is 440 m . Find radius of the outer circle
A) 44
B) 22
C) 33
D) 84
8.The area of a circular field is 13.86 hectares. Find the cost of fencing it at the rate of Rs. 4.40 per metre.
A) 2808
B) 3808
C) 4808
D) 5808
8. The area of a circle of radius 5 is numerically what percent its circumference?
A) $150 \%$
B) $250 \%$
C) $350 \%$
D) $450 \%$
10.A wheel makes 1000 revolutions in covering a distance of 88 km . Find the radius of the wheel.
A) 14
B) 13
C) 12
D) 11
11.The no of revolutions a wheel of diameter 40 cm makes in traveling a distance of 176 m is
A) 240
B) 140
C) 40
D) 340
12.A 3 by 4 rectangle is inscribed in circle. What is the circumference of the circle?
A) $2.5 \pi$
B) $3 \pi$
C) $5 \pi$
D) $4 \pi$
13.A man runs round a circular field of radius 50 m at the speed of $12 \mathrm{~km} / \mathrm{hr}$. What is the time taken by the man to take twenty rounds of the field?
A) $220 / 7 \mathrm{~min}$
B) $110 / 7 \mathrm{~min}$
C) $90 / 7 \mathrm{~min}$
D) $230 / 7 \mathrm{~min}$
14.A circular swimming pool is surrounded by a concrete wall 4 ft wide. If the area of the concrete wall surrounding the pool is $11 / 25$ that of the pool, then the radius of the pool is?
A) 10 ft
B) 20 ft
C) 30 ft
D) 40 ft
15.Four circular cardboard pieces, each of radius 7 cm are placed in such a way that each piece touches two other pieces. The area of the space encosed by the four pieces is
A) 12
B) 32
C) 42
D) 52

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