# Areas Related to Circles : Worksheet -6

1. The radius of a circular wheel is 1.75 m. Number of revolutions will it make in travelling 11 km is _ _ _ _ _ _ _ _ _ _ _ _ [ ]

   a) 4000 b) 3000 c) 2000 d) 1000

2. If the radius of a circle is increased by 20% then the percentage of area increasing is [ ]

   a) 22% b) 11% c) 44% d) 33%

3. The ratio of the radii of two wheels is 3 : 4 then the ratio of their circumference is [ ]

   a) 4 : 3 b) 2 : 3 c) 3 : 4 d) 4 : 5

4. The area of a sector whose radius is 14 m is 154 sq.cm. Then its perimeter [ ]

   a) 20 cm b) 30 cm c) 40 cm d) 50 cm

5. The radius of circle is 21 cm and the sector makes an angle of $90^0$ at the centre then the length of the arc is : _ _ _ _ _ _ _ _ _ _ _

6. A circle and a square have the same perimeter then _ _ _ _ [ ]

   a) the area of the square is greater b) the areas are equal

   c) the area of the circle is greater d) none of these

7. The perimeter of a semicircle is 32.4 cm then the diameter is [ ]

   a) 10 cm b) 12 cm c) 12.6 cm d) 14 cm

8. The radius of the wheel of a bus is 70 cm and the speed of the bus is 66 kmph. Then the number of revolutions per minute of the wheel is [ ]

   a) 200 b) 100 c) 250 d) 300

9. A horse is tied to a pole fixed at one corner of a 30m × 30 m square field of grass by means of a 10 m long rope. Then the increase in the grazing area if the rope were 20 m long instead of being 10 m long is : [ ]

a) 253.5 $m^2$ b) 235.5 $m^2$ c) 222.5 $m^2$ d) 280.5 $m^2$