Areas Related to Circles : Worksheet -5

1. If the radius of the circle is increased by 100% then the area is increased by: [ ]

   a) 100% b) 200% c) 300% d) 400%

2. If the difference between the circumference and radius of the circle is 37 cm then the area of the circle is [ ]

   a) 111 cm^2 b) 148 cm^2 c) 259 cm^2 d) 154 cm^2

3. The area of a square that can be inscribed in a circle of radius 'r' is [ ]

   a) r^2 b) $2r^2$ c) $4r^2$ d) πr^2

4. A circular disc of radius 10 cm is divided into sectors with angles 120^0 and 150^0 then the ratio of the area of two sectors is _ _ _ _ [ ]

   a) 4 : 5 b) 5 : 4 c) 2 : 1 d) 8 : 7

5. A horse is placed for grazing inside a square field 12 cm long and is tethered to one corner by a rope 8 cm long. The area it can graze is [ ]

   a) 50.18 cm^2 b) 50.28 cm^2 c) 50.38 cm^2 d) 50.48 cm^2

6. If the number of units in the circumference of a circle is same as the number of square units in the area then the radius of the circle will be [ ]

   a) 1 unit b) 2 units c) 3 units d) 4 units

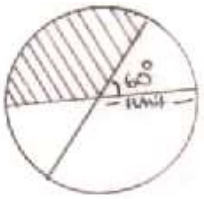
7. The side of a square is 2 cm. semi circles are constructed on two sides of the square then the area of the whole figure is [ ]

   a) $(4 + \pi)$ cm^2 b) $(4 + 4\pi)$ cm^2 c) 4π cm^2 d) 8π cm^2

8. The area of the shaded region in the given figure [ ]

a) $\frac{\Pi}{3}$ sq.units b) $\frac{\Pi}{2}$ sq.units

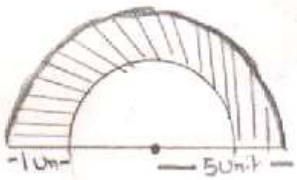
c) $\frac{\Pi}{4}$ sq.units d) Π^2 sq.units



9. The area of the shaded portion in the given figure [ ]

a) 7.5 Π sq.uins b) 6.5 Π sq.units

c) 5.5 Π sq.units d) 4.5 Π sq.units



10. The area of circular field is 1386 sq.m. Then its circumference is [ ]

a) 121 cm b) 144 cm c) 136 cm d) 132 cm