## ONLINE MATHS CLASS - X - 31 ( 03 / 09 / 2021 )

## 3. MATHEMATICS OF CHANCE - CLASS - 4 WORKSHEET

1.In the figure two small semicircles are drawn with the radius of the larger semicircle as the diameter. Put a dot in this figure without looking .

a )If the radius of the smaller semi circle is $r$, What is the radius of the larger semicircle ?
b ) What is the probability that the dot would be within the green portion ?
c) What is the probability that the dot would be within the yellow portion?
2. In the figure, two small circles are drawn with radius of the larger circle as diameter. Put a dot in this figure without looking .
a ) If the radius of the smaller circle is $r$, What is the radius of
 the larger circle?
b) What is the probability that the dot would be within the green portion ?
c ) What is the probability that the dot would be within the yellow portion ?
3. In the figure small squares of equal size are drawn in the larger square . Put a dot in this figure without looking .
a ) How many squares with the same size as that of the small green square can be cut from the larger square ?

b ) What is the probability that the dot would be within the green portion ?
c) What is the probability that the dot would be within the yellow portion ?
4. Two boxes contain paper slips .On each paper slip a number is written . The numbers on the paper slips of each box is given in the table. Complete the table .

| Box 1 | Box 2 | Possible pairs of <br> numbers | Number of <br> paper slips in <br> the first box | Number of <br> paper slips <br> in the <br> second box | Total <br> number of <br> possible <br> pairs of <br> numbers |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1,2,3$ | 1,2 | $(1,1),(1,2)$ <br> $(2,1),(2,2)$ <br> $(3,1),(3,2)$ | 2 | 3 | 6 |
| 1 | 1,2 |  |  |  |  |
| 1,2, | 1,2 |  |  |  |  |
| $1,2,3,4,5$ | 1,2 |  |  |  |  |
| 1 |  |  |  |  |  |

5. Manu has three shirts , yellow, red and black. Also he has two pants, red and black .
a) In what all different ways can he wear them ?
b) What is the probability of his wearing the shirt and the pants of the same colour ?
c) What is the probability of his wearing the shirt and the pants of different colours ?
