Tutorial W12 bis

1. A small company has two automobiles in its car pool. Each automobile may break down (only once) or not break down on any given day. An experiment consists of counting the number of automobile breakdowns to occur on a randomly selected day.

1 Specify a sample space for the experiment.

2 List all possible events.

3 Suppose one car breaks down on a randomly selected day. List the event(s) in part (2) that has (have) occurred.

2:

There are 2 red colored, 3 green colored and 2 blue colored balls in a bag.
Two balls need to be drawn at random.
Find the probability that none of the balls drawn is blue in color.

3.

There are 300 students in a school. Out of them, 95 students play cricket, 120 students play football, 80 students play volleyball and 5 students don't play any games. A student is chosen randomly, find the probability that the chosen student:

a] plays volleyball

b] either cricket or volleyball sport

c] neither football nor volleyball

4.

Two fair dice are rolled. What is the probability of the following events?

a] probability that the sum is 1.

b] probability that the sum is 4.

c] probability that the sum is less than the number 13.

5.

There are 90 discs that are numbered from 1 to number 90 in a box.

1 disc is selected at random from the box given.

Find the probability that:

a] 2-digit numbers are obtained

b] perfect squares are obtained

c] multiples of number 5 are obtained

d] numbers that are divisible by 3 and 5 are obtained