



CLASS : X

Subject: Mathematics

Date: 20.04.2020

Topic: Probability

Time

Limit: 1 hour

Worksheet No.:2

[Copy the questions and solve them on a sheet of paper date wise. Keep the worksheets ready in a file to be submitted on the opening day.]

Exercises

- 1) If two coins have three ones, what is the probability of getting i) two heads ii) at least one head iii) both tails.
- 2) A card is drawn from a pack of 52 cards find the probability that the card is i) An ace ii) An black ace iii) Ace of diamonds iv) A queen or a jack.
- 3) 'A' and 'B' are friends ignoring the leap year find the probability that both friends will have i) different birthday ii) The same birthday.
- 4) In a musical chair game, a person is supposed to stop playing music at any time within 40 seconds after its start. i) What is the probability that the music will stop within first 15 seconds and ii) what is the probability that the music will stop at 40th second.
- 5) A circle with diameter 20 cm is drawn somewhere on a rectangular piece of paper with length 40 cm and width 30 cm. This paper is kept on horizontal on the table top and a die of very small size is dropped on the rectangular paper without seeing at random. If the dice fall on the paper only find the probability that it will fall and land i) inside the circle ii) outside the circle.
- 6) From a deck of 52 cards all the face cards are removed in the remaining cards are shuffled well now one card is drawn from the remaining deck. Find the probability that the card drawn if i) a black card ii) '8' of red card iii) king of black colour
- 7) A die has six faces marked by given number shown below

1	2	3	-1	-2	-3
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If die thrown once what is the probability of getting i) a +ve integer ii) an integer greater than -3 iii) the smallest integer

8) find the probability of getting 53 Fridays in a i) leap year ii) non leap year

9) Offices in Delhi are opened for 5 days in a week (Monday to Friday). Two employees of an office remain absent for 1 day in the same particular week. Find the probability that they remain absent on “ the same day” ii) different days”. iii) consecutive days.

10 cards are numbered as 1,2,3..... 20 and well shuffled. A card is drawn at random . What is the probability that the number on the card is 1) prime number. ii) divisible by 3 iii) A perfect square.

11. if $P(A) = 1/2$, $P(B) = 1/3$, $P(AB) = 1/6$ then find $P(A' \cap B')$. [use De Morgan's law]