Codeyoung

Application_Grade-9_Probability

Experimental Probability

1. A die is rolled 200 times and its outcomes are recorded as below :

Outcome	1	2	3	4	5	6
Frequency	25	35	40	28	42	30

Find probability of getting :
   (i)   An even prime
   (ii) A multiple of 3

2. Some families with 2 children were surveyed and the following data was recorded :

Number of girls in a family	0	1	2
Number of families	184	714	425

If a family is chosen at random, compute the probability that it has
   (i)   exactly 1 girl
   (i)   exactly 2 boys

3. Teachers and students are selected at random to make two teams of 20 members each on sports day to participate in the event of "tug of war". The number of volunteers are as follows :

Teachers		Students	
Male	Female	Male	Female
12	18	20	10

Find the probability that the person chosen at random
   (i)   is a male
   (ii) is a female student

4. Fifty seeds were selected at random from each of 5 bags of seeds, and were kept under standardised conditions favourable to germination. After 20 days, the number of seeds which had germinated in each collection were counted and recorded as follows :

Bag	1	2	3	4	5
Number of seeds germinated	40	48	42	39	41

What is the probability of germination of
- (i)   More than 40 seeds in bag ?
- (ii)   49 seeds in a bag ?
- (iii) More than 35 seeds in bag ?

5. Given below is the frequency distribution of salary of 80 workers in a factory.

Salary	No. of workers
1000 - 2000	12
2000 - 3000	18
3000 - 4000	22
4000 - 5000	28

If a worker is selected at random, find the probability that his salary is:

Less than $ 3000
More than or equal to $ 1000
More than or equal to $ 2000 but less than $ 4000.

6. The weights of 60 persons in a group are given below :

Weight (in kg)	60	61	62	63	64	65
Number of persons	5	18	4	16	5	12

Find the probability that a person selected at random has :
(i)   weight less than 65 kg
(ii)   weight between 61 and 64 kg
(iii)   weight equal to or more than 64 kg