Codeyoung

Advanced_Grade-9_Probability

Empirical Probability of Events

1. In a one-day cricket Match, Sachin played 40 balls and hit 12 sixes and Saurav played 30 balls and hit 9 fours. Find the probability that Sachin will hit a six in the next ball and also find the probability that Saurav will not hit a four in the next ball.

2. A coin is tossed for a certain number of limes. If the probability of getting a head is 0.4 and head appears for 24 times, find the number of times, the coin was tossed. Hence, find probability of getting a tail and verify that P(H) + P(T) = 1.

3. A school organised an adventure camp for students to Kanatal. The following table shows the participation of students in different types of adventure activities :
   Type I → trekking
   Type II →trekking and mountain climbing
   Type III →trekking, mountain climbing
   Type IV →trekking, repelling and rafting.

Type of activities	Number of students
Type I	75
Type II	62
Type III	55
Type IV	36
All	22

Find the probability that the student chosen at random participated in :
(i)   Type III activities.
(ii)   All the activities.
(iii)   Type I activity.
(iv)   Type II and Type IV activities

4. The marks obtained by 30 students in a competitive exam are given below :

Marks	70	58	61	52	65	75	68
No. of Students	3	5	4	7	6	2	3

One student is chosen at random. Find the probability :

(i)   That the student scored more than 65 marks.
(ii)   That the marks scored by the students is an odd number.