



Probability Ex 13.1 Q10

Answer :

GIVEN: Tickets are marked with one of the numbers 1 to 50. One ticket is drawn at random.

TO FIND: Probability of getting a prime number on the drawn ticket

Total number of tickets is 5.

Tickets marked prime number are 1,3,5,7,11,13,17,19,23,29,31,37,43,47,49

Total number of tickets marked prime is 15

We know that PROBABILITY = $\frac{\text{Number of favourable event}}{\text{Total number of event}}$

Hence probability of getting a prime number on the ticket is $\frac{15}{50} = \frac{3}{10}$

Probability Ex 13.1 Q11

Answer :

GIVEN: A bag contains 10 red, and 8 white balls

TO FIND: Probability that one ball is drawn at random and getting a white ball

Total number of balls $10 + 8 = 18$

Total number of white balls is 8

We know that PROBABILITY = $\frac{\text{Number of favourable event}}{\text{Total number of event}}$

Hence probability of getting a white ball is $\frac{8}{18} = \frac{4}{9}$

Probability Ex 13.1 Q2

Answer :

GIVEN: A bag contains 3 red, 5 black and 4 white balls

TO FIND: Probability of getting a

(i) White ball

(ii) Red ball

(iii) Black ball

(iv) Not red ball

Total number of balls $3 + 5 + 4 = 12$

(i) Total number white balls is 4

We know that PROBABILITY = $\frac{\text{Number of favourable event}}{\text{Total number of event}}$

Hence probability of getting white ball = $\frac{4}{12} = \boxed{\frac{1}{3}}$

(ii) Total number red balls are 3

We know that PROBABILITY = $\frac{\text{Number of favourable event}}{\text{Total number of event}}$

Hence probability of getting red ball is $\frac{3}{12} = \boxed{\frac{1}{4}}$

(iii) Total number of black balls is 5

We know that PROBABILITY = $\frac{\text{Number of favourable event}}{\text{Total number of event}}$

Hence probability of getting black ball = $\boxed{\frac{5}{12}}$

(iv) Total number of non red balls are 4 white balls and 5 black balls i.e. $4 + 5 = 9$

We know that PROBABILITY = $\frac{\text{Number of favourable event}}{\text{Total number of event}}$

Hence probability of getting non red ball $\frac{9}{12} = \boxed{\frac{3}{4}}$

Probability Ex 13.1 Q13

Answer :

GIVEN: Numbers are from 1 to 15. One number is selected

TO FIND: Probability that the selected number is multiple of 4

Total number is 15

Numbers that are multiple of 4 are 4,8,12,

Total number which is multiple of 4 is 3

We know that PROBABILITY = $\frac{\text{Number of favourable event}}{\text{Total number of event}}$

Hence probability of selecting a multiple of 4 is $\frac{3}{15} = \boxed{\frac{1}{5}}$

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