

CHAPTER- Probability

Q1. The probability of selecting a red ball at random from a jar that contains only red, blue and orange balls is $\frac{1}{4}$. The probability of selecting a blue ball at random from the same jar is $\frac{1}{3}$. If the jar contains 10 orange balls, find the total number of balls in the jar

Q2. A card is drawn at random from a well shuffled pack of 52 playing cards. Find the probability that the drawn card is

- 1) neither a king nor a queen.
- 2) neither a jack nor an ace
- 3) a red king.
- 4) a queen or a jack.
- 5) face card

Q3. What is the probability that a randomly selected month with 31 days will contain 5 Sundays?

Q4. A bag contains 15 white and some black balls. If the probability of drawing a black ball from the bag is thrice that of drawing a white ball, find the number of black balls in the bag.

Q5. The probability of selecting a blue marble at random from a jar that contains only blue, black and green marbles is $1/5$. The probability of selecting a black marble at random from the same jar is $1/4$. If the jar contains 11 green marbles, find the total number of marbles in the jar.

Q6.

Three different coins are tossed together.

Find the probability of getting

- (i) exactly two heads,
- (ii) at least two heads (iii) at least two tails.

There are 100 cards in a bag on which numbers from 1 to 100 are written. A card is taken out from the bag at random. Find the probability that the number on the selected card (i) is divisible by 9 and is a perfect square (ii) is a prime number greater than 80.

Q7.

A bag contains 25 cards numbered from 1 to 25. A card is drawn at random from the bag. Find the probability that the number on the drawn card is:

Q8. (i) divisible by 3 or 5
(ii) a perfect square number.

A card is drawn at random from a well-shuffled deck of playing cards. Find the probability that the card drawn is

(i) A card of spade or an ace
(ii) A black king
(iii) Neither a jack nor a king
(iv) Either a king or a queen

Q9.

Q10

Q3. A number is chosen at random from the numbers -3,-2,-1,0,1,2,3. What will be the probability that square of this number is less than or equal to 1