

1. If a card is drawn from a well-shuffled deck of 52 cards, what is the probability of drawing a king?
2. Eleven slips of paper are labelled with the numerals 1,2,3..... 11. If they are shuffled in a hat and you draw one while blind folded, what is the probability of an event "an old number is drawn"?
3. The probability of drawing a red ball from a bag is $\frac{5}{18}$. The probability of drawing a black ball is $\frac{10}{18}$, There are only red, black and yellow balls in the bag. What is the probability of drawing a yellow ball?
4. The probability of winning a class academic prize in the school is $\frac{1}{35}$. What is the probability of not winning a prize?
5. What is the probability of picking a multiple of 5 from the set of spades in a pack of cards?
6. Find the probability that a number selected at random from the numbers 1 to 10 is a prime number, when each of the given numbers is equally likely to be selected.
7. A bag contains 5 black, 7 red and 3 white balls. A ball is drawn from the bag at random . Find the probability that the ball drawn is : (i) Red (ii) Black or white (iii) Not black.
8. A die is rolled. Find the probability of getting an odd prime number.
9. A card is drawn at random from a pack of 100 cards numbered 1 to 100. find the probability of drawing a square number.
10. Apoorva chooses a date at random in July for a party. Find the probability of her choosing (i) a Friday,
(ii) a Saturday, (iii) a Saturday or Sunday.
11. A die is tossed once. What is the probability of the number "7" coming up? What is the probability of a number "less than 7" coming up?
12. 100 tickets of a lottery were sold and there are 3 prizes on these tickets. If Rashmi has purchased one lottery ticket, what is the probability of her not winning the prize?
13. A card is drawn at random from a pack of cards. Find the probability that it is (i) a black card (ii) a heart (iii) a king (iv) a red queen (v) jack of clubs (vi) not a heart (vii) a king or a queen.
14. Two coins are tossed simultaneously. Find the probability of getting (i) two heads (ii) at least one head (iii) no head.
15. On tossing three unbiased coins at a time, find
 - i. all possible outcomes,
 - ii. events of occurrence of 3 heads, 2 heads, 1 head and 0 head,
 - iii. probability of getting 3 heads, 1 head and no head.

16. A bag contains 12 balls out of which x are white

- i. If one ball is drawn at random what is the probability that it will be white ball ?
- ii. If 6 more white balls are put in the bag. the probability of drawing a white ball will double than that in (i). find x .

17. Cards marked with the numbers 2 to 101 are placed in a box and mixed thoroughly.

One card is drawn from this box. Find the probability that the number on the card.

- i. an even number,
- ii. a number less than 14,
- iii. a number which is a perfect square,
- iv. a prime number less than 20.

18. (i) What is the probability that there are 53 Sundays in a leap year?

(ii) What is the chance that a non leap year, selected at random, will contain 53 Sundays?

1. Find the probability of getting a head when a coin is tossed once.
2. A bag contains a black ball, a red ball and a green ball, all the balls are identical in shape and size. Mohit takes out a ball from the bag, without looking into it. What is the probability that the ball drawn is:
 - i. Red ball?
 - ii. Black ball?
 - iii. Green ball?
3. In a single throw of a dice, find the probability of getting a number:
 - i. Greater than 2
 - ii. Less than or equal to 2
 - iii. Not greater than 2.
4. From a well-shuffled deck of 52 cards, one card is drawn. Find the probability that the card drawn will:
 - i. be a face card
 - ii. Not be a face card
5. In a badminton match between Rajesh and Joseph, the probability of winning of Rajesh is 0.58. find the probability of
 - i. Not winning of Rajesh.
 - ii. Winning of Joseph.
6. In a single throw of a dice, find the probability of getting
 - i. 7
 - ii. A number less than 7.
7. A dice is thrown once. Find the probability of getting:
 - i. An odd number
 - ii. A number greater than 4
 - iii. A number between 2 and 6
8. Two dice are thrown simultaneously. Find the probability that:
 - i. Both the dice show the same number.
 - ii. The first dice shows 6.
 - iii. The total (sum) of the numbers on the dice is 9.
 - iv. The product of the numbers on the dice is 8.
 - v. The total of the numbers on the dice is greater than 9

9. A card is drawn from a pack of 100 cards number 1 to 100. Find the probability of drawing a number which is a perfect square.

10. Three identical coins are tossed together. What is the probability of obtaining:

- i. All heads?
- ii. Exactly two heads?
- iii. Exactly one head?
- iv. At least one head?
- v. At least two heads?
- vi. All tails?

11. Two dice are rolled simultaneously. Find the probability of:

- i. Obtaining a total of at least 9.
- ii. Getting a multiple of 2 on one dice and a multiple of 3 on the other dice.
- iii. Getting a multiple of 3 as the sum.

12. A dice is thrown two times. Find the probability that the product of number of the dice of

- i. 4
- ii. 6
- iii. A perfect square

13. A dice is rolled two times or two dice are rolled together. Find the probability of getting:

- i. An even number on each dice.
- ii. A prime number on each dice.
- iii. A composite number on each dice.

14. From the pack of 52 playing cards, the black face cards are removed. Now the cards are re-shuffled and then a card is drawn from the remaining pack of cards. Find the probability that the card drawn is:

- i. A black card
- ii. A king
- iii. An ace
- iv. A spade card