1. If the probability of winning a game is 0.07, what is the probability of losing it?
2. If a number is chosen at random from the numbers $-3,-2,-1,0,1,2,3$. What is the probability that $x^2 < 4$?
3. A number is chosen at random from the numbers, $-3,-2,-1,0,1,2,3$. What will be the (3) probability that the square of this number is less than or equal to 1 ?
4. A letter of English alphabet is chosen at random. Determine the probability that the chosen letter is a consonant.
5. What is the probability that a number selected at random from the numbers $3,4,5,\ldots,9$ is a multiple of 4?
6. From a well shuffled pack of cards, a card is drawn at random. Find the probability of getting a black queen.
7. A box contains 90 discs which are numbered from 1 to 90. If one discs is drawn at random from the box, find the probability that it bears (i) a two digit number (ii) a perfect square number (iii) a number divisible by 5.
8. All red face cards are removed from a pack of playing cards. The remaining cards are well shuffled and then a card is drawn at random from them. Find the probability that the drawn card is (i) a red card (ii) a face card and (iii) a card of clubs.
9. What is the probability that a leap year has 53 Tuesdays and 53 Mondays?
10. Cards marked with numbers $13,14,15,\ldots,60$ are placed in a box and mixed thoroughly. One card is drawn at random from the box. Find the probability that number on the card drawn is

    (i) divisible by 5 (ii) a number is a perfect square
11. A bag contains tickets numbered $11,12,13,\ldots,30$. A ticket is taken out from the bag at random. Find the probability that the number on the drawn ticket (i) is a multiple of 7 (ii) is greater than 15 and a multiple of 5.
12. A box contains 100 red cards, 200 yellow cards and 50 blue cards. If a card is drawn at random 12 from the box, then find the probability that it will be (i) a blue card (ii) not a yellow card (iii) neither yellow nor a blue card.
13. Find the probability that a number selected from the number 1 to 25 is not a prime number when each of the given numbers is equally likely to be selected.
14. A box contains cards numbered $3,5,7,9,\ldots,35,37$. A card is drawn at random from the box. Find the probability that the number on the drawn card is a prime number.
15. A die is thrown. Find the probability of getting:

    (i) a prime number (ii) 2 or 4

    (iii) a multiple of 2 or 3 (iv) an even prime number

    (v) a number greater than 5 (vi) a number lying between 2 and 6

    (vii) a composite number
16. Two unbiased dice are thrown. Find the probability that the total of the numbers on the dice is greater than 10.
17. A box contains 20 cards numbered from 1 to 20 . A card is drawn at random from the box. Find the probability that the number on the drawn card is

    (i) divisible by 2 or 3 (ii) a prime number

18. Cards numbered 1 to 30 are put in a bag. A card is drawn at random from this bag. Find the probability that the number on the drawn card is

(i) not divisible by 3 (ii) a prime number greater than 7

(iii) not a perfect square number.

19. One card is drawn from a well shuffled deck of 52 cards. Find the probability of getting:

(i) a king of red suit (ii) a face card

(iii) a red face card (iv) a queen of black suit

(v) a jack of hearts (vi) a spade

20. A group consists of 12 persons, of which 3 are extremely patient, other 6 are extremely honest and rest are extremely kind. A person from the group is selected at random. Assuming that each person is equally likely to be selected, find the probability of selecting a person who is (i) extremely patient (ii) extremely kind or honest. Which of the above you prefer more.

21. 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 a white ball?

(ii) If 6 more white balls are put in the bag, the probability of drawing a white ball will be double than that in (i). Find x.

22. A bag contains 5 red balls and some blue balls. If the probability of drawing a blue ball is double that of a red ball, find the number of blue balls in the bag.

23. Peter throws two different dice together and finds the product of the two numbers obtained. Rina throws a die and squares the number obtained. Who has the better chance to get the number 25?

24. Find the probability that a leap year selected at random will contain 53 Sundays.

25. If a number x is chosen at random from the numbers $-2,-1,0,1,2$. What is the probability that $x^2 < 2$?

25. A jar contains 24 marbles some are green are others are blue. If a marble is drawn at random from the jar, the probability that it is green is $2/3$. Find the number of blue marbles in the jar.

26. A game consists of tossing a one rupee coin 3 times and noting its outcome each time. Hanif wins if all the tosses give the same result i.e. three heads or three tails, and loses otherwise. Calculate the probability that Hanif will lose the game.

27. A jar contains 54 marbles each of which is blue, green or white. The probability of X selecting a blue marble at random from the jar is $\frac{1}{3}$, and the probability of selecting a green marble at random is $\frac{4}{9}$. How many white marbles does the jar contain?

28. Three unbiased coins are tossed together. Find the probability of getting:

(i) all heads (ii) two heads (iii) one head (iv) at least two heads

30. Two unbiased coins are tossed simultaneously. Find the probability of getting

(i) two heads (ii) one head (iii) one tail (iv) at least one head

(v) at most one head. (vi) no head