

KALYAN ACADEMY

BHARATH NAGAR, HYD-18
PROBABILITY | CLASS X | WORKSHEET

NAME :

DATE OF SUBMISSION: 25.03.2019

1. A game of chance of a spinning wheel has number 1 to 10. What is the probability of getting a number less than to 5 when wheel comes to rest?
2. Two dice are rolled once what is the probability of getting a doublet?
3. A die is rolled once. What is the probability of getting a prime number?
4. A bank A.T.M. has notes of denomination 100, 500 and 1000 in equal numbers. What is the probability of getting a note of Rs. 1000?
5. What is the probability of getting a number greater than 6 in a single throw of a die?
6. A selection committee interviewed 50 people for the post of sales manager. Out of which 35 are males and 15 are females. What is the probability of a female candidate being selected?
7. A bag contains cards numbering from 5 to 25. One card is drawn from the bag. Find the probability that the card has numbers from 10 to 15.
8. In 1000 lottery tickets there are 5 prize winning tickets. Find the probability of winning a prize. if a person buys one tickets.
9. It is known that in a box of 600 screws, 42 screws are defective. One screw is taken out at random from this box. Find the probability that it is not defective.
10. Write all the possible outcomes when a coin is tossed twice.
11. Two dice are rolled simultaneously. Find the probability that the sum is more than and equal to 10.
12. From the well shuffled pack of 52 cards. Two Black king and Two Red Aces are removed. What is the probability of getting a face card?
13. In a leap year what is the probability of 53 Sundays.
14. A box contains card numbered from 2 to 101. One card is drawn at random. What is the probability of getting a number which is a perfect square?
15. A coin is tossed. Find the probability that a head is obtained.
16. Find probability of throwing 5 with an ordinary dice.
17. Probability of winning a game is 0.4. What is the probability of losing the game?
18. A person is known to hit the target in 3 shots out of 4 shots. Find the probability that the target is not hit.
19. Tickets numbered from 1 to 20 are mixed together and a ticket is drawn at random. What is the probability that the ticket has a number which is multiple of 3 or 7?

20. A bag contains 100 identical tokens, on which numbers 1 to 100 are marked. A token is drawn at random. What is the probability that the number on the token is: (a) an even number (b) an odd number (c) a multiple of 3 (d) a multiple of 5 (e) a multiple of 3 and 5 (f) a multiple of 3 or 5 (g) a number less than 20 (h) a number greater than 70 (i) a perfect square number (j) a prime number less than 20.
21. A card is drawn from a well-shuffled pack of cards. Find the probability that the card drawn is: (a) a queen (b) a king bearing diamond sign (c) a black card (d) a jack (e) black and a queen (f) either black or a queen (g) a red card (h) a face card (i) a diamond or a club (j) neither heart nor a jack (k) a 2 of diamond (l) an ace of hearts (m) a face card of red color (n) 10 of a black "suit"
22. In a simultaneous toss of two coins, find: (a) $P(2 \text{ tails})$ (b) $P(\text{exactly one tail})$ (c) $P(\text{no tails})$ (d) $P(\text{at most one head})$ (e) $P(\text{one head})$
23. A coin is tossed successively three times. Find probability of getting exactly one head or two heads.
24. Three coins are tossed once. Find probability of: (a) 3 heads (b) exactly 2 heads (c) at least 2 heads (d) almost 2 heads (e) no tails (f) head and tail appear alternatively (g) at least one head and one tail
25. A dice is thrown once. Find: (a) $P(\text{number } 5)$ (b) $P(\text{number } 7)$ (c) $P(\text{an even number})$ (d) $P(\text{ a number greater than } 4)$ (e) $P(\text{ a number less than or equal to } 4)$ (f) $P(\text{a prime number})$
26. A bag contains 10 white, 6 black and 4 red balls. Find probability of getting: (a) a white ball (b) a black ball (c) not a red ball (d) a white or a red ball
27. Two dice are thrown simultaneously. Find: (a) $P(\text{an odd number as a sum})$ (b) $P(\text{sum as a prime number})$ (c) $P(\text{a doublet of odd numbers})$ (d) $P(\text{a total of at least } 9)$ (e) $P(\text{ a multiple of } 2 \text{ on one die and a multiple of } 3 \text{ on other die})$ (f) $P(\text{a doublet})$ (g) $P(\text{a multiple of } 2 \text{ as sum})$ (h) $P(\text{getting the sum } 9)$ (i) $P(\text{getting a sum greater than } 12)$ (j) $P(\text{ a prime number on each die})$ (k) $P(\text{ a multiple of } 5 \text{ as a sum})$
28. Find the probability that a leap year at random contains 53 Sundays.
29. Two black kings and two black jacks are removed from a pack of 52 cards. Find the probability of getting: (a) a card of hearts (b) a black card (c) either a red card or a king (d) a red king (e) neither an ace nor a king (f) a jack, queen or a king
30. One card drawn from a pack of 52 cards, each of the 52 cards being equally likely to be to drawn. Find the probability that the card drawn is: (i) an ace (ii) red (iii) either red or king (iv) red and a king (v) a face card (vi) a red face card (vii) '2' of spades (viii) '10' of a black suit
31. The king, queen and jack of clubs are removed from a deck of 52 playing cards and the well shuffled. One card is selected from the remaining cards. Find the probability of getting: (i) a heart (ii) a king (iii) a club (iv) the '10' of hearts.
32. A bag contains 5 red balls and some blue balls. If the probability of drawing blue ball is double that of a red ball, find the number of blue balls in the bag.
33. A bag contains 5 red balls, 8 white balls, 4 green balls and 7 black balls. If one ball is drawn at random, find the probability that it is: (i) black (ii) red (iii) not green.