

# Probability Practice Set

1. A bag contains 2 yellow, 3 green and 2 blue balls. Two balls are drawn at random. What is the probability that none of the balls drawn is blue?

A]  $1/2$    B]  $10/21$    C]  $9/11$    D]  $7/11$

2. A die is rolled twice. What is the probability of getting a sum equal to 9?

A]  $2/3$    B]  $2/9$    C]  $1/9$    D]  $1/3$

3. Three coins are tossed. What is the probability of getting at most two tails?

A]  $7/8$    B]  $1/8$    C]  $1/2$    D]  $1/7$

4. When tossing two coins once, what is the probability of heads on both the coins?

A]  $1/4$    B]  $1/2$    C]  $3/4$    D] None

5. What is the probability of getting a number less than 4 when a die is rolled?

A]  $1/6$    B]  $1/2$    C]  $1/3$    D]  $1/4$

6. A bag contains 4 black, 5 yellow and 6 green balls. Three balls are drawn at random from the bag. What is the probability that all of them are yellow?

A]  $2/91$    B]  $1/81$    C]  $1/8$    D]  $2/81$

7. One card is randomly drawn from a pack of 52 cards. What is the probability that the card drawn is a face card (Jack, Queen or King)?

A]  $1/13$    B]  $2/13$    C]  $3/13$    D]  $4/13$

8. A dice is thrown. What is the probability that the number shown in the dice is divisible by 3?

A]  $1/6$    B]  $1/3$    C]  $1/4$    D]  $1/2$

9. John draws a card from a pack of cards. What is the probability that the card drawn is a card of black suit?

A]  $1/2$    B]  $1/4$    C]  $1/3$    D]  $1/13$

10. There are 15 boys and 10 girls in a class. If three students are selected at random, what is the probability that 1 girl and 2 boys are selected?

A]  $1/40$    B]  $1/2$    C]  $21/46$    D]  $7/42$

11. What is the probability of selecting a prime number from 1, 2, 3, ..., 10?

A]  $2/5$    B]  $1/5$    C]  $3/5$    D]  $1/7$

12. 3 balls are drawn randomly from a bag contains 3 black, 5 red and 4 blue balls. What is the probability that the balls drawn contain balls of different colors?

A]  $3/11$    B]  $1/3$    C]  $1/2$    D]  $2/11$

13. 5 coins are tossed together. What is the probability of getting exactly 2 heads?

A]  $1/2$    B]  $5/16$    C]  $4/11$    D]  $7/16$

14. The probability A getting a job is  $1/5$  and that of B is  $1/7$ . What is the probability that only one of them gets a job?

A]  $11/35$    B]  $12/35$    C]  $2/7$    D]  $1/7$

15. A letter is chosen at random from the word 'ASSASSINATION'. What is the probability that it is a vowel?

A]  $4/13$    B]  $8/13$    C]  $7/13$    D]  $6/13$

16. Tickets numbered 1 to 20 are mixed up and then a ticket is drawn at random. What is the probability that the ticket drawn has a number which is a multiple of 3 or 5?

A]  $1/20$    B]  $9/20$    C]  $4/20$    D]  $1/4$

17. A man and his wife appear in an interview for two vacancies in the same post. The probability of husband's selection is  $(1/7)$  and the probability of wife's selection is  $(1/5)$ . What is the probability that only one of them is selected?

A]  $2/7$    B]  $1/7$    C]  $3/4$    D]  $4/5$

# Probability Practice Set

18. Raja has 4 tickets of a lottery for which 12 tickets were sold and 3 prizes are to be given. What is the probability that Raja will win at least one prize?

A]  $41/55$  B]  $43/55$  C]  $12/55$  D]  $14/55$

19. A basket contains 15 apples and 10 oranges out of which 4 apples and 2 oranges are defective. If a person takes two fruits at random, what is the probability that either both are apples or both are good?

A]  $221/300$  B]  $312/401$  C]  $1/2$  D] NONE

20. Three boys P, Q and R are to speak at a function along with 5 others. If all of them speak in random order, what is the probability that P speaks before Q and Q speaks before R?

A]  $2/9$  B]  $1/9$  C]  $1/6$  D]  $1/3$

21. An urn contains 3 red and 4 green marbles. If three marbles are picked at random, what is the probability that two are green and one is red?

A]  $3/7$  B]  $18/35$  C]  $5/14$  D]  $4/21$

22. A student has 60% chance of passing in English and 54% chance of passing in both English and Mathematics. What is the percentage probability that he will fail in Mathematics?

A] 12 B] 36 C] 4 D] 10 E] 14

23. When three coins are tossed together, the probability that all coins have the same face up, is

A]  $1/3$  B]  $1/6$  C]  $1/8$  D]  $1/12$  E]  $1/17$

24. Ten identical particles are moving randomly inside a closed box. What is the probability that at any given point of time all the ten particles will be lying in the same half of the box?

A]  $1/4$  B]  $1/512$  C]  $2/92$  D]  $2/112$  E]  $1/232$

25. 3 digits are chosen at random from 1, 2, 3, 4, 5, 6, 7, 8 and 9 without repeating any digit. What is the probability that their product is odd?

A]  $2/3$  B]  $5/108$  C]  $5/42$  D]  $8/42$  E]  $9/42$

26. A committee of 4 is to be formed from among 4 girls and 5 boys. What is the probability that the committee will have number of boys less than number of girls?

A]  $1/4$  B]  $1/5$  C]  $1/6$  D]  $1/7$

27. A box contains 4 black balls, 3 red balls and 5 green balls. 2 balls are drawn from the box at random. What is the probability that both the balls are of the same colour?

A]  $47/68$  B]  $1/6$  C]  $19/66$  D]  $2/11$

28. In a box carrying one dozen of oranges, one-third have become bad. If 3 oranges are taken out from the box at random, what is the probability that at least one orange out of the three oranges picked up is good?

A]  $1/55$  B]  $54/55$  C]  $45/55$  D]  $3/55$

29. A box contains 5 green, 4 yellow and 3 white marbles. 3 marbles are drawn at random. What is the probability that they are not of the same colour?

A]  $13/44$  B]  $41/44$  C]  $13/55$  D]  $152/55$

30. Out of 15 students studying in a class, 7 are from Maharashtra, 5 from Karnataka and 3 from Goa. Four students are to be selected at random. What are the chances that at least one is from Karnataka?

A]  $12/13$  B]  $11/13$  C]  $100/15$  D]  $51/15$

31. From a pack of 52 cards, 2 cards are drawn at random. What is the probability that either both cards are black card or both are heart card?

A]  $31/102$  B]  $21/73$  C]  $1/5$  D]  $17/100$  E]  $3/10$

# **Probability Practice Set**

32. Two cards are drawn at random from a pack of 52 cards. What is the probability that either both are black or both are jacks?

A]  $62/221$  B]  $21/312$  C]  $5/21$  D] NONE

33. From a group of 3 men, 4 women and 2 children, 4 people are to be chosen to form a committee. What is the probability that the committee contains at least 1 each of men, women and children?

A]  $4/15$  B]  $12/21$  C]  $4/19$  D]  $4/7$

33. A box contains 25 bulbs out of which 5 are defective. 3 bulbs are to be delivered to a customer. What is the probability that he get one defective bulb?

A]  $19/46$  B]  $25/51$  C]  $44/77$  D]  $21/46$

34. There are 4 red balls, 5 white and 3 green balls in a basket. 3 balls are chosen at random. What is the probability that there is at most 1 green ball?

A]  $13/40$  B]  $48/55$  C]  $25/68$  D]  $8/33$

35. A bag contains 3 red, 4 green and 3 yellow balls. If 2 balls are drawn at random, what is the probability that they are of different color?

A]  $9/16$  B]  $4/15$  C]  $11/15$  D]  $5/11$

36. There are 4 black balls and 6 white balls. 2 balls are drawn one by one without replacement. What is the probability that the balls are same in color?

A]  $9/21$  B]  $8/17$  C]  $5/14$  D]  $7/15$

37. A bag contains 5 red balls and 4 green balls. 2 balls are drawn at random. What is the probability that both balls are same in color?

A]  $5/11$  B]  $4/9$  C]  $3/13$  D]  $6/17$

38. An urn contains 4 red balls, 5 green balls and 6 white balls, if one ball is drawn at random, find the probability that it is neither red nor white.

A]  $1/3$  B]  $1/4$  C]  $1/5$  D]  $2/3$

39. Two squares are chosen at random on a chessboard. What is the probability that they have a side in common?

A]  $1/18$  B]  $64/4032$  C]  $63/64$  D]  $1/9$

40. A man can hit a target once in 4 shots. If he fires 4 shots in succession, what is the probability that he will hit his target?

A] 1 B]  $1/256$  C]  $81/256$  D]  $175/256$