

CLASS X : CHAPTER - 15 PROBABILITY

1. Find the probability of getting a head when a coin is tossed once.

- (a) $\frac{1}{2}$ (b) 1 (c) 0 (d) none of these

2. A die is thrown once . What will be the probability of getting a prime number ?

- (a) $\frac{1}{2}$ (b) $\frac{1}{6}$ (c) $\frac{1}{3}$ (d) none of these

3. A die is thrown once . What will be the probability of getting a odd number ?

- (a) $\frac{1}{2}$ (b) $\frac{1}{6}$ (c) $\frac{1}{3}$ (d) none of these

4. A die is thrown once . What will be the probability of getting a even number ?

- (a) $\frac{1}{2}$ (b) $\frac{1}{6}$ (c) $\frac{1}{3}$ (d) none of these

5. A die is thrown once . What will be the probability of getting a number lying between 2 and 6 ?

- (a) $\frac{1}{2}$ (b) $\frac{1}{6}$ (c) $\frac{1}{3}$ (d) none of these

6. A die is thrown once . What will be the probability of getting a number 4 ?

- (a) $\frac{1}{2}$ (b) $\frac{1}{6}$ (c) $\frac{1}{3}$ (d) none of these

7. A die is thrown once . What will be the probability of getting a number greater than 4 ?

- (a) $\frac{1}{2}$ (b) $\frac{1}{6}$ (c) $\frac{1}{3}$ (d) none of these

8. A die is thrown once . What will be the probability of getting a odd number less than or equal to 4 ?

- (a) $\frac{1}{2}$ (b) $\frac{1}{6}$ (c) $\frac{1}{3}$ (d) none of these

9. A box contains 3 blue, 2 white, and 4 red marbles. If a marble is drawn at *random* from the box, what is the probability that it will be white?

- (a) $\frac{2}{9}$ (b) $\frac{4}{9}$ (c) $\frac{1}{3}$ (d) none of these

10. A box contains 3 blue, 2 white, and 4 red marbles. If a marble is drawn at *random* from the box, what is the probability that it will be blue?

- (a) $\frac{2}{9}$ (b) $\frac{4}{9}$ (c) $\frac{1}{3}$ (d) none of these

11. A box contains 3 blue, 2 white, and 4 red marbles. If a marble is drawn at *random* from the box, what is the probability that it will be red?

- (a) $\frac{2}{9}$ (b) $\frac{4}{9}$ (c) $\frac{1}{3}$ (d) none of these

12. One card is drawn from a well-shuffled deck of 52 cards.What is the probability that the card will an ace card?

- (a) $\frac{4}{13}$ (b) $\frac{12}{13}$ (c) $\frac{1}{13}$ (d) none of these

13. One card is drawn from a well-shuffled deck of 52 cards.What is the probability that the card will not be an ace card?

- (a) $\frac{4}{13}$ (b) $\frac{12}{13}$ (c) $\frac{1}{13}$ (d) none of these

14. One card is drawn from a well-shuffled deck of 52 cards.Find the probability of getting a king of a red colour.

- (a) $\frac{4}{13}$ (b) $\frac{1}{26}$ (c) $\frac{1}{13}$ (d) none of these

15. One card is drawn from a well-shuffled deck of 52 cards. Find the probability of getting a face card.

- (a) $\frac{4}{13}$ (b) $\frac{3}{26}$ (c) $\frac{3}{13}$ (d) $\frac{2}{13}$

16. One card is drawn from a well-shuffled deck of 52 cards. Find the probability of getting a red face card.

- (a) $\frac{4}{13}$ (b) $\frac{3}{26}$ (c) $\frac{3}{13}$ (d) $\frac{2}{13}$

17. One card is drawn from a well-shuffled deck of 52 cards. Find the probability of getting a the jack of hearts

- (a) $\frac{1}{52}$ (b) $\frac{3}{26}$ (c) $\frac{3}{13}$ (d) $\frac{2}{13}$

18. One card is drawn from a well-shuffled deck of 52 cards. Find the probability of getting a spade.

- (a) $\frac{4}{13}$ (b) $\frac{3}{26}$ (c) $\frac{3}{13}$ (d) $\frac{1}{4}$

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

- (a) $\frac{1}{52}$ (b) $\frac{3}{26}$ (c) $\frac{3}{13}$ (d) $\frac{2}{13}$

20. A lot consists of 144 ball pens of which 20 are defective and the others are good. Nuri will buy a pen if it is good, but will not buy if it is defective. The shopkeeper draws one pen at random and gives it to her. What is the probability that She will buy it ?

- (a) $\frac{31}{36}$ (b) $\frac{5}{36}$ (c) $\frac{1}{144}$ (d) $\frac{124}{164}$

21. A lot consists of 144 ball pens of which 20 are defective and the others are good. Nuri will buy a pen if it is good, but will not buy if it is defective. The shopkeeper draws one pen at random and gives it to her. What is the probability that She will not buy it ?

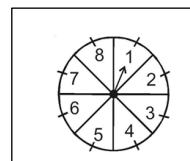
- (a) $\frac{31}{36}$ (b) $\frac{5}{36}$ (c) $\frac{1}{144}$ (d) $\frac{124}{164}$

22. A lot of 20 bulbs contain 4 defective ones. One bulb is drawn at random from the lot. What is the probability that this bulb is defective?

- (a) $\frac{4}{5}$ (b) $\frac{1}{6}$ (c) $\frac{1}{5}$ (d) $\frac{5}{6}$

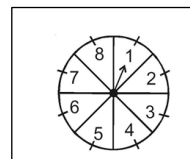
23. A game of chance consists of spinning an arrow which comes to rest pointing at one of the numbers 1, 2, 3, 4, 5, 6, 7, 8 (see Fig.), and these are equally likely outcomes. What is the probability that it will point at 8 ?

- (a) $\frac{1}{8}$ (b) $\frac{1}{2}$ (c) 1 (d) $\frac{3}{4}$



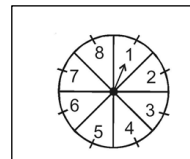
24. A game of chance consists of spinning an arrow which comes to rest pointing at one of the numbers 1, 2, 3, 4, 5, 6, 7, 8 (see Fig.), and these are equally likely outcomes. What is the probability that it will point at an odd number?

- (a) $\frac{1}{8}$ (b) $\frac{1}{2}$ (c) 1 (d) $\frac{3}{4}$

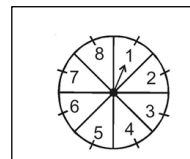


25. A game of chance consists of spinning an arrow which comes to rest pointing at one of the numbers 1, 2, 3, 4, 5, 6, 7, 8 (see Fig.), and these are equally likely outcomes. What is the probability that it will point at a number greater than 2?

- (a) $\frac{1}{8}$ (b) $\frac{1}{2}$ (c) 1 (d) $\frac{3}{4}$



25. A game of chance consists of spinning an arrow which comes to rest pointing at one of the numbers 1, 2, 3, 4, 5, 6, 7, 8 (see Fig.), and these are equally likely outcomes. What is the probability that it will point at a number less than 9?



- (a) $\frac{1}{8}$ (b) $\frac{1}{2}$ (c) 1 (d) $\frac{3}{4}$

26. A child has a die whose six faces show the letters as given below:

Th

A

B

C

D

E

A

- (a) $\frac{1}{6}$ (b) $\frac{1}{2}$ (c) $\frac{1}{3}$ (d) $\frac{3}{4}$

27. A child has a die whose six faces show the letters as given below:

Th

A

B

C

D

E

A

- (a) $\frac{1}{6}$ (b) $\frac{1}{2}$ (c) $\frac{1}{3}$ (d) $\frac{3}{4}$

28. A piggy bank contains hundred 50p coins, fifty Re 1 coins, twenty Rs 2 coins and ten Rs 5 coins. If it is equally likely that one of the coins will fall out when the bank is turned upside down, what is the probability that the coin (i) will be a 50 p coin ?

- (a) $\frac{1}{18}$ (b) $\frac{5}{9}$ (c) $\frac{1}{36}$ (d) $\frac{3}{4}$

28. A piggy bank contains hundred 50p coins, fifty Re 1 coins, twenty Rs 2 coins and ten Rs 5 coins. If it is equally likely that one of the coins will fall out when the bank is turned upside down, what is the probability that the coin will not be a Rs 5 coin?

- (a) $\frac{1}{18}$ (b) $\frac{5}{9}$ (c) $\frac{1}{36}$ (d) $\frac{3}{4}$

29. Gopi buys a fish from a shop for his aquarium. The shopkeeper takes out one fish at random from a tank containing 5 male fish and 8 female fish. What is the probability that the fish taken out is a male fish?

- (a) $\frac{1}{13}$ (b) $\frac{5}{13}$ (c) $\frac{8}{13}$ (d) $\frac{2}{13}$

30. 12 defective pens are accidentally mixed with 132 good ones. It is not possible to just look at a pen and tell whether or not it is defective. One pen is taken out at random from this lot. Determine the probability that the pen taken out is a good one.

- (a) $\frac{31}{36}$ (b) $\frac{5}{36}$ (c) $\frac{11}{12}$ (d) $\frac{144}{164}$

31. Savita and Hamida are friends. What is the probability that both will have different birthdays? (ignoring a leap year).

- (a) $\frac{364}{365}$ (b) $\frac{365}{366}$ (c) $\frac{1}{365}$ (d) $\frac{1}{366}$

33. Savita and Hamida are friends. What is the probability that both will have the same birthday? (ignoring a leap year).

- (a) $\frac{364}{365}$ (b) $\frac{365}{366}$ (c) $\frac{1}{365}$ (d) $\frac{1}{366}$

34. A box contains 90 discs which are numbered from 1 to 90. If one disc is drawn at random from the box, find the probability that it bears a two digit number.

- (a) $\frac{1}{10}$ (b) $\frac{9}{10}$ (c) $\frac{1}{5}$ (d) $\frac{1}{90}$

35. A box contains 90 discs which are numbered from 1 to 90. If one disc is drawn at random from the box, find the probability that it bears a perfect square number.

- (a) $\frac{1}{10}$ (b) $\frac{9}{10}$ (c) $\frac{1}{5}$ (d) $\frac{1}{90}$

36. A box contains 90 discs which are numbered from 1 to 90. If one disc is drawn at random from the box, find the probability that it bears a number divisible by 5.

- (a) $\frac{1}{10}$ (b) $\frac{9}{10}$ (c) $\frac{1}{5}$ (d) $\frac{1}{90}$

37. The probability of an event which is impossible to occur is Such an event is called anevent.

- (a) 0, impossible (b) 1, sure (c) 0, Complementary (d) 1, Equally likely

38. The probability of an event which is certain to occur is Such an event is called anevent.

- (a) 0, impossible (b) 1, sure (c) 0, Complementary (d) 1, Equally

39. Probability of an event E+ Probability of an event 'not E'=.....

- (a) 0 (b) 1 (c) -1 (d) greater than 1

40. The sum of the probabilities of all the elementary events of an experiment is

- (a) 0 (b) 1 (c) -1 (d) greater than 1

41. The probability of an event E is a number P(E) such that

- (a) $0 \leq P(E) \leq 1$ (b) $0 \leq P(E) \leq 1$ (c) $0 \geq P(E) \geq 1$ (d) $0 = P(E) > 1$