

CHAPTER- Probability

Q1.

Peter throws two different dice together and finds the product of the two numbers obtained. Rina throws a dice and squares the number obtained.

Who has the better chance to get the number 25?

Q2.

A number x is selected at random from the numbers 1, 2, 3 and 4. Another number y is selected at random from the numbers 1, 4, 9 and 16. Find the probability that product of x and y is less than 16.

Q3.

Two different dice are thrown together. Find the probability that the numbers obtained

- (i) have a sum less than 7
- (ii) have a product less than 16
- (iii) is a doublet of odd numbers.

Q4.

Two different dice are thrown together. Find the probability of:

- (i) getting a number greater than 3 on each die
- (ii) getting a total of 6 or 7 of the numbers on two dice

Q5.

A number x is selected at random from the numbers 1, 4, 9, 16 and another number y is selected at random from the numbers 1, 2, 3, 4. Find the probability that the value of xy is more than 16.

Q6.

Q: Two dice are rolled. Find the probability of getting digit on the upper face of the first die less than the digit on the second die.

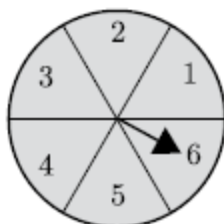
THEREFORE,

$$p(A) = \frac{n(A)}{n(S)} = \frac{15}{36} = \frac{5}{12}$$

Q7.

In Figure a disc on which a player spins an arrow twice. The fraction $\frac{a}{b}$ is formed, where a is the number of sector on which arrow stops on the first spin and 'b' is the number of the sector in which the arrow stops on second spin. On each spin, each sector has equal chance of selection by the arrow.

Find the probability that the fraction $\frac{a}{b} > 1$



Q8.

A dice is rolled twice. Find the probability that :

- 5 will not come up either time.
- 5 will come up exactly one time.

Q9.

From a deck of 52 playing cards, Jacks and kings of red colour and Queen and Aces of black colour are removed. The remaining cards are mixed and a card is drawn at random. Find the probability that the drawn card is

- (i) a black queen
- (ii) a card of red colour
- (iii) a Jack of black colour
- (iv) a face card

Q10.

Two different dice are thrown together. Find the probability that the numbers obtained have

- (i) even sum, and
- (ii) even product.