

CHAPTER-14 | Probability

QUIZ PART-02

1. A coin is tossed once. What is the probability of getting a head?
A. $\frac{1}{4}$ B. $\frac{1}{3}$
C. $\frac{1}{2}$ D. 1 (C)

Explanation: A coin has two equally likely outcomes, Head and Tail. So the probability of getting a head is 1 out of 2.

2. A bag contains one red ball, one blue ball and one yellow ball. What is the probability of drawing a yellow ball?
A. $\frac{1}{2}$
B. $\frac{1}{3}$
C. $\frac{2}{3}$
D. $\frac{1}{4}$ (B)

Explanation: There are 3 balls in total and only 1 of them is yellow. So the probability is $\frac{1}{3}$.

3. If a die is thrown once, what is the probability of getting a number greater than 4?
A. $\frac{1}{6}$ B. $\frac{1}{3}$
C. $\frac{1}{2}$ D. $\frac{2}{3}$ (B)

Explanation: Numbers greater than 4 on a die are 5 and 6. So there are 2 favourable outcomes out of 6, giving $\frac{2}{6} = \frac{1}{3}$.

4. One card is drawn from a well-shuffled deck of 52 cards. What is the probability of getting an ace?
A. $\frac{1}{13}$ B. $\frac{1}{26}$
C. $\frac{4}{13}$ D. $\frac{1}{52}$ (A)

Explanation: A deck has 4 aces out of 52 cards. So the probability is $\frac{4}{52} = \frac{1}{13}$.

5. The probability of Sangeeta winning a tennis match is 0.62. What is the probability of Reshma winning the match?
A. 0.62 B. 0.48
C. 0.38 D. 1.62 (C)

Explanation: Only one player can win. So Reshma's probability is $1 - 0.62 = 0.38$.

6. What is the probability that two friends have the same birthday, ignoring a leap year?
A. $\frac{1}{365}$
B. $\frac{1}{12}$
C. $\frac{1}{7}$
D. $\frac{364}{365}$ (A)

Explanation: After fixing one friend's birthday, the second friend can match it in only 1 out of 365 possible days.

7. In a class of 40 students, 25 are girls and 15 are boys. If one student is chosen at random, what is the probability of selecting a girl?
A. $\frac{5}{8}$ B. $\frac{3}{8}$
C. $\frac{1}{4}$ D. $\frac{25}{40}$ (A)

Explanation: The probability of selecting a girl is 25 out of 40, which simplifies to $\frac{5}{8}$.

8. A box contains 3 blue, 2 white and 4 red marbles. What is the probability of drawing a red marble?
A. $\frac{2}{9}$ B. $\frac{1}{3}$
C. $\frac{4}{9}$ D. $\frac{3}{9}$ (C)

Explanation: Total marbles are $3 + 2 + 4 = 9$. Red marbles are 4, so the probability is $\frac{4}{9}$.

9. Two different coins are tossed simultaneously. What is the probability of getting at least one head?
A. $\frac{1}{4}$ B. $\frac{1}{2}$
C. $\frac{3}{4}$ D. 1 (C)

Explanation: Possible outcomes are HH, HT, TH, TT. At least one head appears in 3 outcomes, so the probability is $\frac{3}{4}$.

10. Two dice are thrown together. What is the probability that the sum of the numbers is 8?
A. $\frac{5}{36}$ B. $\frac{1}{6}$
C. $\frac{1}{9}$ D. $\frac{1}{12}$ (A)

Explanation: The sum 8 can occur in 5 ways: (2,6), (3,5), (4,4), (5,3), (6,2). So the probability is $\frac{5}{36}$.