

Probability Numerical Questions

A. Basic Probability

1. A fair coin is tossed once. Find the probability of getting a head.
 2. A die is rolled once. What is the probability of getting a number greater than 4?
 3. One card is drawn from a deck of 52 cards. Find the probability of getting a red card.
 4. A letter is chosen at random from the word **PROBABILITY**. Find the probability that it is a vowel.
-

B. Mutually Exclusive Events

5. A die is rolled. Find the probability of getting **2 or 6**.
 6. A card is drawn from a deck. Find the probability of getting a **King or a Queen**.
 7. From numbers 1 to 10, one number is chosen at random. Find the probability that the number is **3 or 7**.
 8. A coin is tossed. What is the probability of getting **Head or Tail**?
-

C. Non-Mutually Exclusive Events

9. A card is drawn from a deck. Find the probability of getting a **Heart or a King**.
 10. From numbers 1 to 20, one number is chosen at random. Find the probability that the number is **even or divisible by 5**.
 11. A student is chosen from a class. Find the probability that the student is a **girl or wears spectacles**, if
 - $P(\text{girl}) = 0.6$
 - $P(\text{spectacles}) = 0.3$
 - $P(\text{girl and spectacles}) = 0.2$
-

D. Independent Events

12. A coin is tossed twice. Find the probability of getting **two heads**.
 13. A die is rolled and a coin is tossed. Find the probability of getting **4 and Head**.
 14. Two dice are thrown together. Find the probability that **both show even numbers**.
 15. A bag contains 5 red and 3 blue balls. One ball is drawn, replaced, and another is drawn. Find the probability that **both balls are red**.
-

E. Dependent Events

16. A bag contains 4 red and 6 blue balls. Two balls are drawn **without replacement**. Find the probability that **both are red**.
 17. From a deck of cards, two cards are drawn one after the other **without replacement**. Find the probability that **both are Aces**.
 18. A box contains 3 white and 5 black balls. Two balls are drawn successively without replacement. Find the probability that the **first is white and the second is black**.
-

F. Mixed / Application

19. A card is drawn from a deck. Find the probability that it is **neither a King nor a Heart**.
 20. Two coins are tossed together. Find the probability of getting **at least one head**.
-