Probability Sample Problems

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10/7/2021

Digit and Number Problem

1. Out of the natural numbers 10 through 30, a number is chosen randomly; what is the probability that the number is

    a. a prime number
    b. a prime number or multiple of 5
    c. a prime number or an odd number
    d. not a perfect square

Coin Problems

1. An unbiased coin is tossed thrice. Find the probability that

    a. All three are Heads?
    b. There are more than one Head?
    c. The second draw gives a Head?
    d. The third draw does not give a head?
    e. The first draw gives a Tail but the the Draw does not?
    f. At most one Head appears?
    g. At least one head appears

2. An unbiased coin is tossed ten times. Find the probability that there are

    a. just three heads
    b. at least 1 head
    c. at most 2 heads

Die Problems

1. Two dice are thrown at once. Find the probability that

    a. The first numbers is odd?
    b. The summation of numbers in two draws is a prime number?
    c. Both numbers are same?
    d. The second number is bigger?
    e. Total of the numbers is 8
    f. Sum of numbers is greater than 5

Card Problems

1. 3 cards are drawn from a pack of 52 cards. What is the probability that they are all Kings?

2. Two cards are drawn with replacement; What is the probability that they are

    a. Kings of same color

b. Kings of different color
c. Not Kings at all