AP Statistics | Activity 0828 | Name:
Dr. Paul Bailey | Wednesday, August 28, 2024

Problem 1. A coin is flipped ten times.

(a) Count the number of possible outcomes (ordered with replacement).

(b) Find the probability that exactly half are heads.

Problem 2. Three dice of different colors are rolled.

(a) Count the number of possible outcomes (ordered with replacement).

(b) Find the probability that all three dice have the same value.

(c) Find the probability that exactly one die has a six.

(d) Find the probability that the sum of the values of the dice is 10.

Problem 3. Five cards are dealt from a shuffled deck and placed in a line, so the order matters.

(a) Count the number of possible outcomes (ordered without replacement).

(b) Find the probability that the cards are placed in consecutive increasing rank order.

Problem 4. Five cards are dealt from a shuffled deck and placed in a pile, so the order does not matter.

(a) Count the number of possible outcomes (ordered without replacement).

(b) Find the probability that all are face cards (Jack, Queen, or King).

Problem 5. A bin contains 3 red balls, 5 blue balls, and 7 white balls. Three balls are drawn at random.

(a) Count the number of possible outcomes.

(b) Find the probability of drawing three blue balls.