

Theoretical Probability

1. Find the sample space for each experiment.
 - a) Flipping a coin three times
 - b) Rolling a die twice
 - c) Rolling a die and flipping a coin
2. Find the probability of each.
 - a) A die is rolled twice. Find the probability that the sum of the rolls is a seven.
 - b) A die is rolled twice. Find the probability that both numbers are the same.
 - c) A coin is flipped three times. Find the probability of flipping three tails.
 - d) A coin is flipped three times. Find the probability of flipping at least one tail.
3. An integer between 1 and 50 inclusive is drawn at random. Find the probability that the integer is a multiple of 5.
4. Which has a greater probability?

$$\frac{12}{50} \text{ or } \frac{18}{74}$$