

MATH 201 - INTRODUCTION TO PROBABILITY

Homework Assignment 1

- (1) A fair coin is tossed 11 times. In the end of the experiment we get an ordered vector of length 11 with elements H and T.
 - (a) What is the number of possible outcomes?
 - (b) What is the number of outcomes where the first H appears on the sixth toss?
 - (c) What is the number of outcomes where the forth H appears on the ninth toss?
- (2) We toss 3 different dice: green, red, and blue.
 - (a) What is the probability that the outcome of the green die is even?
 - (b) What is the probability that the sum of the outcomes of the green and red dice equals to the outcome on the blue die?
 - (c) What is the probability that the sum of the outcomes in any two dice equals to the outcome on the third die?