

Assignment 5 (NCERT Class 10 Probability)

Gautam Singh (CS21BTECH11018)

Abstract—This document contains the solution to Example 3 of Chapter 15 (Probability) in the NCERT Class 10 Textbook.

Example 3. Suppose we throw a die once.

- (i) What is the probability of getting a number greater than 4?
- (ii) What is the probability of getting a number less than or equal to 4?

Solution: Let the random variable X denote the number that appears on rolling the die. Then, we see that the sample space is $S = \{1, 2, 3, 4, 5, 6\}$. From the probability mass function (PMF) below,

$$\Pr(X > 4) = \frac{2}{6} = \frac{1}{3} \quad (1)$$

$$\Pr(X \leq 4) = \frac{4}{6} = \frac{2}{3} \quad (2)$$

The Python code `codes/6_1.py` creates the plot of the given PMF.

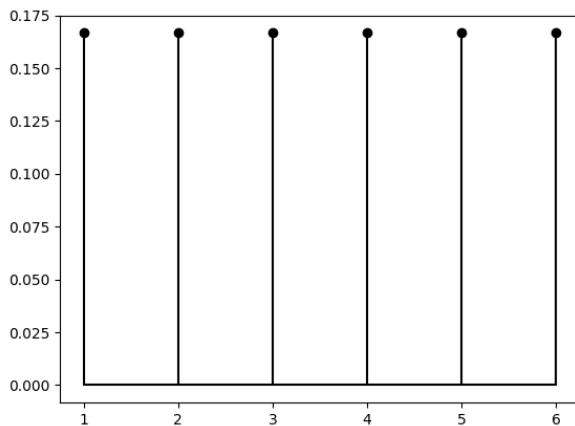


Fig. 1: Plot of the PMF of an unbiased die.