

# 1 Homework 01

You will find all the problems for this homework in this document. You are responsible for uploading a pdf document with all of your results and the necessary work to the Canvas shell for the class. Please make sure that your homework pdf is legible, clear, and pledged.

1. You have an urn with 4 red balls, 3 white balls, 6 blue balls, and 7 purple balls. You draw a ball out at random and observe the color. Describe the sample space, event space, and probability measure associated with this experiment.
2. You flip a fair coin twice, each time recording the outcome of the toss. Express the sample space, event space, and probability measure for this experiment.
3. You perform the same experiment as in the previous problem, but this time, before you begin the experiment, you bend the coin so that the likelihood that the coin lands on heads is twice that of landing on tails. Express the sample space, event space, and probability measure for this experiment.