

APPM 3570/STAT 3100 Spring 2019 Homework 4 - Due Feb. 13

- Chapter 3, Problems 32, 33, 38, 42, 51, 61, 91.
- Chapter 3, Theoretical Exercise 6.
- A biased coin ($P(H) = p$, $P(T) = 1 - p$) is tossed until a head appears for the first time. What is the probability that the number of required tosses is odd? What is this probability for a fair coin, i.e., $p = 0.5$?

Note, as with all homework sets in this class, that you may discuss the homework problems with your classmates. However, the work you turn in must be your own – you should write your solutions on your own. Identical solutions will be considered as a violation of the Student Honor Code. Furthermore, **no work equals no credit**. Your homework should be neatly written or typed and stapled.

On the front of your homework clearly print your:

- First Name and Last Name
- Lecture number (either Section 001 or Section 002) and homework number.
- Draw a **blank grading table** with room for 3 problems, format points and a total:

Question	Points
Format	
Total	

- Points will be deducted if these instructions are not followed.

Remember that writing style, clarity, and completeness of explanations are always important. Justify your answers.