

STA - 2023
Review for Exam I

The Exam is on Friday, September 18. It will cover Chapters I, and II and 3.1-3.4. You will be allowed to bring one 8.5 x 11 sheet of paper with anything **written** on both sides. The exam will be divided into two parts : a short answer part worth roughly 25-30% of the grade and a problems part.

For the Problems Part: This part will have 2-3 problems similar to your homework problems and examples in class. Each problem will have 2-3 parts.

For the Short Answer Part: This part will be made up of fill in the blanks, true/false, multiple choice -type problems. You will be tested on definitions and the basic understanding of concepts for this part. Know all possible definitions for this part. Also, be prepared to do short calculations in this part. Concentrate on:

1) Advantages and disadvantages of the various graphical techniques to summarize data.

2) Calculation of the median, quartiles, mean, percentiles, mode etc. Know the relationship between the mean, median and the mode for the three main types of distributions. Know what the three main types of distributions are and how to describe them.

3) The empirical rule and Chebyshev's Theorem.

4) Know all definitions relevant to probability - sample spaces, events, rules of probability as it applies to the material covered in class.

6) Know the difference between a population and a sample and the significance of all the definitions from Chapter I.

7) The different branches of statistics and their significance.