



MATH225—Midterm Exam Review

A little more focus—We have covered so much material to this point so here is a review that will help you focus your studying a little bit more. These are the concepts that you want to review before you take the Midterm Exam.

1. Go over Observational and Experiment studies.
2. Identify Levels of Measurement
3. Understand the definitions of population, sample, statistic, parameter, and data
4. Identify and distinguish between types of sampling methods such as stratified, cluster, systematic, and convenience sampling.
5. Frequency Tables: class limits, reading these tables, calculating frequencies, etc.
6. Construct and understand relative frequency tables for a set of data.
7. Construct and understand cumulative relative frequency tables for a set of data.
8. Histograms : Reading and Constructing, Shapes of Histograms, etc.
9. Create and interpret stem-and-leaf plots.
10. Measures of Central Tendency: Find the mean, median and mode of a data set.
11. Identify the effect of outliers on measures of central tendency.
12. Determine if a data set is skewed.
13. Measures of Variation: Find the range, variance and standard deviation of a data set.
14. Identify the interquartile range and potential outliers in a set of data.
15. Construct and understand box-and-whisker plots .
16. Use “and”, “or”, and “not” notation to describe events.
17. Compute basic probability in a situation where there are equally likely outcomes.
18. Understand mutually exclusive events .
19. Interpret and complete a contingency table.