

## MATH 155 Exam I Review (Section 1.1 - 2.3)

1. Know the definition of statistics. (1.1)
2. Know the definition of a simple random sample and how to construct one. (1.1)
3. Know how to describe and recognize different sampling types: stratified, cluster, systematic, voluntary response and convenience sampling. (1.1)
4. Know how to distinguish between a statistic and a parameter. (1.1)
5. Know how to recognize types of data: qualitative, quantitative, ordinal, nominal, discrete, continuous. (1.2)
6. Know how to distinguish between a randomized experiment and observational study. (1.3)
7. Know the definitions associated with randomized experiment and observational study and the definition of confounding. (1.3)
8. Know how to identify sources of bias. (1.4)
9. Know how to construct frequency distribution, bar graphs, pareto chart, pie chart, stem-and-leaf plot, histogram, frequency polygon, ogive, dotplot and time-series graph. (2.1 - 2.3)
10. Know how to interpret summation notation.

Review Exercises. Homework, Quizzes,  
Ch. 1 Review Exercises: #1 - 25;  
Ch. 2 Review Exercises: #1 - 15;