## Math 121 - Midterm 2 Suggested Study Problems

Here are problems that are similar to the ones you might see on the exam. Be sure to also review old homework and quiz questions too. The exam will have both multiple choice and short answer questions.

Sampling Distributions Cht. 11# 11.15, 11.17, 11.19, 11.21

Review the Central Limit Theorem and the Law of Large Numbers. Understand why  $\bar{x}$  has its own distribution with its own  $\sigma_{\bar{x}}$  that is different than the  $\sigma$  for individuals.

Basic Inference: Confidence Intervals Cht. 14 & 16# 14.13, 14.15, 14.17; 16.21

**Basic Inference: Hypothesis Testing** Cht. 15 & 16# 15.19, 15.21, 15.23, 15.25, 15.27; 16.19, 16.23, 16.25

**t-Distribution** Cht. 18# 18.15, 18.17, 18.19, 18.21, 18.23

Make sure you know when to use the t-distribution (t-values) instead of the normal distribution (z-values).

Two Sample Inference About the Mean Cht. 19# 19.17, 19.19, 19.21

**Terminology** The end of each chapter has a one page chapter summary. Make sure you read this, and are familiar with all of the terms that are mentioned in bold-face.