Math 121 - Midterm 2 Suggested Study Problems

Here are problems that are similar to the ones you might see on the exam.

Experiments Cht. 9 # 19, 28

Make sure that you know the difference between experiments and observational studies. Know these types of variables: response, explanatory, and confounding.

Sampling Distributions Cht. 11 # 15, 17, 19, 21, 31

The most important idea from this section is that the sample mean $\bar{x}$ has its own distribution (usually normal) with mean μ and standard deviation $\sigma/\sqrt{n}$.

Confidence Intervals Cht. 14 # 27, 28, 30 ; Cht. 17 # 21

Statistical Inference Cht. 15# 18, 19, 21, 23

Null & Alternative Hypotheses Cht. 14 # 10, 11, 12, 29; Cht. 15 # 25

*Remember: the null hypothesis (H_0) is a **specific** claim about the **population**. It should not refer to the sample data.*

P-values Cht. 14 # 25, 33, 49; Cht. 17 # 18

t-Distribution Cht. 17 # 15, 17, 19, 35

Make sure you know the difference between t-values and z-values.