MATH 125
Review for Test #4
Sections 8.1-8.4, 9.2, 10.1-10.4

Sections 8.1-8.2: *Set Theory*
Element
Subset
Complement
Intersection
Union
Venn Diagram
Union Rule for Counting

Sections 8.3-8.4: *Probability*
Sample Space
Event
Basic Probability Principle
Union Rule for Probability
Complement Rule
Odds

Section 9.2: *Counting*
Multiplication Principle
Factorial
Permutations
Combinations
Applications

Sections 10.1-10.4: *Statistics*
Frequency Distribution
Histogram
Frequency Polygon
Mean
Median
Mode
Range
Standard Deviation
Normal Distribution
z-score
Area under a Normal Curve
Stem-and-Leaf Plots

The test will be divided into the following three sections:
1. Set Theory   (5)
2. Probability   (8)
3. Statistics   (4)
The number in parentheses indicates the number of problems in each section.

Review Problems:
Chapter 8
        Pg. 461: #1-8, 13-36, 43-48
        Pg. 414: #1-10, 13-24, 28-44
Chapter 9
        Pg. 484: #1-12, 23-30, 38-48
Chapter 10
        Pg. 560: #3-6, 9-16, 23, 24, 31-34, 37-40

These review problems are representative of the types of problems on the test. You do not have to work every problem. Try several of the odd-numbered problems in each part just to make sure you know what you are doing. You can use your homework assignments and notes for further review.

NOTE: I will give you the formulas for standard deviation and z-score. You do not need to memorize them. I will also give you a copy of the table from Appendix A in the back of your book that will be needed to answer the z-score questions.