MATH 227 – SPRING 2004 **Name:**

**Practice for Exam I** (February 2004)

Here are some things you should know for the exam:

1. The definitons we have studied so far.

2. How to construct a pie chart, a histogram, a stem and leaf display and a box and whisker plot. I want you to be able to do a good job. You should also be able to discuss these items (i.e. You should be able to classify distributions as uniform, skewed, etc.)

3. Given a set of data, be able to
   a) Determine the mean, median, mode and 5% trimmed mean.
   b) Compute the range, standard deviation, and coefficient of variation.
   c) Understand what Chebyshev's theorem says.

4. Given paired data, be able to
   a) Find the equation of the regression line.
   b) Be able to use the regression line to make predictions.
   c) Be able to determine the correlation coefficient and the coefficient of determination. You should understand the significance of each.

5. Understand rules for computing probabilities including the following concepts:
   a) Independent events
   b) Mutually exclusive events
   c) Probability space
   d) Conditional probability
   e) How to compute the probability of events connected by "and", "or".
   f) How and when to use $P_{n,r}$ and $C_{n,r}$.

This is not intended to be an exhaustive list of the topics that might be tested. Still, it should give you a pretty good idea of what I think is most important. Please feel free to ask any questions you may have.