MATH 227 – SPRING 2004 **Name:**

Practice for Exam II (March 2004)

Here are some things you should know for the exam:

1. Be able to compute the mean and the standard deviation for a discrete probability distribution (see pg 219).

2. Know and understand the features of a binomial experiment. (see pg 225)

3. Know the formula for P(r) for the binomial distribuion. You should also be able to compute μ and σ.

4. Understand how p effects the shape of the binomial distribution.

5. Be familliar with the shape of the Normal curve (including where it has a maximum and points of inflection, and the total area under the curve).

6. Be able to compute probablilities. You should understand independent events, mutually exclusive events, conditional probability, tree diagrams, and permutations and combinations.

7. Be able to convert between z-scores and raw scores and use the table to look up areas to the left of any z-value.

8. Be able to tell when it is appropriate to use the normal approximation to the binomial distribution and then be able to use the approximation.

9. Know and be able to use both versions of the Central Limit Theorem.

10. Be able to define the following:
    Statistical Inference
    Parameter
    Statistic