Exam #1 Review

1. Review "Notes", sections (1) and (5.4).

2. Review "Log of Class Activities" through Friday, February 1.

3. Review Homework #1 through #4 and the solutions.

4. Be able to do all of the problems that we did in class and for homework. The explanations are just as important as the final answers. You should be able also to solve variations of these problems.

5. You do not need to memorize Polya's Four Phases of Problem Solving, but you should be able to identify problems that we worked on that illustrate various parts of these phases.

6. Be able to set up and solve problems involving proportional and inversely proportional quantities.

7. Be able to carry out proofs by induction, including formulas we considered, the hand-shaking problem, the weighing problem, and similar problems.

8. Be able to use the method of finite differences to guess polynomial formulas for given sequences.

9. Be able to derive the formula for the sum of the measures of a simple n-gon, and hence the formula for the measure of the angle of a regular n-gon.