

On Wednesday, January 30, the class will work in groups on logic puzzles from the first chapter of *Problem Solving Through Recreational Mathematics*. **Your solutions (or attempted solutions) of these puzzles are due in class next Wednesday, February 6.** However, if the problems turn out to be a lot more difficult than I think they are, this deadline might be extended, I might give some hints, and we might even take additional class time for working on them.

For this assignment, the class should break into groups of three, except that there might be one or two groups that have four members instead of three.

You should work together with your group on the following exercises from Chapter 1 of *Problem Solving Through Recreational Mathematics*: #1.2, #1.5, and #1.9. Your goal is to solve each of these problems and write up a clear and complete discussion of how the problem was solved, including the logical deductions that lead to the solution of the problem and the reason why each deduction is true.

Your group might or might not be able to solve all three problems. To get full credit (100%) for the assignment you must find and write up correct solutions to all three problems, and your write-up must be complete and well-written. But you can still get substantial credit (up to 90%) for writing up partial solutions that present some ideas that you applied to try to solve the problems and some logical deductions that you were able to make.

You can decide how to divide up the work of writing up the material that you will turn in. Perhaps each person in your group can take charge of writing up one question. However, all the work from your group should be turned in as a unit, and everyone in the group will receive the same grade for that work.

Please remember that *frustration is part of the process*. You should not expect the first thing that you think of doing to yield an immediate solution to a problem. Maybe not the second, third, or fourth things either. Doing math is messy! Hopefully, you will eventually find a solution, and your sense of achievement will make up for all the frustration. Even if you don't, you will have exercised and improved your logical and problem-solving skills.