

The following assignment is due in class on Friday, February 11. Everyone should **read** and **think about** all four problems listed below. However, each person in the course will be primarily responsible for just **one** of the four problems. You are responsible for the problem that is circled on your copy of the assignment handout. You should write a written response to your problem. Please do not trivialize the problem. You should write at least one, possibly two full pages of text. You should turn in your written response in class on Friday, and you will lead a discussion of your problem during the class.

Grading for this assignment will be based on your written response, the discussion of your problem, and your participation in the discussions of other students' problems.

The problems are taken from the Chapter 3 exercises in the textbook:

Problem 1. Do Exercise 3.7, parts (b) and (d). For part (d), it would be nice if you could also discuss how the problem could be generalized to other “jug” problems. If you think this is too short, you can do part (a) as well.

Problem 2. Consider the search problem discussed in Exercise 3.14. This exercise actually asks for a program, but you should **not** do any programming. Just discuss how the program could be written, and discuss the questions in the exercise.

Problem 3. Consider Exercise 3.15. Do **not** write any actual program. Just discuss the questions in the exercise.

Problem 4. Consider Exercise 3.19. Consider only the case of a two-dimensional vacuum cleaner world. Do **not** write any actual program. Discuss at least parts (a) through (d).