## **Introduction to Logical Reasoning**

# Problem Set #4

Although I strongly suggest that you write out answers to all these problems, you do *not* have to turn in any written responses. You do, however, need to be prepared to do these types of problems, for questions on the weekly quizzes and exams will primarily be drawn from the problem sets. The solutions to these problems will be provided, so you can check your own work and seek help from me as necessary.

We will devote considerable time to these types of problems during the next in-class workshop. In order to make that workshop productive, please make a solid start on them. That way you can use the workshop to address the difficulties you are facing.

If you do the extra credit logic puzzle, you must turn in a computer-type-written solution at the beginning of class on Sunday, September  $30^{m}$ .

#### Instructions

Each of the following problems presents an argument with two opposing viewpoints. For each, indicate whether the dispute is primarily (1) actually genuine, (2) merely verbal, or (3) apparently verbal but really genuine (it will only be one of these).

If it is (1), then indicate the conflicting issue, explain each person's side on it, and explain whether the dispute is over beliefs, attitudes, or both. If it is (2), then indicate the ambiguous key word or phrase and explain how each side understands that key word or phrase differently. Or, if it is (3), then indicate the ambiguity and explain why resolving this ambiguity is not likely to resolve the dispute, being clear whether the dispute concerns beliefs, attitudes, or both.

#### Problems

**Part A:** Do the arguments on pages 81–84 from the Irving Copi and Carl Cohen handout on "Emotive Language, Neutral Language, and Disputes".

**Part B:** Do the arguments on pages 85–87 from the Irving Copi and Carl Cohen handout on "Disputes and Ambiguity".

**Note:** There may a lot of exercises here. Do not feel obligated to do all of them. I often assign many exercises so that you have plenty of opportunities to practice the skills these exercises are trying to impart. I suggest doing just enough of them so that you are confident that you could use these skills on a quiz or an exam.

### Extra Credit Logic Puzzle

Mr. Majnun likes to take his son and daughter to the shooting range to practice firing their guns at targets. Miss Ayah, who is Majnun's sister, likes to come along with them as well. The following statements are true of this group of four people:

- 1. One person out of these four is the best target-shooter.
- 2. One person out of these four is the worst target-shooter.
- 3. The best target-shooter and the worst-target shooter are the same age.
- 4. The best target-shooter's twin and the worst target-shooter are of the opposite sex.

**Question:** Which two are the twins? Which one is the best target-shooter? Which one is the worst target-shooter?

To receive full credit you must justify your answer with a logical argument showing why you are 100% right. That is to say, this question has a definitive answer that can be justified without *any* guessing on your part.