## EXERCISES – Standard Logical Form VALIDITY SOUNDNESS and BEYOND

Put each of the following arguments into standard logical form, and then determine whether each argument is valid or invalid. Once you have done this, determine whether or not you can make an evaluation of whether or not each argument is sound or unsound, and in those cases where you can, indicate whether it is sound or unsound. Bring your responses to class. I have left this in MS Word format so that you can use it as a template if you wish.

- 1. Gerrymandering is always political, so it should be banned.
- 2. Gerrymandering is always political, and anything that is political should be banned, and therefore gerrymandering should be banned.
- 3. Well, somebody broke into his apartment is what we know. Anita has a key to it, and nobody else besides Anita and him has a key to it, so she's got to have been the person who broke in.
- 4. For every action there is an equal and opposite reaction. You just moved five feet to the left, and that's an action, so although I don't know what the equal and opposite reaction is, there certainly was one.
- 5. Nobody has conclusively proved that God exists, so God doesn't exist.
- 6. The Lakers have been on a winning streak, and the Celtics have lost their last three games, so the Lakers should win tonight's game against the Celtics.
- 7. I ate some of the peanuts, and they tasted okay, so I wouldn't throw that jar out. They're probably all fine.
- 8. All sound arguments are deductive arguments, and no deductive arguments are inductive arguments, so no inductive arguments are sound arguments.
- 9. To get an A, you must have perfect attendance. You have perfect attendance, and so therefore you will get an A.

Now answer the following questions. Using your "Basic Logic, Principles of Reasoning, and Mind" sheet may help (formerly titled, "Basic Logic, Principles of Reasoning, and Epistemology"). The above link is to my fresh new website version, slightly modified. Also use the Argument Evaluation Flowchart. You can access the flowchart through the above link as well.

- 10. Can you give an example of a deductive argument that is invalid? If not, why not?
- 11. What is the fundamental difference between a deductive argument and an inductive argument?
- 12. What features must a deductive argument possess if it is to be classified as a "good" argument?
- 13. What features do we look for when evaluating an inductive argument?
- 14. What is the definition of an inductive argument?
- 15. What features does a "good" inductive argument possess?