Homework 4

General Instructions:

1. Homework must be typewritten and stapled. Writing should be clear, concise, and grammatical.

2. If you discuss the assignment with your peers, list their names on the top of your homework. Remember: your answers must be your own and should not match the answers of any other student, even those whose names you list. WRITE YOUR OWN ANSWERS.

3. Homework is due at the BEGINNING of class Friday, October 16.

Part 1. Read through the experiment and answer the questions.
Part 2. Then think of your own experiment.

Part 1:

Experiment:

Professor Fabri wants to know the effects of get-out-the-vote strategies on voter turnout. Her theory suggests that door-to-door canvassing should improve voter turnout. Professor Fabri has a list of all the registered voters in Los Angeles, which she uses as her sampling frame. She then randomly selects 2000 registered voters from this list to be in her study. She randomly assigns these 2000 voters into two groups of 1000. She sends canvassers to visit each voter in group 1, and she does not engage the voters at all in group 2. After the election, Professor Fabri accesses public voting records to see who voted.

Questions:

a) What was Professor Fabri’s hypothesis? (1 sentence)

b) What was the independent variable in this experiment? (1 sentence)

c) What was the dependent variable? (1 sentence)

d) Which group was the control group? (1 sentence)
e) Which group was the experimental group and what was its treatment? (1-2 sentences)

f) What types of measurements can Professor Fabri take to assess the effects voter outreach? (Name the most obvious, and try to think of an additional measure; 1-2 sentences)

Part 2:

In a new study, we want to answer the research question, when are police most likely to use force? We hypothesize that monitoring police behavior makes it less likely that they will use force. We want to run an experiment, and we have three potential sampling frames available: all 10000 police officers in the Los Angeles police department; all 64 municipal police stations (in 46 departments) in Los Angeles county; or all 260 municipal police departments in California.¹

Use our hypothesis to produce a testable prediction. Then design a simple experiment and write a brief description of it. (4-6 sentences)

a) Describe your sampling strategy, and clarify your level of analysis. (2-3 sentences)

b) What is the specific hypothesis your experiment tests? (1-2 sentences)

c) What is your independent variable? (1 sentence)

d) What is your dependent variable? (1 sentence)

e) Which group or groups are the control group(s)? (1-2 sentences)

f) Which group or groups are your experimental group(s), and what are their specific treatment(s)? (2-4 sentences)

g) What types of measurements will you take to compare the effects of your treatments? (2-4 sentences)

¹ These figures may not be accurate.