Homework #2, Computer Exercise
Due Tuesday Sept 6, 2011
Econ 29000, Principles of Statistics
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For **Computer Exercises**, your study group should hand in a single assignment. When submitting assignments, **please include your name and the assignment number as part of the filename**. Please write the names of your study group members at the beginning of your homework. These assignments will be available to all members of the class.

Remember, I DO NOT want just the SPSS output – although you can include that as an appendix. I want a clear briefing, of the sort you might make to your boss or client, with appropriate professional-looking charts or tables.

Your company bridges the new media/old media gap by purchasing advertising space such as billboards and MTA posters (on subways and buses) to inform consumers about new smartphone apps. They want to more precisely target their advertising buys; they want to understand more about the people who commute by subway/bus/car in each of the five boroughs of NYC (Bronx, Brooklyn, Manhattan, Queens, Staten Island).

The PUMS data, collected by the US Census bureau, has useful information. The SPSS data file, pums_NYState.sav, has socioeconomic data on many different households including where they live (not just which borough but which neighborhood – approx. their Community District) as well as very detailed information on age, race/ethnicity, gender, education, income, rent, family structure (if married, if kids, etc).

Give a **one-page briefing** explaining the differences between people commuting by subway, bus, or car (so advertisers might buy billboard space or subway posters or bus signs). For particular demographic groups (you can define them), what advertising media would be best?

Solution Strategies
Too many students stop stone-cold at the beginning of a problem, if they can't immediately see how to solve it. This violates one of the most basic strategies of finding a solution: Just Do It! (Yeah, it's also a slogan to sell something.)

You regularly use this solution strategy for things like electronic games. How do you learn to play them? Usually you just start doing it, figuring things out as you go along. You might not know how to score points (or even if the point of the game is scoring points); you will discover for yourself many things about the game. If you are serious about it then after a while, you

might search online for tips or even read some help files . But the main way you will learn about it is to just do it.

So, too, for stats. The only difference is that learning a game is fun work while learning stats is hard work – but that's just laziness. (With time you might learn how fun stats is!) If you haven't spent a few hours just trying it, then you haven't started anything.

And just like you chat with friends about a new game, so too work with your study group to figure out problems.

Asking questions

It is rarely helpful to go to the instructor or TA and just say "I can't do it." You have to explain what you've done so far, in detail, and where you've hit problems. Sometimes writing this out can even cause a "eureka!" moment when you see what you were missing. But it can at least help me or a TA understand what you're doing wrong.