Reflection 3, due Wednesday 10/15/14

Chapter 6

1. Suppose that Stan's preferences regarding leisure and consumption can be represented by the utility function $U = e^2 c$, and that he has the linear budget constraint $c = (1 - e)w + k$, where e is the share of his time he spends not working, c is his consumption, w is his wage rate, and k is his non-labor income. Stan has a wage rate of $w = 100$ and a non-labor income of $k = 100$.

a) Find Stan's optimal combination of leisure and consumption.

b) Draw a graph with leisure on the horizontal axis and consumption on the vertical axis. Include Stan's budget line, the point representing his optimal choice, the indifference curve that passes through that point, and a few other indifference curves.

c) Explain in words what's going on with this problem. Why does the answer you find make sense? What is the relevance to labor supply decisions that real people make in the real world?

2. Suppose that Tony, like Stan, has the utility function $U = e^2 c$, the budget constraint $c = (1 - e)w + k$. Tony has a wage rate of $w = 270$, but he has $k = 0$, which is to say that he has no non-labor income. However, he has the option of applying for unemployment insurance, which will give him a benefit of μ (and therefore consumption $c = \mu$) if he doesn't work at all (and therefore has $e = 1$).

a) Determine Tony's utility-maximizing labor supply decision if the unemployment benefit is $\mu = 50$.

b) Draw a graph like the one in 1b. Include Tony's budget set, his optimal leisure-consumption combination without the unemployment benefit, the corresponding indifference curve, and the indifference curve associated with going on unemployment.

c) Find the critical value of $\tilde{\mu}$, at which Tony is just indifferent between working for pay and collecting the unemployment benefit. Add $\tilde{\mu}$ to your graph from part b.

Chapter 7

1. In addition to labor and leisure, people also devote a share of their time to household work. How does this change our previous model of the labor supply decision? What new implications does this change have?

2. How are labor supply decisions made jointly by spouses/domestic partners/etc. different from labor supply decisions made by single people? Explain the difference between a 'unitary' model and a bargaining model of joint decisions.

3. How are labor supply decisions made by individuals taking into account expectations of future earnings and expenditures through the course of their lifetime different from labor supply decisions made by individuals who are simply maximizing utility from leisure, consumption, etc. in a single, present time period? What new implications come from adjusting our model to take this into account?