ECON 321, Assignment 2:
BP, Chapter 2: 2.1 Consumer Surplus

1. Read Section 2.1.1.

2. Skim Section 2.1.2.

2. Read Section 2.1.3. Note footnote g is very important – it defines a commodity q_0 that has a price of 1. This is also called the **numeraire.** This allows more simple utility maxmimization problems because it gets rid of income effects.

3. Read Section 2.1.4. On page 25, let $a = 10$, $b = 2$, and $d = 1$. Substitute the budget constraint given on page 23 in place of q_0, and write the utility maximization problem. Then take the 2 first order conditions for q_1, q_2, and simplify. Note how you get the inverse demands easily, but the actual demand functions take more solving.

4. Suppose that initially $p_1 = 3$ and $p_2 = 3$. What is the CS found by using the formula in equation (2.2)? How does CS change if p_1 falls to 2? (Note you need to find what are q_1 and q_2 at these prices.