SLUTSKY EQUATION

8.1 (0) Gentle Charlie, vegetarian that he is, continues to consume apples and bananas. His utility function is $U(xA; xB) = x_A x_B$. The price of apples is \$1, the price of bananas is \$2, and Charlie's income is \$40 a day. The price of bananas suddenly falls to \$1.

Find the substitution and income effect of the price change for apples and bananas.

2) A Giffen good must be an inferior good. T/F

3) If a good is an inferior good, then an increase in its price will increase the demand for it. T/F

8.2 (0) Neville's passion is fine wine. When the prices of all other goods are fixed at current levels, Neville's demand function for high quality claret is q = 0,02m - 2p, where *m* is his income, *p* is the price of claret (in British pounds), and *q* is the number of bottles of claret that he demands. Neville's income is 7,500 pounds, and the price of a bottle of suitable claret is 30 pounds. The price of wine rises to 40 pounds, find the substitution and income effect.

5) A consumer has the utility function $U(x,y) = x + 2y^{1/2}$. The price of good x is 2 and the price of good y is 1. The consumer's income is 20. If the price of good y rises to 2, then entire change in demand for y is due to the substitution effect.