## SLUTSKY EQUATION

8.1 (0) Gentle Charlie, vegetarian that he is, continues to consume apples and bananas. His utility function is $U(x A ; x B)=x_{A} x_{B}$. 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 $q=0,02 m-2 p$, 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 $U(x, y)=x+2 y^{1 / 2}$. 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.

