ECO 401-002
Spring 2003
Problem Set \#1
Due: Thursday, January 30, 2003

1. Concerned about impending cuts in federal welfare programs, the state legislature decides to study the problem of hunger in Kentucky. Two proposals are considered. The first is to place a price ceiling on bread at $\$ .75$ per loaf. The second is to place a price ceiling on hamburger at $\$ 2.00$ per pound. Currently bread sells for $\$ 1.00$ per loaf and hamburger sells for $\$ 1.50$ per pound. Using supply and demand diagrams, evaluate the impact of each of these maximum prices on their respective markets.
2. The adoption of mass-production methods in raising hogs, a technological advancement, is starting to have an impact on both the market for pork and the market for beef. (a) Using supply and demand analysis, evaluate the effect of the new hog production techniques on the market for pork. (b) Then evaluate the resultant impact on the market for beef.
3. The demand and supply curves for coffee are given by:

$$
\begin{aligned}
& \mathrm{Q}_{\mathrm{d}}=600-2 \mathrm{P} \\
& \mathrm{Q}_{\mathrm{s}}=300+4 \mathrm{P}
\end{aligned}
$$

Plot the supply and demand curves on a graph and show where equilibrium occurs. Then, using algebra, solve for the equilibrium price and quantity and verify that they correspond to your graph.
4. Browning \& Zupan, $2.9 \mathrm{a}, \mathrm{b}, \mathrm{c}$
5. $B \& Z, 2.15$

