Homework Assignment #2

15 points

Due Date: Beginning of Class on **Tuesday, February 18, 2014**

Instructions: Make sure your answers are precise, complete and legible, with plenty of explanation for why you did what you did. If I can't read your answer, you won't get credit for it. Use separate sheets of paper for your answers. Don't forget to label all items on graphs. Round to two decimal places.

1. (5 points) In a competitive agriculture wheat market, demand for wheat is Q_D = 9,900 - 100P, and supply is Q_S = 2,000 + 1,900P, where Q is the quantity bushels of wheat produced and P is the price per bushel. Suppose the government decides to impose a price ceiling of $3 per bushel.
   a. What would the equilibrium be in this wheat market before the price ceiling? Be sure to include the price and # bushels supplied/demanded and whether a shortage/surplus exists.
   b. What would the outcome in this market be post-price ceiling? Be sure to include the price and # bushels supplied/demanded and whether a shortage/surplus exists.
   c. Graph the pre- and post- price ceiling outcomes.

2. (5 points) In 1999, after nearly 20 years of rent control in Berkeley, CA, the elimination of the law led to an estimated rise in rents of nearly 40%. Using supply-and-demand models, illustrate how the law and then its elimination affected the rental housing market.
   Discuss the effects on the equilibrium rental price and quantity of housing rented.

3. (3 points) Green et al. (2005) estimate that the demand elasticity is -0.47 and the long-run supply elasticity is 12.0 for almonds. The corresponding elasticities are -0.68 and 0.73 for cotton and -0.26 and 0.64 for processing tomatoes.
   If the government were to apply a specific tax to each of these commodities, what incidence would fall on consumers?

4. (2 points) The supply curve is $Q = g + hp$.
   a. Derive a formula for the elasticity of supply in terms of p (and not Q).
   b. Now give on entirely in terms of Q.