## Quiz #5 - 5 points

## Please answer the following questions using one graph.

1. The unleaded gasoline market in Flagstaff is represented by the following demand and supply schedules. The price is in dollars and the quantities in thousands of gallons per day. (13 points)

<u>P</u>	$\underline{Q}^{d}$	$Q^{S}$
2.80	7	55
2.70	14	50
2.60	21	45
2.50	28	40
2.40	35	35
2.30	42	30
2.20	49	25
2.10	56	20
2.00	63	15

- a) Graph these curves, labeling them  $D_1$  for the demand curve,  $S_1$  for the supply curve, and make sure to label everything. Label the initial equilibrium  $Q_1$ ,  $P_1$ .
- b) What is the equilibrium quantity and price?
- c) What is the surplus, equilibrium or shortage if there is a price ceiling at \$2.30?
  Make sure to write the condition of the market (binding or not binding) AND the amount (shortage, surplus, or equilibrium). Label Q<sub>d</sub> and Q<sub>s</sub>, on the graph as well as P<sub>c</sub> at the price ceiling.
- d) Suppose that the supply of gasoline increases due to Iraq again producing oil such that production (quantity supplied) increases at each price by 24 thousand gallons per day. Draw the new curve and label it  $S^2$ . Label the this equilibrium  $Q_2$ ,  $P_2$ .
- f. NOW, what effect did this have on the market (is the ceiling binding or not binding after this change)? Make sure to give the amount of the shortage, surplus or the equilibrium price and quantity?