## On a separate sheet of paper please answer the following questions. Use one graph to analyze the following questions.

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

| $\frac{\mathrm{P}}{8}$ | $\mathrm{Q}^{\mathrm{d}}$ | $\frac{\mathrm{Q}^{\mathrm{S}}}{}$ |
| :---: | :---: | :---: |
| 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, $D_{1}$ for the demand curve, $S_{1}$ for the supply curve, and make sure to label everything. Label the initial equilibrium $\mathrm{Q}_{1}, \mathrm{P}_{1}$.
b) What is the equilibrium quantity and price?
c) 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 $\mathrm{S}^{2}$. Label the this equilibrium $\mathrm{Q}_{2}, \mathrm{P}_{2}$.
d) An increase in demand is experienced (in addition to the supply change) due to the impact of hurricanes in the U.S. such that the quantity demanded increases by 12 thousand gallons per day. Show this on the same graph and label it $\mathrm{D}_{3}, \mathrm{P}_{3}$, and $\mathrm{Q}_{3}$.
f) What happens to the equilibrium quantity from $Q_{1}$ to $Q_{3}$ ?? The equilibrium price $\left(P_{1}\right.$ to $\left.P_{3}\right)$ ?

