1. The graph below illustrates the market for toothpaste. Label both axes and both lines. Label the initial equilibrium quantity $Q_0$. The equilibrium price is $3.75. The government is worried that the current consumption of toothpaste is too low. They attempted to introduce a price ceiling to encourage additional consumption, but that idea failed. Therefore, they removed the price ceiling. Instead they have decided to subsidize the consumption of toothpaste. With this policy, consumers will receive $1.00 for every tube of toothpaste they purchase.

Show the effects of this subsidy in the graph below. (Hint: Think of a subsidy as a negative tax.)
- Label the new consumption of toothpaste as $Q_1$.

b. How effective is this policy in increasing toothpaste use? Explain.

c. In the graph below, clearly show the increase in consumer surplus with the subsidy.
d. In the graph below, clearly show the increase in producer surplus with the subsidy.
e. In the graph below, clearly show the cost of this program to the government.

f. Does this policy create a deadweight loss? Explain why it does or does not. If it does create an efficiency loss, show it in the graph above.
2. The space below shows the US domestic market for toys. Label both axes. Label the domestic supply, $S_{US}$, domestic demand, $D_{US}$, and the autarky price and quantity, $P_A$ and $Q_A$.

Assume the US opens this market to trade and the world price ($P^W$) lies below the autarky price.

A. In the graph above, show the new level of domestic production ($Q^S$) and consumption ($Q^D$).

B. In the graph above, clearly show the gains to consumers.

C. In the graph above, clearly show the losses to producers.

D. In the graph above, clearly show the gains from trade.

E. How would opening up this industry to world competition effect labor markets in the US? What predictions can be made about wages in the US?