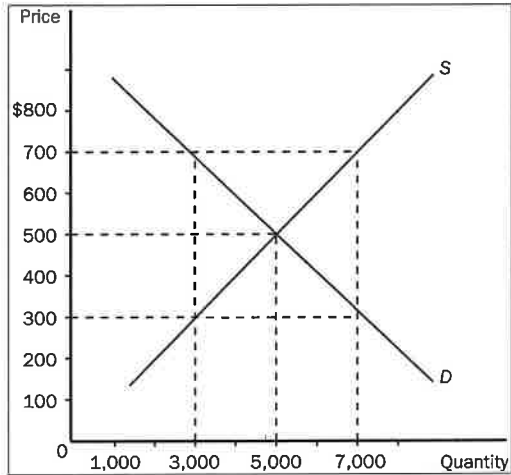


EC 11
Problem Set 3 – Due 3/7

- 1.) Using the graph shown below, analyze the effect a \$300 price ceiling would have on the market for ten-speed bicycles. Would this be a binding price ceiling?
- b. Using the graph shown, analyze the effect a \$700 price floor would have on this market. Would this be a binding price floor?
- c. Why would policymakers choose to impose a price ceiling or price floor?

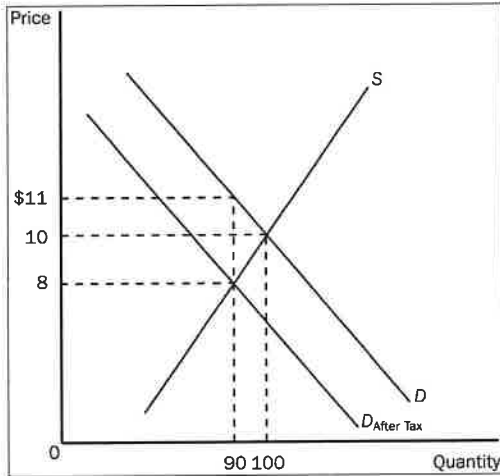


a.) It would bind, causing a shortage of 4,000 bikes.

b.) It would bind causing a 4,000 bike surplus.

c.) To limit the price in either direction.

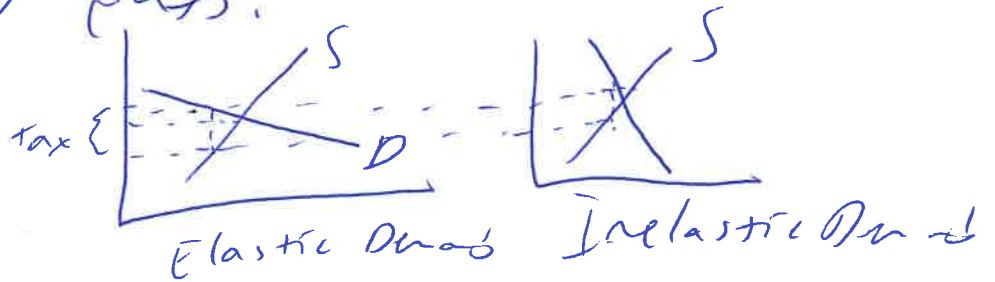
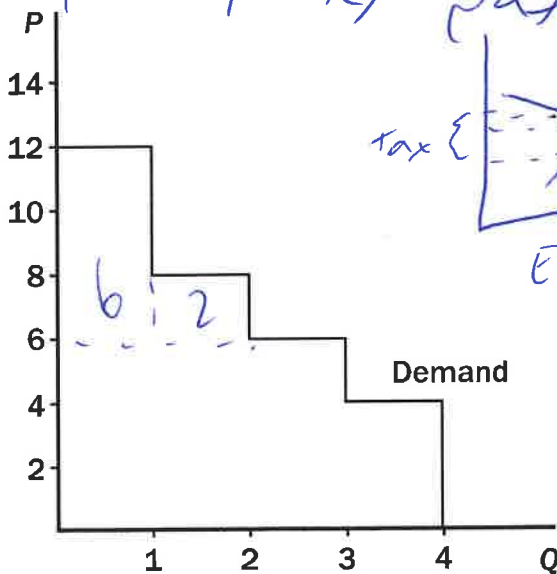
- 2.) Using the graph shown below, answer the following questions.
- What was the equilibrium price in this market before the tax?
 - What is the amount of the tax?
 - How much of the tax will the buyers pay?
 - How much of the tax will the sellers pay?
 - How much will the buyer pay for the product after the tax is imposed?
 - How much will the seller receive after the tax is imposed?
 - As a result of the tax, what has happened to the level of market activity?



a.) \$10
 b.) \$3
 c.) \$1
 d.) \$2
 e.) \$11
 f.) \$8
 g.) decreased by 10.

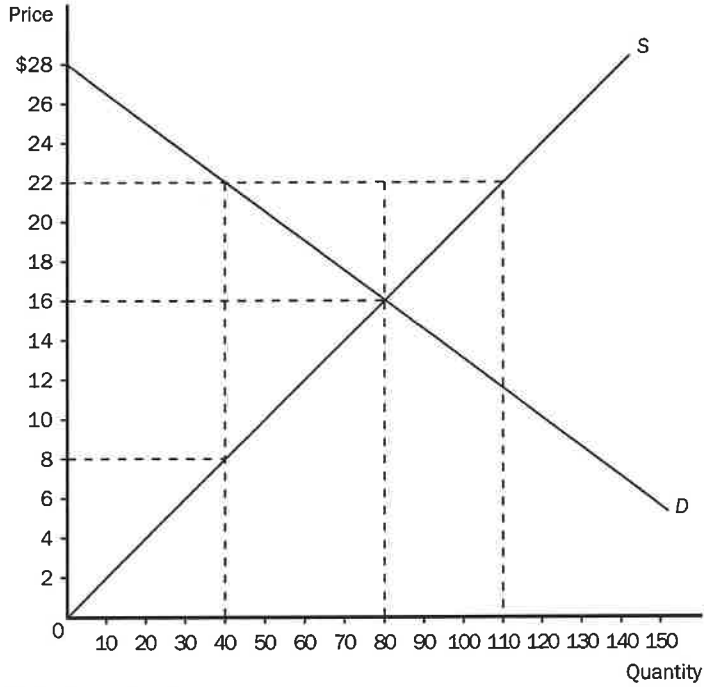
3.) How does elasticity affect the burden of a tax? Justify your answer using supply and demand diagrams.

The more elastic a good, the less of the tax that party pays.



4.) Refer to the figure above. If the price of the good is \$6, then consumer surplus is what?

CS = 8



5.) Refer to the figure above.

a.) What are equilibrium price and quantity?

$$P = 16 \quad Q = 80$$

b.) What is consumer surplus in the market at equilibrium?

$$CS = \frac{1}{2} (12) (80) = 480$$

c.) What is producer surplus in the market at equilibrium?

$$PS = \frac{1}{2} (16) (80) = 640$$

d.) What would the quantity bought and sold be if the government sets a price ceiling of \$22? Price ceiling of \$8?

\$22:

$$Q = 80$$

\$8:

$$Q = 40$$