

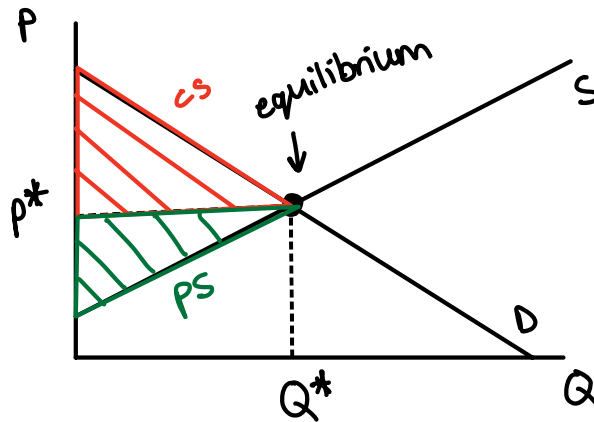
ECON 101

TA Worksheet, Module 7 (CS and PS)

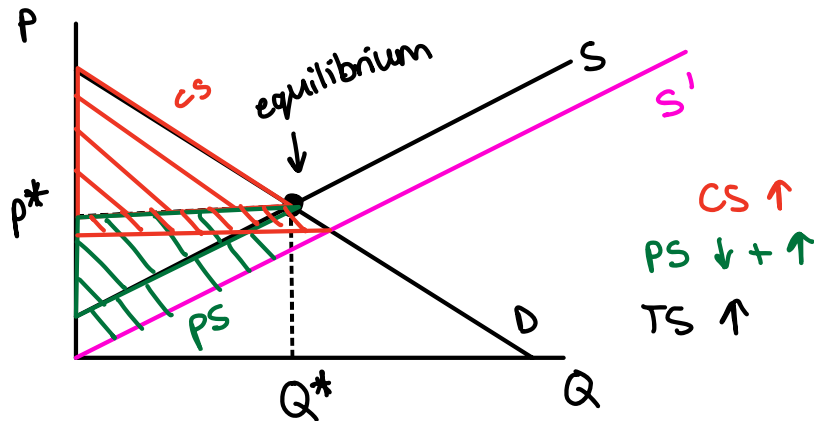
Name: _____

TA: _____

1. Draw a market in equilibrium. Label the equilibrium price and quantity. Identify consumer and producer surplus.



2. What happens to CS, PS and TS as supply shifts out? Explain and draw it.

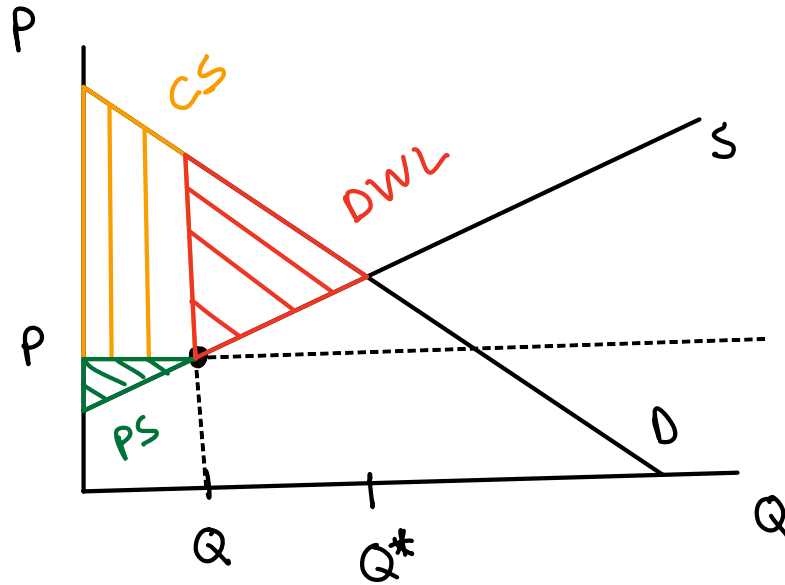


3. Suppose cheese curds cost 50 cents each. Given the data below, how many would you buy and what would your total consumer surplus be? "MC"

Number	Marginal Benefit/Willingness to pay
1	\$1.00 ✓
2	\$0.80 ✓
3	\$0.60 ✓
4	\$0.40 ✗
5	\$0.20 ✗

3 cheese curds
 $CS = MB - MC$ at each curd
 $= (1 - .5) + (.8 - .5) + (.6 - .5)$
 $= .5 + .3 + .1 = \boxed{0.9}$

4. Draw a market. Suppose quantity is below equilibrium quantity and price is where that quantity hits the Supply curve (you just made a price ceiling). Show consumer surplus, producer surplus, and deadweight loss. Label everything.



5. Consider the system:

Market Demand: $P = 50 - 10Q$

Market Supply: $P = 10 + (10/3)Q$

Calculate consumer, producer, and total surplus when the market is in equilibrium.

$$50 - 10Q = 10 + \frac{10}{3}Q$$

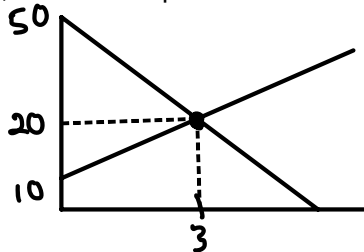
$$40 = \frac{40}{3}Q$$

$$120 = 40Q$$

$$3 = Q \rightarrow$$

$$P = 50 - 10(3) = 20$$

$$P = 10 + \frac{10}{3}(3) = 20$$



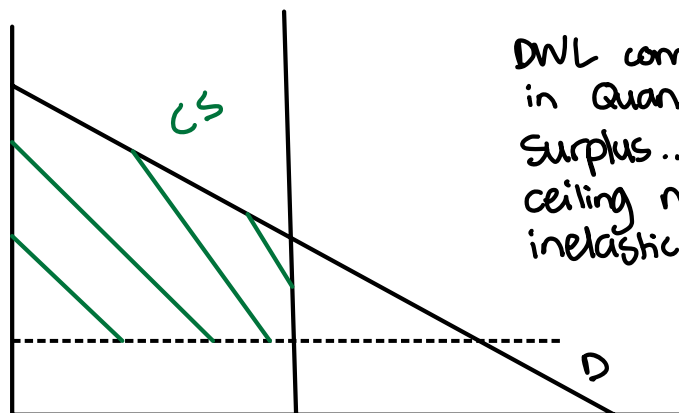
$$CS = \frac{1}{2}(3)(50 - 20)$$

$$= 45$$

$$PS = \frac{1}{2}(3)(20 - 10)$$

$$= 15$$

6. Under what circumstance(s) would a binding price ceiling create no deadweight loss? Draw it.



DWL comes from the reduction in Quantity that reduces Surplus... how would a price ceiling not affect Q? ... inelastic supply!