

①

1. You are considering the number of hamburgers that you plan to order. Based on the following table, complete the table and answer the following questions.

a. How many units of hamburgers should you order? Why?

②

Ans Should order 4 hamburgers to get the highest utility. Moreover, the 4th hamburgers provide a higher net benefit more than the 5th hamburger. The total net benefit for 4th is 720, while 5th hamburger is 700.

b. Suppose you decide to order 2 hamburgers. Is this underallocation or overallocation? Explain
How much is your deadweight loss?

③

Ans Underallocation. This is because of it does not meet a condition of optimal condition.
The amount of deadweight loss = 20

c. Suppose you decide to order 5 hamburgers. Is this underallocation or overallocation? Explain
How much is your deadweight loss?

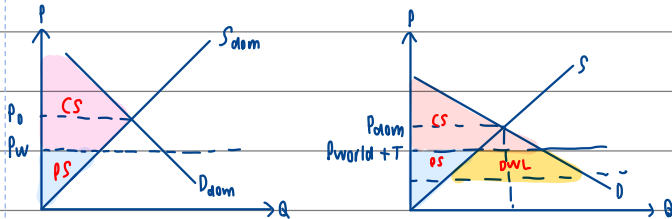
④

Ans Overallocation. This is because of the 5th hamburger provide a utility equal to zero.
The amount of deadweight loss = 20

2. With diagrams, explain the differences between tariff and quota. Also, explain the impact on domestic stakeholders (consumers, producers, and government), i.e., who is better off and who is worse off? Why?

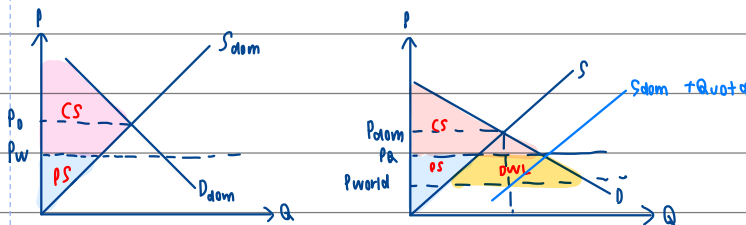
2. With diagrams, explain the differences between tariff and quota. Also, explain the impact on domestic stakeholders (consumers, producers, and government), i.e., who is better off and who is worse off? Why?

Ans Tariff = tax imposed on import goods to protect domestic producer



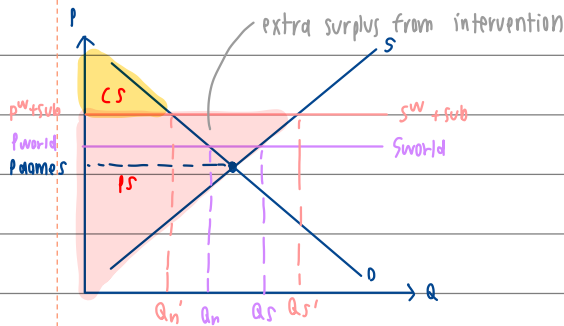
From this graph, it represents a higher Producer Surplus, from the increasing the amount that the domestic producers can sell. Moreover, from the DWL part, it gives a tariff's revenue to the government. However, it also affects the domestic customer because they need to pay for a higher price, which is the consumer surplus decrease.

Quota = setting the limit amount of import



From the graph, it represents that the domestic producers can sell more, from the larger PS, while the domestic consumers decrease from a smaller CS by the effect of paying a higher price. Moreover, the difference between tariff and quota is that quota gets a "license" to import to a firm, usually by a foreign firm and gets a limit of how much can be imported. These licenses allow holders to purchase product abroad at P_w and sell in the domestic market at a higher price.

3. Consider an exporting country. Analyze welfare effect on all stakeholders when its government impose "Export Tax", i.e., per-unit tax imposed on the exported good. Draw a diagram(s) and provide complete analysis on who gain(s) and who lose(s).



4. A "small", open economy is engaging in international trade. Its domestic demand curve is given by $P = 100 - Q$ and its domestic supply curve is given by $P = Q$. The world price of the good is 20\$. Answer the following questions.

- a. What does it mean for a country to be "small"? What implication of being "small" has on the world supply curve?

Ans A country need to buy or sell goods at the market price, so supply = world supply.

- (b) b. Is this economy either an exporting or important country? Why? How many units of the goods is the country is currently importing or exporting?

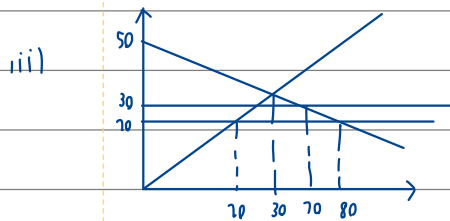
Ans From the given information that $P=Q$, the equation $P=100-Q$

$P = 100 - Q$; $P = Q$	if $P = 20$
$Q = 100 - P$	$Q = 100 - P$
$2Q = 100$	$Q_D = 100 - 20 = 80$
$Q^* = 50$	$Q_S = 20$
$P^* = 50$	} IMPORT $\rightarrow 80 - 20 = 60$
$P_{world} = 20$, $P_{domestic} = 50$	
$P_{domestic} > P_{world} \Rightarrow \text{import}$	

- c. Now suppose the government decides to intervene. If the country is importing, the government will impose import tariff of 10\$ per unit. If the country is exporting, the government will impose export subsidy of 10\$ per unit. Calculate
- Domestic consumer and producer surplus after the intervention
 - Either subsidy cost or tariff revenue
 - Deadweight loss from the intervention.

i) $CS = \frac{1}{2} \cdot 70 \cdot 70 = 2450$
 $PS = \frac{1}{2} \cdot 30 \cdot 30 = 450$

ii) $IMPORT = 70 - 30 = 40$
 $REVENUE = 40 \cdot 10$



$$DWL = \left(\frac{1}{2} \cdot 10 \cdot 10 \right) + \left(\frac{1}{2} \cdot 10 \cdot 10 \right)$$

$$= 100$$

TITLE

DATE

TITLE

DATE

TITLE

DATE

TITLE

DATE

TITLE

DATE

TITLE

DATE

TITLE

DATE

TITLE

DATE

TITLE

DATE

TITLE

DATE

TITLE

DATE

TITLE

DATE

TITLE

DATE

TITLE

DATE

TITLE

DATE

TITLE

DATE

TITLE

DATE

TITLE

DATE

TITLE

DATE

TITLE

DATE