Exercise 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?
    b. Suppose you decide to order 2 hamburgers. Is this underallocation or overallocation? Explain. How much is your deadweight loss?
    c. Suppose you decide to order 5 hamburgers. Is this underallocation or overallocation? Explain. How much is your deadweight loss?

Quantity	Total Benefit	Marginal Benefit	Total Cost	Marginal Cost	Total Net Benefit
1st	80	80	20	20	60
2nd	140	60	40	20	100
3rd	180	40	60	20	120
4th	200	20	80	20	120
5th	200	0	100	20	100

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?
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$. Answer the following questions.
    a. What does it mean for a country to be "small"? What implication of being "small" has on the world supply curve?
    b. Is this economy either an exporting or important country? Why? How many units of the goods is the country is currently importing or exporting?
    c. Now suppose the government decides to intervene. If the country is importing, the government will impose import tariff of 10$ per unit. If the country is exporting, the government will impose export subsidy of 10$ per unit. Calculate
        i. Domestic consumer and producer surplus after the intervention
        ii. Either subsidy cost or tariff revenue
        iii. Deadweight loss from the intervention.

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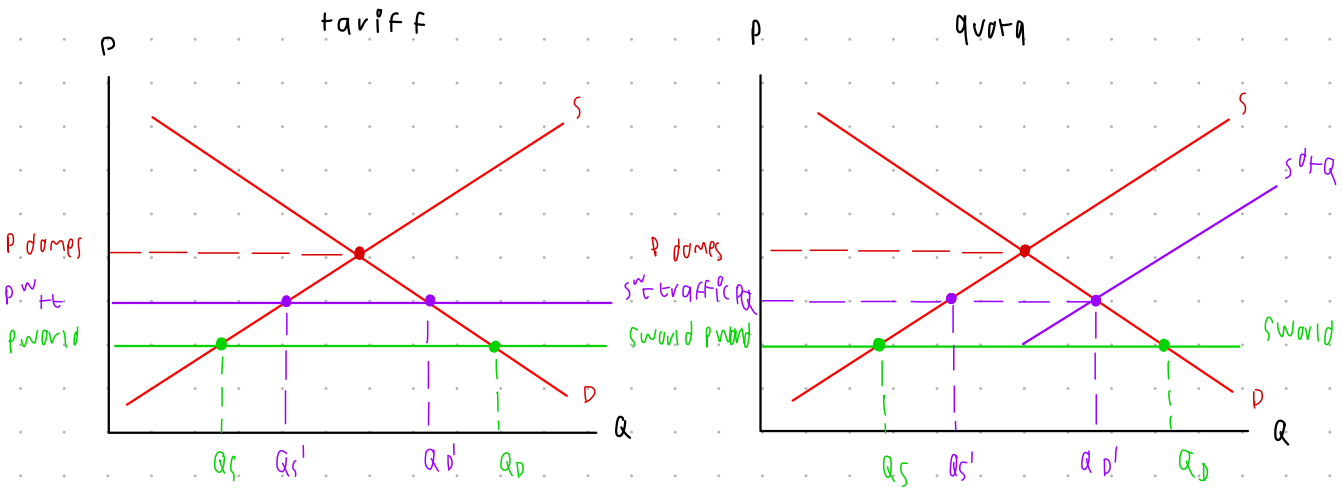
a) The number of hambergers I should order is 4 units because that is where I recieve the max total net benefit and from the table above, when I order 5 units of hamburgers, the total net benefit is decreare

b) It is under allocation because you can still recieve higher total net benefit and deadweight loss is 120 - 100 = 20

c) It is overallocation
and deadweight loss is 120 - 100 = 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?



The different between tariff and quota is for tariff the consumer will pay more and buy less also the producer sell at high price and produce more and lastly the

government will get the tariff revenue. For quota, q set a limit of how much can be imported and issues the import licences" to firm which allow the holder to buy goods abroad at P^w and sell in domestic market at higher price

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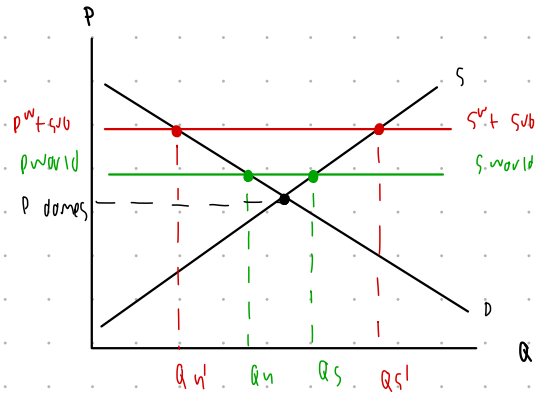

the producers will loss benefit and the consumer will gain benefit because producer have to pay higher tax of export → they sell less

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.
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a) The implication of being small country has on world supply curve is they need to buy and sell products at the market point to make the supply = world supply

b) domestic prices : $100 - Q = Q$

$Q = 50$, $P = 50$

if $P = 20$; $Q_D = 80$, $Q_S = 20$ import $= 60$

c) i) $CS = \frac{1}{2} \times 70 \times 70 = 2450$

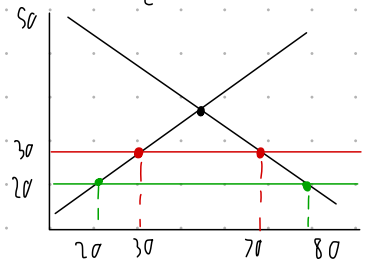
$PS = \frac{1}{2} \times 30 \times 30 = 450$

ii) import $= 70 - 30$

$= 40$

revenue $= 40 \times 10 = 400$

iii)



deadweight loss $= \left(\frac{1}{2} \times 10 \times 10\right) + \left(\frac{1}{2} \times 10 \times 10\right)$

$= 100$