Example 3.K ***Price control and Welfare***

Consider the market for apartment rentals in Chicago. The price of rent is determined by the following system of equations.

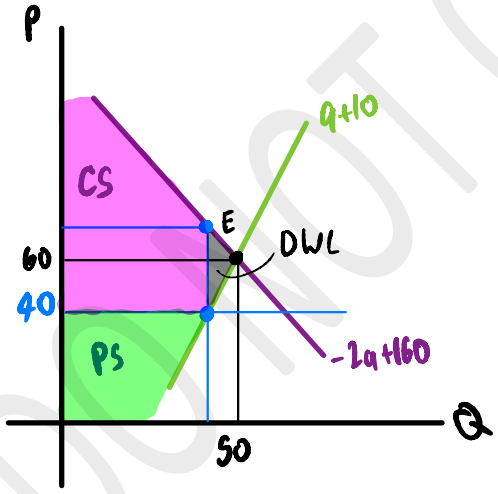
Demand: $p = -2q_d + 160$

Supply: $p = q_s + 10$

- What is the equilibrium price and quantity in the market for apartment rentals?

$$P_d = P_s$$
$$-2q + 160 = q + 10$$
$$3q = 150$$
$$q^* = 50$$
$$p^* = 50 + 10 = 60$$

- Suppose the government tries to control the rent prices through a price ceiling of $40. Discuss the implication of this policy. Is there any deadweight loss?



Imposing ceiling price has effects as follows

i) Output decreases.
- Ceiling price at $40 makes suppliers want to decrease their production since the equilibrium price is higher than ceiling price.

ii) Consumer Surplus increases.
- Because of ceiling price, consumers are able to rent apartment at the cheaper price.

iii) There is deadweight loss.
- The black area is a deadweight loss.