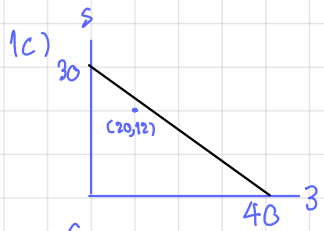
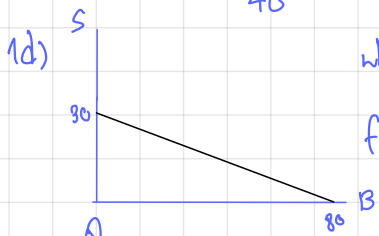


With 120 units of wood source, we can produce 30 spears or we can produce 40 bows.

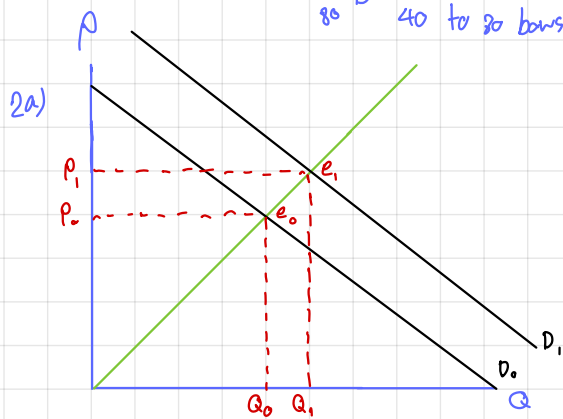
1b) If you produce 30 spears, the opportunity cost is 40 which is from the opportunity to produce 40 bows.



This option is possible but not efficient because they only used 116 units of wood source in total, so there is 4 units remaining.



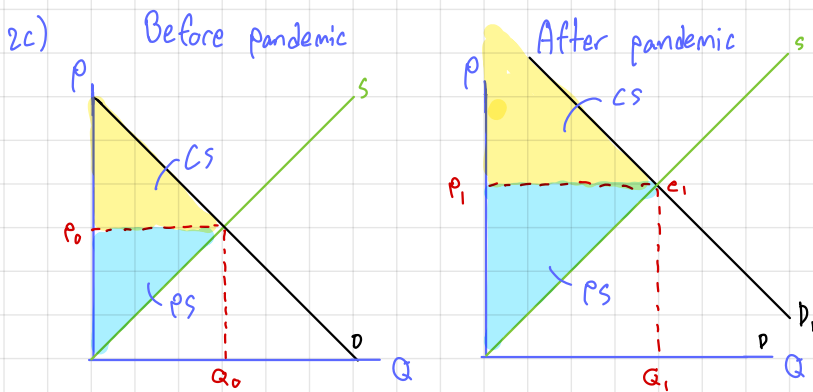
when the new method is discovered, the opportunity cost of spear is changed from 40 to 80 because the new method is able to produce more bows from 40 to 80 bows.

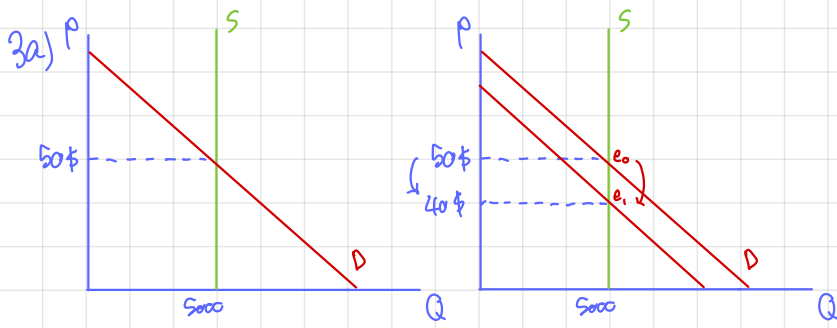


During the pandemic, many people have to work from home so the market demand will increase because people will need a computer to work at home more than usual.

2b) During the pandemic there will be an excess demand because the demand for computer is increased.

The equilibrium is shifted upward from e_0 to e_1 , and the equilibrium price and quantity are increased.



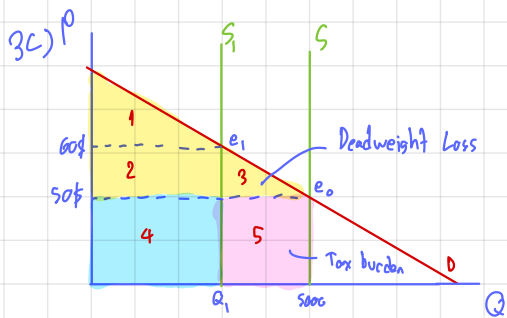


3b) Price elasticity of demand

Price elasticity of supply

$$\epsilon_D = \frac{P}{Q} \cdot \frac{\Delta Q}{P} = \frac{40}{5000} \cdot \frac{500}{-10} = -0.4$$

$$\epsilon_S = \frac{P}{Q} \cdot \frac{\Delta Q}{P} = \frac{40}{5000} \cdot \frac{0}{-10} = 0$$



After a unit tax is imposed on buyers for 10 , they have to

pay 60 for 1 unit of product. The tax burden belongs to the sellers.