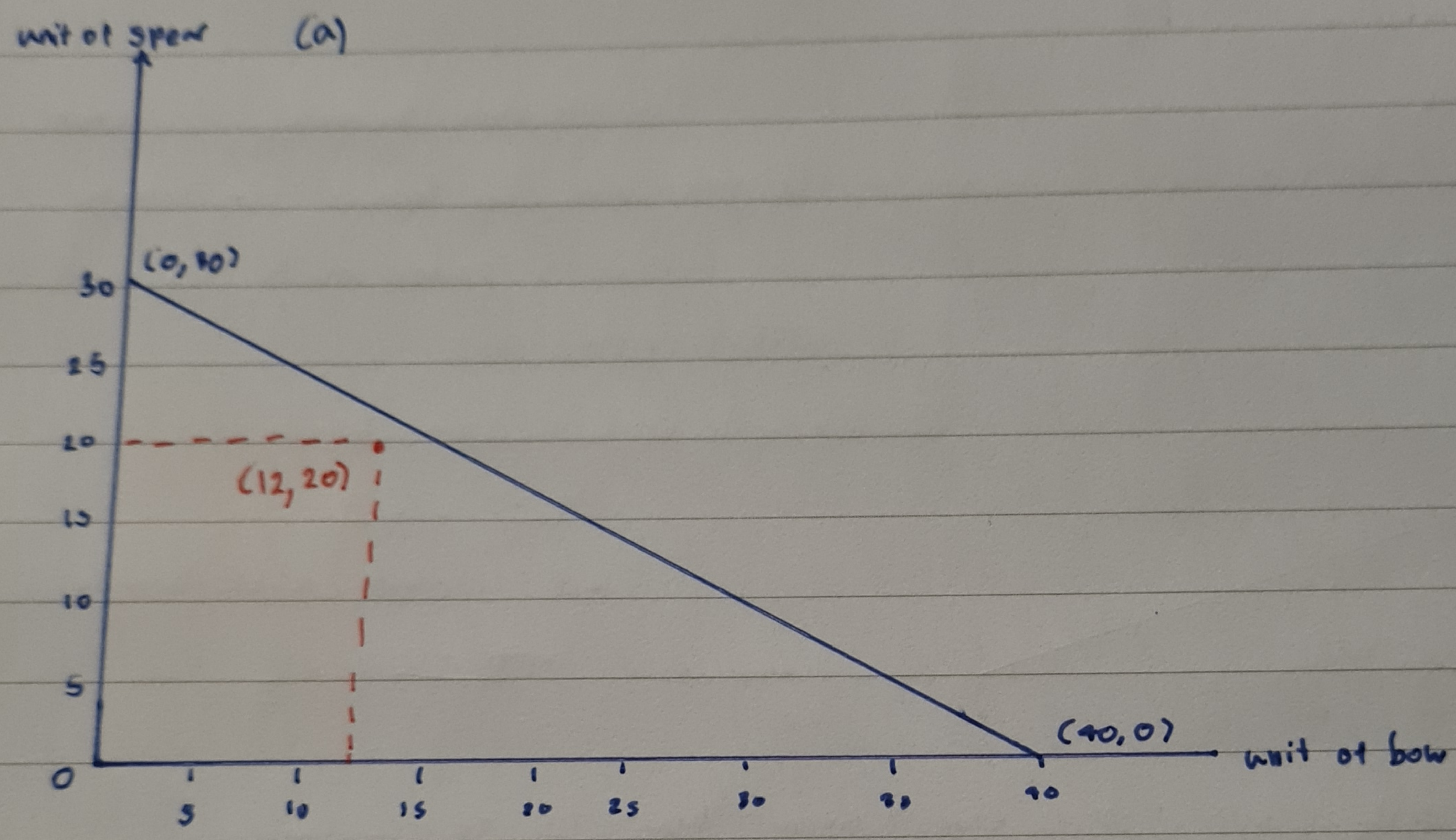


11

- 1) - new wood source of total 120 units
- to make spear take 4 unit
- to make bow take 3 unit

total	120	
spear	30	0
bow	0	40



(b) Opportunity cost for spear = $\frac{\text{rise}}{\text{run}} = \frac{\text{bow}}{\text{spear}}$
 to find opportunity cost = $\frac{-40-0}{0-30} = -\frac{4}{3}$

If human civilization want produce one more 1 spear
 then need lose $-\frac{4}{3}$ bow

(c) If possible for civilization to produce 20 spear and 12 bow } the total number of unit 120 - (80 + 36) = 4 left

In ppc to produce 20 spear = $20 \times 4 = 80$ unit
 to produce 12 bow = $12 \times 3 = 36$ unit

It's present in the graph show this point below the graph. This show is inefficient because it's not used all total unit to produce.

(d) If the new method of make bow only is unit
 bow can produce maximum 80 of bow and 0 spear
 produce maximum 30 spears and 0 bow

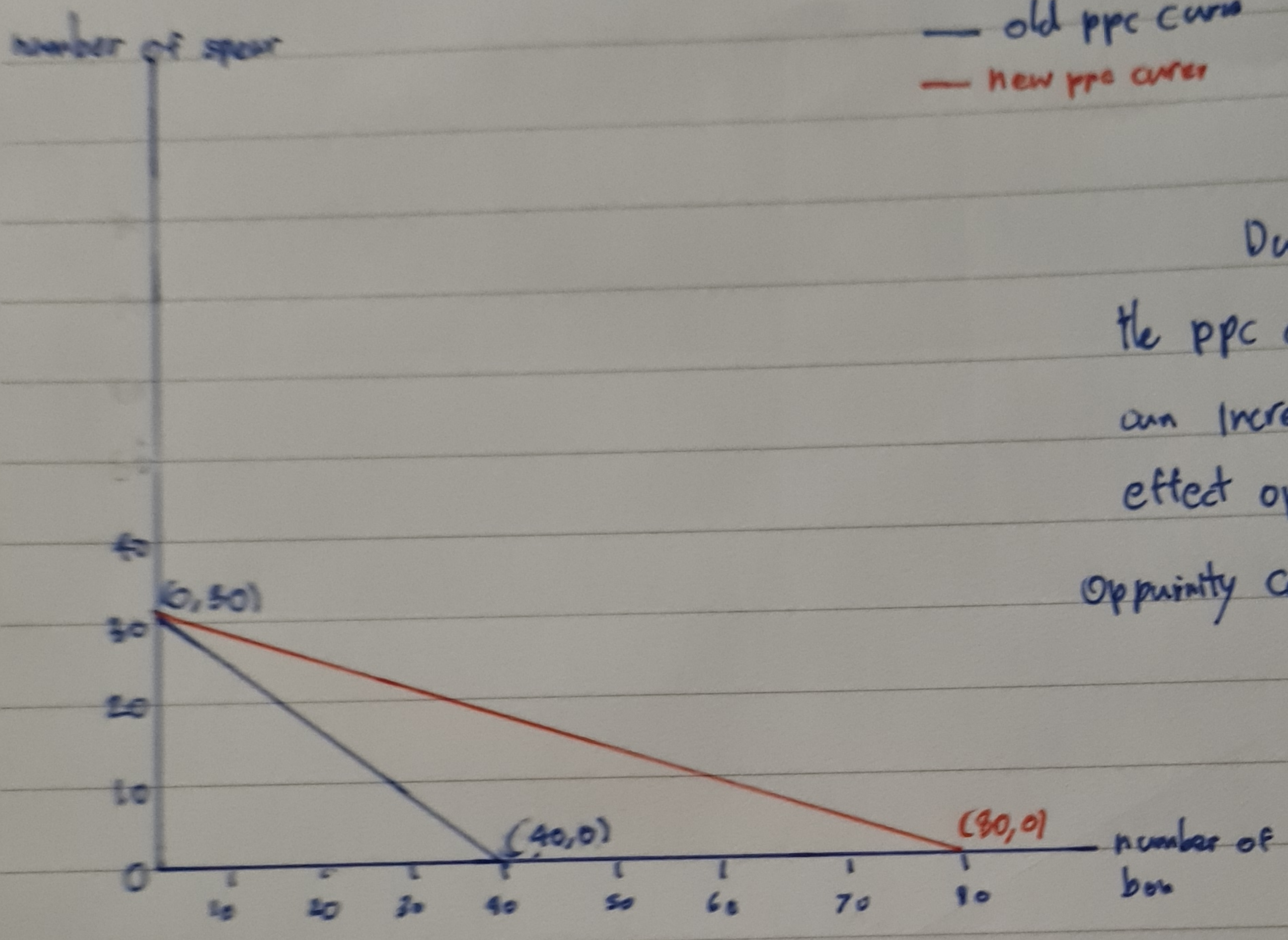
SUBJECT: _____

The PPC curve has effect by new method

total	before techoly	after techoly
spear	30	0
bow	0	40

total	before techoly	after techoly
spear	30	0
bow	0	80

— old ppc curve
— new ppc curve



Due to new technology is effect the ppc curve due because new technology can increase in produce of the bow and effect opportunity cost

Opportunity cost of spear before is

$$\frac{10-0}{0-30} = -\frac{1}{3}$$

but opportunity cost of bow is

$$\frac{30-0}{0-40} = -\frac{3}{4}$$

The opportunity cost of spear change from 1 spear lose $-\frac{1}{3}$ to $-\frac{3}{4}$
 this show the new technology has effect on opportunity cost of spear to increase.

for opportunity cost of bow before is

$$\frac{\Delta \text{spear}}{\Delta \text{bow}} = \frac{30-0}{0-40} = -\frac{3}{4} = -0.75$$

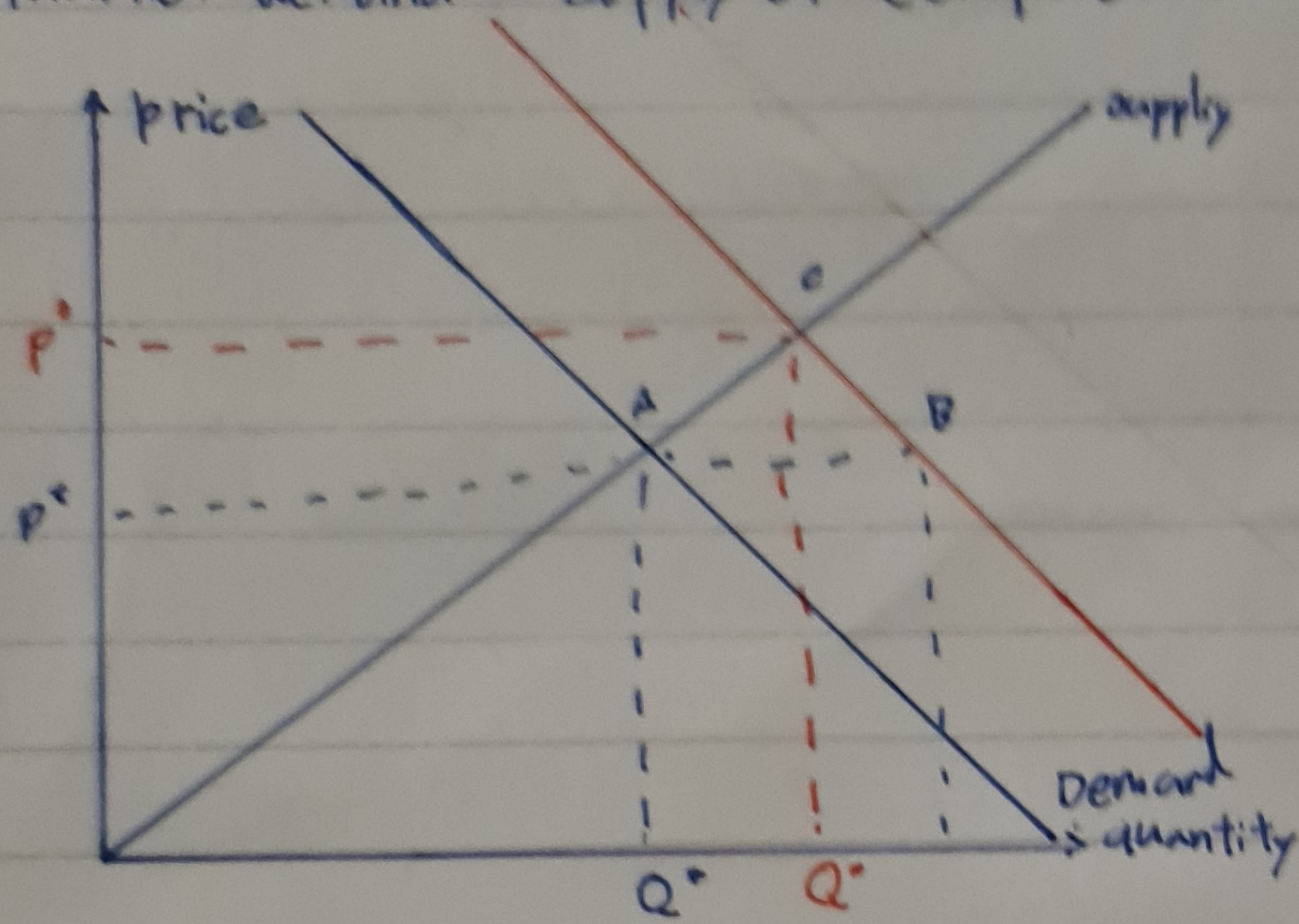
However, the opportunity cost of bow have decrease due to efficiency in production of bow

opportunity cost of bow after is

$$\frac{\Delta \text{spear}}{\Delta \text{bow}} = \frac{30-0}{0-80} = -\frac{3}{8} = -0.375$$

2)

Market demand & supply of computer devices

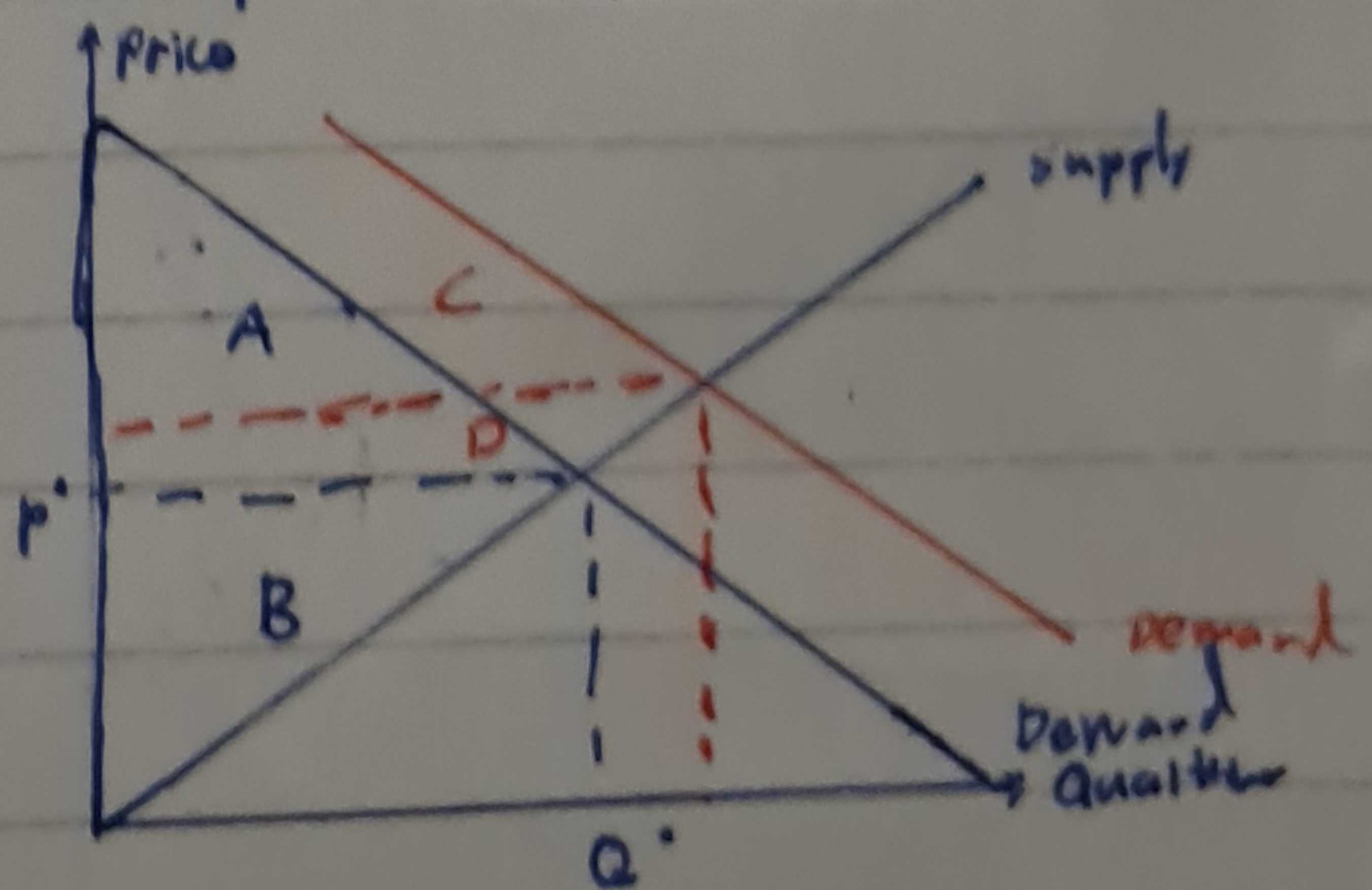


a) Due to covid-19 and work from home policy the demand of market has shift right and the quantity of demand increase.

b) Due to quantity demand more quantity supply cause excess demand with move the point (A to b). Then due to pandemic they increase in equilibrium price and quantity to move to C point. When price increase demand move along the curve and supply move along the curve.

c) To see the different in the consumer surplus and producer surplus

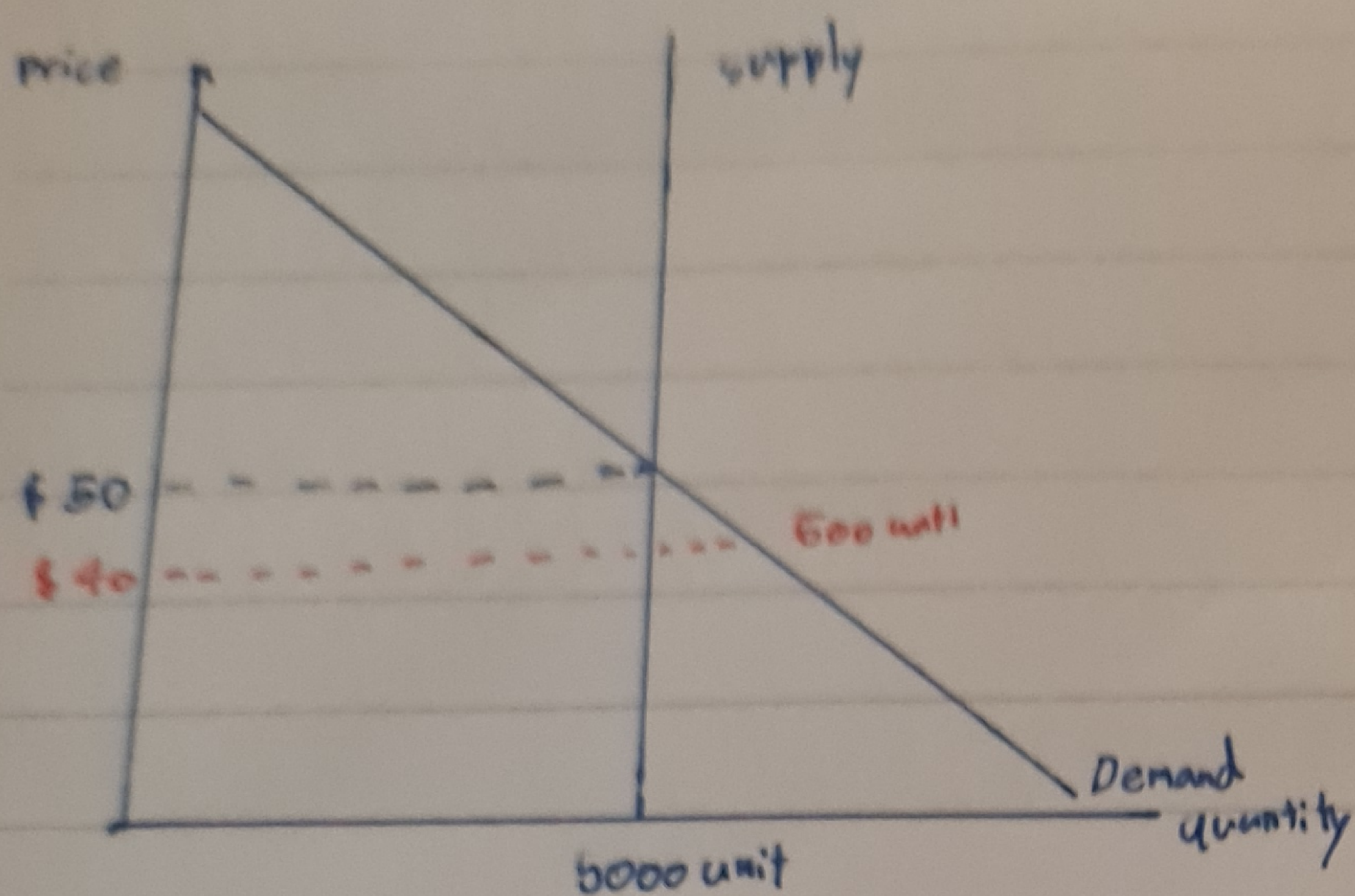
	Before the pandemic	after the pandemic	change
CS	A	A + C - D	+C - D
PS	B	B + D	+D
TS	A + B	A + B + C	+C



Both of consumer and producer have increase due to the global pandemic situation. The demand has shift to right and consumer surplus and producer surplus have increase.

3)

a) system-on-a-chip (soc) market



equilibrium price \$50
equilibrium quantity 5000 unit

b) To calculate both of price elasticity of demand and supply

at the equilibrium. For the calculation $\frac{\Delta \text{quantity}}{\Delta \text{price}} \times \frac{P}{Q}$

To find the price elasticity of supply

$$\frac{5000 - 0}{40 - 0} \times \frac{50}{5000} = 0 \times 0 = 0 \text{ perfect price inelasticity supply}$$

price elasticity of demand

$$\frac{4500 - 5000}{40 - 50} \times \frac{50}{5000} = \frac{1}{2} = 0.5 \text{ consider inelastic demand}$$

3) C if a unit tax is imposed on buyer 10%.

Due to impose on buyer is lower

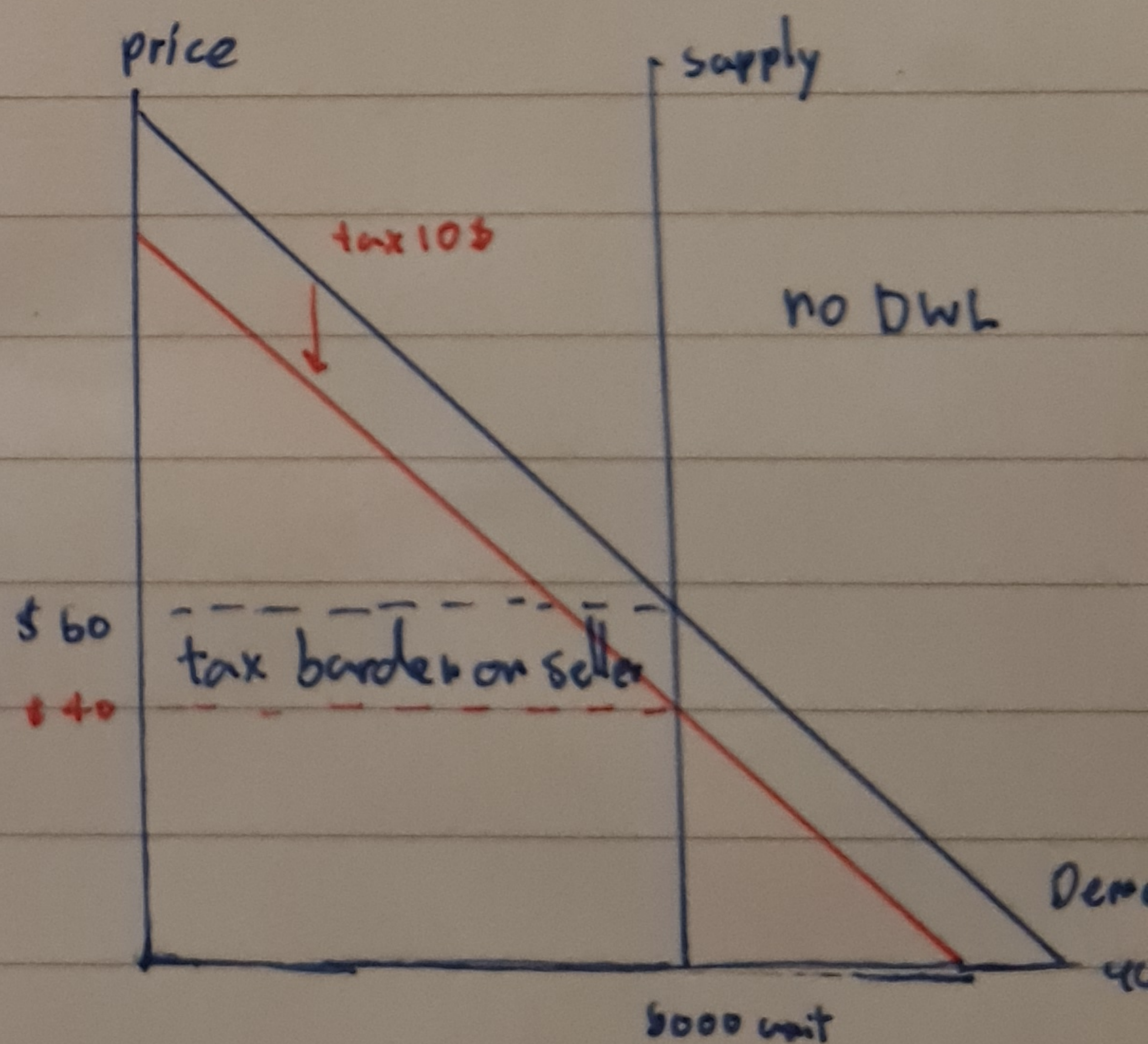
the equilibrium price from \$50 to \$40

but equilibrium quantity stay the same (5000 unit)

because the perfect price inelastic

there is no deadweight loss because quantity stays

the same, and only tax burden on buyer



	before tax	after tax
ep	\$50	\$40
eq	5000	5000
DWL	-	-
tax burden	-	only on seller