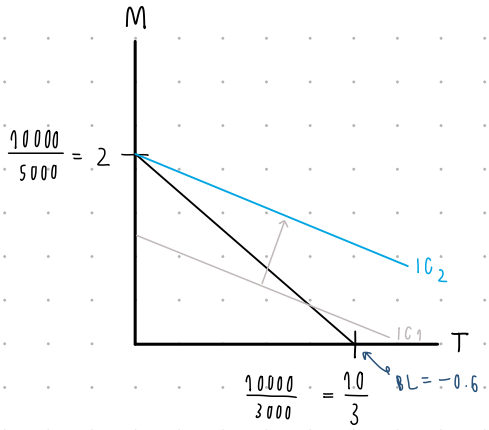


Q1)

(1.a)

$$M = 5000 \quad T = 3000$$



$$- BL \Rightarrow I = P_x X + P_y Y$$

$$10000 = 3000X + 5000Y$$

$$\text{slope } BL = \frac{3}{5} = 0.6 //$$

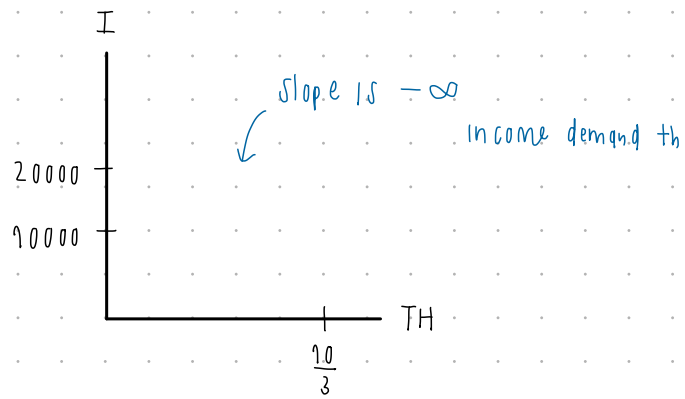
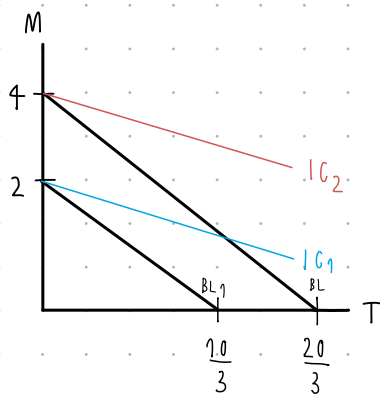
$$- IC \Rightarrow 2MU_X = MU_Y$$

$$\frac{MU_X}{MU_Y} = \frac{1}{2} = 0.5 //$$

$$\therefore IC < BL$$

Neo travel 2 times to Maldives because slope IC is less than BL $\frac{MU_X}{MU_Y} < \frac{P_X}{P_Y}$
 Therefore, if Neo want to acquire higher utility = Increase in traveling to Maldives and decrease travel to Thai which mean only travel to Maldives.

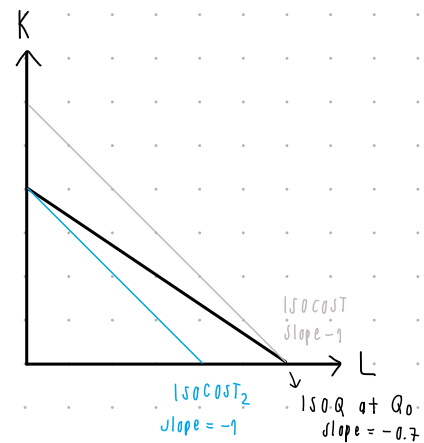
(1.b)



Q2)

(2.a) $MRTS = -\frac{MP_L}{MP_K} = -\frac{6}{8} = -0.75$

COST MIN $= \frac{MP_L}{W} = \frac{MP_K}{r}$
 $\frac{6}{3} = \frac{8}{r}$
 $6r = 24$
 $r = 4 //$



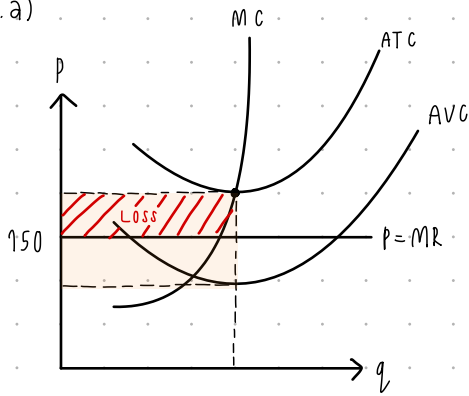
(2.b) wage $\uparrow = 4$

ISOCOST slope $= -1$

$K = \frac{TC}{4}$ $L = 0 //$

Q3)

(3.a)

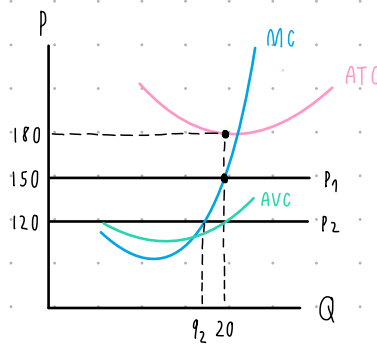
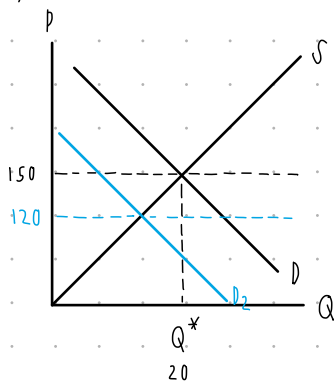


(3.b)	$AVC = ATC - AFC$	$TR = P \cdot Q$	$TC = ATC \times Q$	$\pi = TR - TC$
	$= 180 - 60$	$= 150 \times 20$	$= 180 \times 20$	$= 3000 - 3600$
	$= 120$	$= 3000$	$= 3600$	$= -600$

(3.c)

yes, the firm should stay in the market due to $P > AVC$ this mean that the firm have some money to cover the variable cost and also some fixed cost. Thereby, loss only some fixed cost.

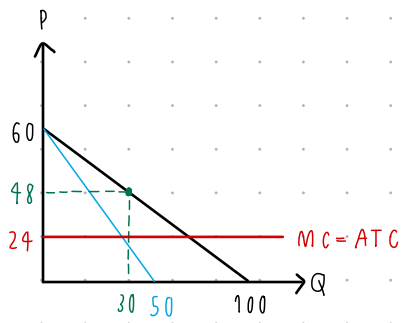
(3.d)



Demand decrease $\rightarrow$ Price decrease from 150 to 120.
 $P = 120 > \text{MIN } AVC$ = firm still can operate

Q4.)

(4.a)



$$\begin{aligned} TR &= P \cdot Q \\ TR &= (60 - 0.6Q)Q \\ TR &= 60Q - 0.6Q^2 \\ \frac{dTR}{dQ} = MR &= 60 - 1.2Q \end{aligned}$$

(4.b) $MC = MR$

$$24 = 60 - 1.2Q$$

$$1.2Q = 36$$

$$Q = 30$$

$$P = 60 - 0.6(30)$$

$$P = 42 //$$

$$\pi = TR - TC$$

$$= (P \times Q) - (ATC \times Q)$$

$$= Q(P - ATC)$$

$$\pi = 30(48 - 24)$$

$$= 720 //$$

(4.c)

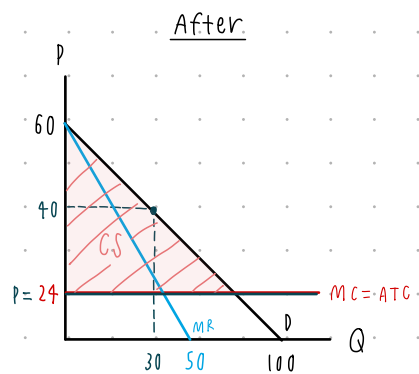
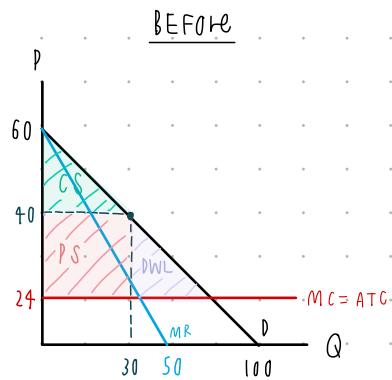
ideal price $P = MC$

$$24 = 60 - 0.6Q$$

$$36 = 0.6Q$$

$$Q = 60$$

$$P = 24$$



↑ After ideal price the social welfare higher due to there are no DWL (dead weight loss).

Q5)

If Mook choose B $\Rightarrow$ MIX choose C.

Mook C MIX B

Mook D MIX C

If MIX choose B $\Rightarrow$ Mook choose B.

MIX C Mook D

MIX D Mook C

$\therefore$ Nash equilibrium (D, C) DONUT, ICE CREAM