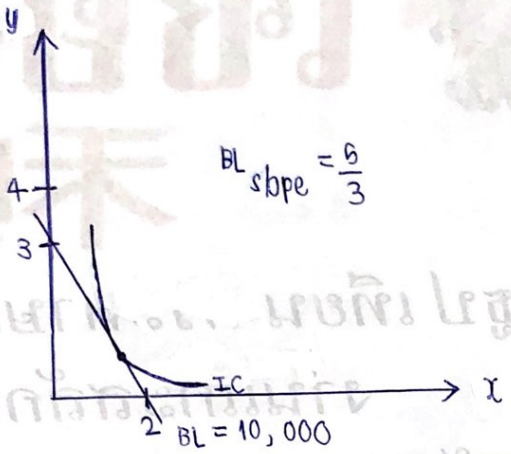
ข้อสอบเก่า micro

① Thailand = 3,000

Maldives = 5,000

$Mu_{mal} = 2Mu_{Th}$

1a) if he had 10,000




$BL_{slope} = \frac{5}{3}$

Let Maldives = x
Thailand = y

$10,000 = 3,000y + 5,000x$

$\frac{P_x}{P_y} = \frac{5,000}{3,000}$

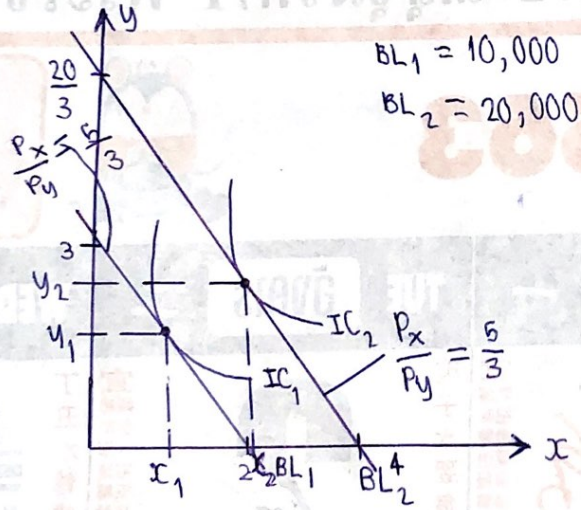
$= \frac{5}{3}$

$MRS_{xy} = \frac{MU_x}{MU_y}$

If he choose to spent all $10,000, he would be able to make a choice of 2 trips to Maldives or 3 trips to thailand. However, the place that he would choose to go depends on his "preference" which he already say that going to Maldives is twice satisfication compare to Thailand

b)

If he had 20,000




$BL_1 = 10,000$

$BL_2 = 20,000$

$MRS_{xy} = \frac{Mu_x}{MU_y}$

$= \frac{5}{3}$

$20,000 = 3000y + 5000x$

$3000y = 5000x - 20,000$

$y = \frac{5,000}{3000}x - \frac{20,000}{3,000}$

$y = \frac{5}{3}x - \frac{20}{3}$

The demand traveling to Thailand would be more as the budget increase and the IC curve is higher. However, the slope of the IC remain the same compared to 10,000 bath budget. Even though, the slope doesn't increased but he still able to spend more (he could go Maldives 4 times or go to thailand 6 times) Thus, his demand going to Thailand Increase!!

② Long-run production

2 inputs → labour & capital

wage(w) interest(r)

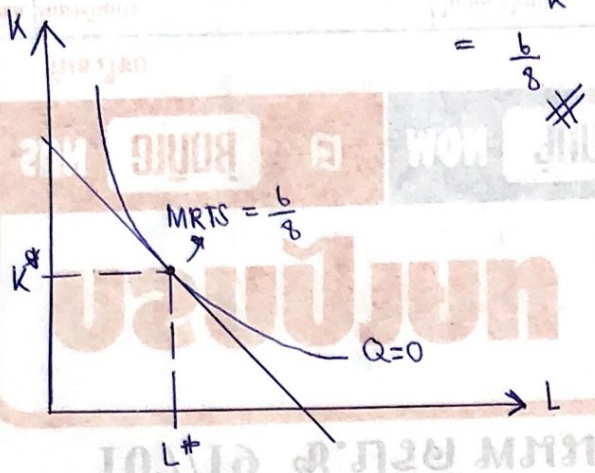
$(L^*, K^*)$

$MP_L$ = 6, $MP_K$ = 8

$q(K, L)$

a) $MRTS = \frac{\text{change in labour}}{\text{change in capital}} = \frac{MP_L}{MP_K}$

$= \frac{6}{8}$ //



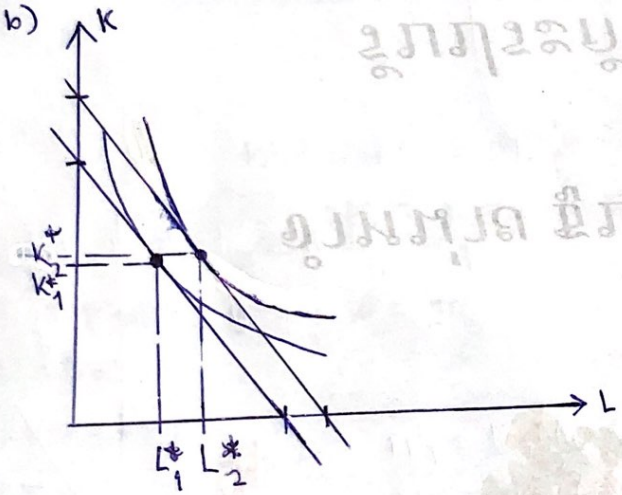

output = $Q_0$

market wage = $3

$\frac{MP_L}{MP_K} = \frac{w}{r}$

$\frac{6}{8} = \frac{3}{r}$ $r = 4$ //

b)




wage = $4

$\frac{MP_L}{MP_K} = \frac{w}{r}$

$\frac{6}{8} = \frac{4}{r}$

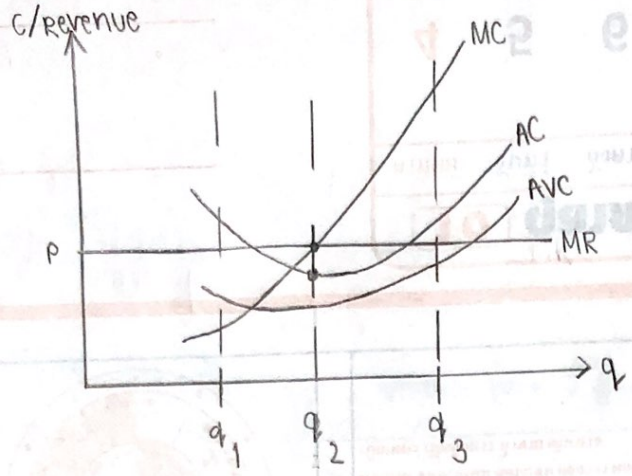
$r = \frac{16}{3}$

The interest rate at the equilibrium would increase from 4 to $\frac{16}{3}$ ($\approx 5.33$) the wage would increase too around 33.3 %.

price 150

3a) 20 units = output

profit maximizing condition




consider $q_1$ : MC < MR
MR < AC
AVC > MR
↓
no economy of scale

consider $q_2$ : MC = MR
MR > AC → Have economy of scale
MR < AVC → more marginal cost

consider $q_3$ : MC > MR
MR < C
more opportunity cost
MR < AVC
more marginal cost

∴ The quantity that maximize the profit is at $q_2$

b)

total cost = TFC + TVC

AVC = ?
AC = ฿180
AFC = ฿60
P = MR = ฿150

$AFC = \frac{TFC}{q}$

$60 = \frac{TFC}{20}$

$60(20) = TFC$

$TFC = 1200$

$AC = \frac{TC}{20}$

$180 = \frac{TC}{20}$

$TC = 3600$ ✻

$AVC = \frac{2400}{20}$

$= ฿120$ ✻

Total variable cost = TC − TF
= 3600 − 1200
= 2,400

$\pi = TR - TC$
$= 3,000 - 3,600$
$= -600$

Total Revenue = MR × q
= 150(20)
= 3,000

3C) No as the company couldn't make the profit out of business. In order to continue doing business, company should produce at this rate or produce nothing.

choice 1 producing at the same rate

total revenue = ฿150(20)
= ฿3,000

profit = TR − TC
= 3,000 − 3,600
= −600 [lost 600]

TFC = 1,200
TC = 3600
TVC = 2,400

## ioice 2 stop production

total variable cost = ฿120 (0)
= 0

total fixed cost = 1,200

TC = 0 + 1200
= 1200

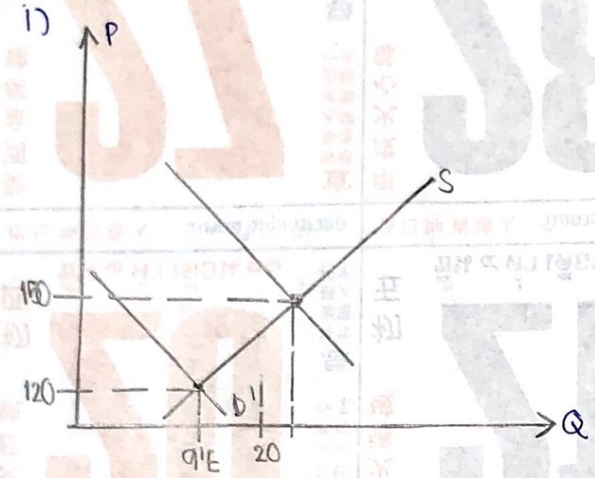
Total revenue = 0

profit = 0 − 1200
= −1200 [lost 1,200]

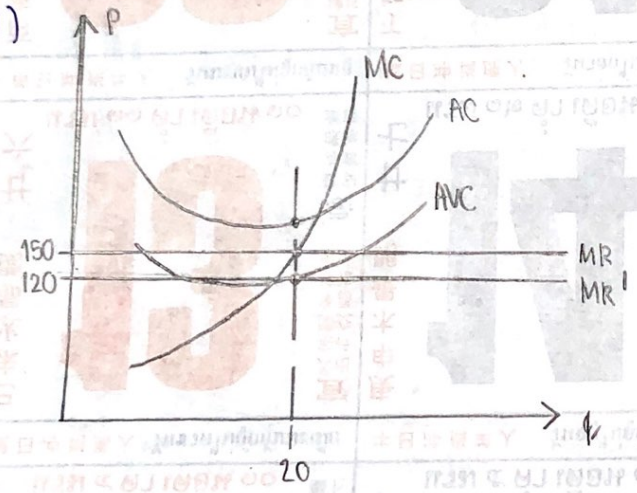
3 d) price ↓ ฿120 / unit
demand ↓

original price = ฿150 / unit

i)




ii)




omparing 2 onditions

① contine producing

TVC = 120 × 20 = 2,400
TFC = 1,200
TC = 3,600
π = 2,400 − 3,600
= −1,200

② stop producing

TVC = 120 × 0 − 0
TFC = 1,200
TC = 1,200
π = 0 − 1,200
= −1200

∴ Both choices make the amount of loss so the firm's decision would depend on other factors.