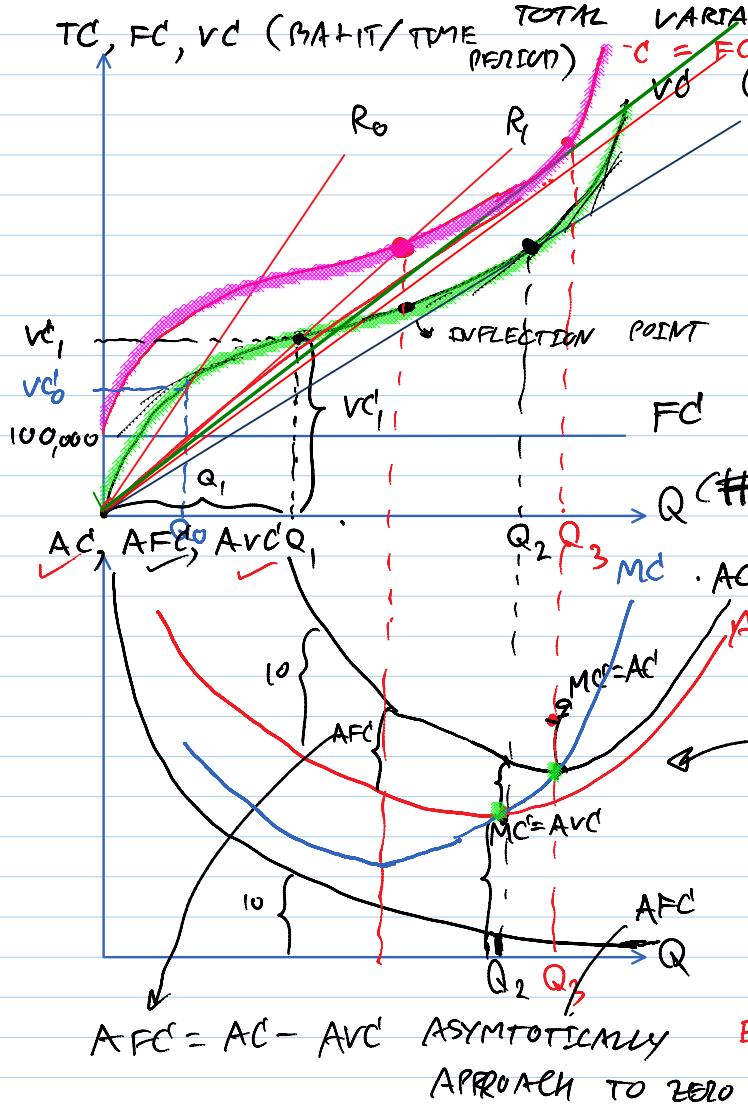
Tuesday, October 11, 2011
11:14 AM

COSTS IN THE "SHORT RUN" → $Q = F(L, \bar{K})$

TOTAL COST (TC) = TOTAL FIXED COST (FC)
+
TOTAL VARIABLE COST (VC)



WHEN $Q = Q_1$, $AVC = \frac{VC_1}{Q_1}$

WHEN $Q = Q_0$, $AVC = \frac{VC_0}{Q_0}$ = SLOPE OF LINE R_0

$TC = FC + VC$

$\frac{TC}{Q} = \frac{FC}{Q} + \frac{VC}{Q}$

$AC = AFC + AVC$ → AVERAGE VARIABLE COST

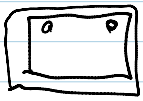
AVERAGE COST OR UNIT COST OR COST/UNIT

AVERAGE FIXED COST

$AFC = AC - AVC$ ASYMPTOTICALLY APPROACH TO ZERO

EX: $TC = 200{,}000$ BAHT
$Q = 20{,}000$ COOKIES
$AC = \frac{TC}{Q} = \frac{200{,}000}{20{,}000} = 10$ BAHT/UNIT

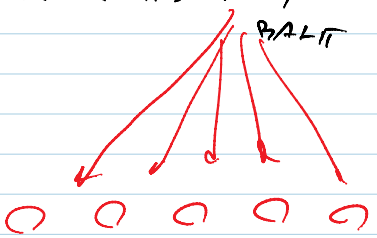
EX: ON AFC
$FC = 100{,}000$ BAHT
$Q = 20{,}000$ COOKIES
$AFC = \frac{FC}{Q} = \frac{100{,}000}{20{,}000} = 5$ BAHT/UNIT
↳ FIXED COST/UNIT



OVEN COSTS 100,000 BAHT

$Q = 1$

$AFC = \frac{FC}{Q}$



SPREADING OVERHEAD COST:

WHEN THE FIRM PRODUCES MORE OUTPUT, FIXED COST WILL SPREAD OVER "EACH UNIT OF OUTPUT"

ANOTHER EXAMPLE: WINDOWS 7

$FC = 100,000,000$ บาท

$Q = 1$, $AFC = 100,000,000$

$Q = 2$, $AFC = \frac{100,000,000}{2} = 50,000,000$

$Q = 10$, $AFC = 10,000,000$

$Q = 100$, $AFC = 1,000,000$

Ex: ON AVC.

$$AVC = \frac{VC}{Q}$$

SUPPOSE Wage (w) = 300 BAHT/PERSON/DAY

L = 10 WORKERS/DAY

Q = 1000 COOKIES/DAY

$VC = w \cdot L$

$= 300 \cdot 10$

$= 3000$ BAHT/DAY

$AVC = \frac{VC}{Q} = \frac{3000}{1000} = 3$ BAHT/COOKIE

AVC → VARIABLE COST PER UNIT OF COOKIE

$TC = FC + VC$ (BACKWARD-S SHAPED, HORIZONTAL LINE, BACKWARD-S SHAPED)

$AC = AFC + AVC$ → V-SHAPED

AC: V-SHAPED

AFC: RECTANGULAR HYPERBOLA SHAPED

$$MC = \frac{\Delta TC}{\Delta Q} = \text{SLOPE OF TC CURVE}$$