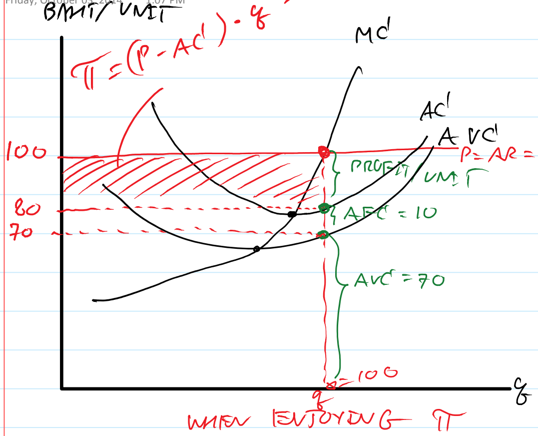
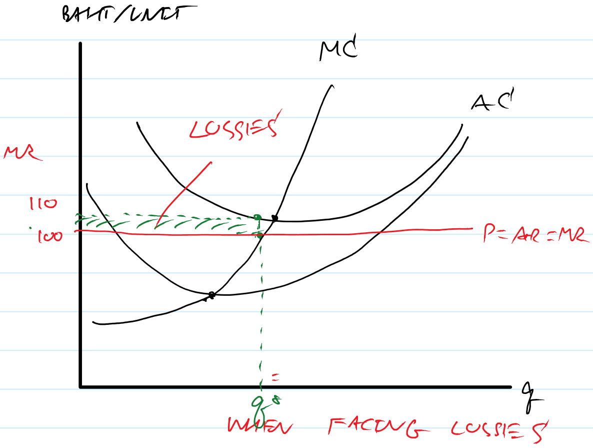
Friday, October 03, 2014 1:07 PM

$\pi = (P - AC) \cdot q = (100 - 80) \cdot 100 = 20 \cdot 100 = 2000$





SHUTDOWN DECISION

IN THE SHORT RUN, IF A FIRM FACES LOSSES, SHOULD IT CONTINUE TO PRODUCE OR

STOP PRODUCING TEMPORARILY (= SHUTDOWN) ?

THE FIRM SHOULD SHUTDOWN IF

$$\pi_{q>0} \le \pi_{q=0}$$

$$TR - \cancel{FC} - VC \le \underbrace{0}_{=TR} - \cancel{FC} - \underbrace{0}_{=VC}$$

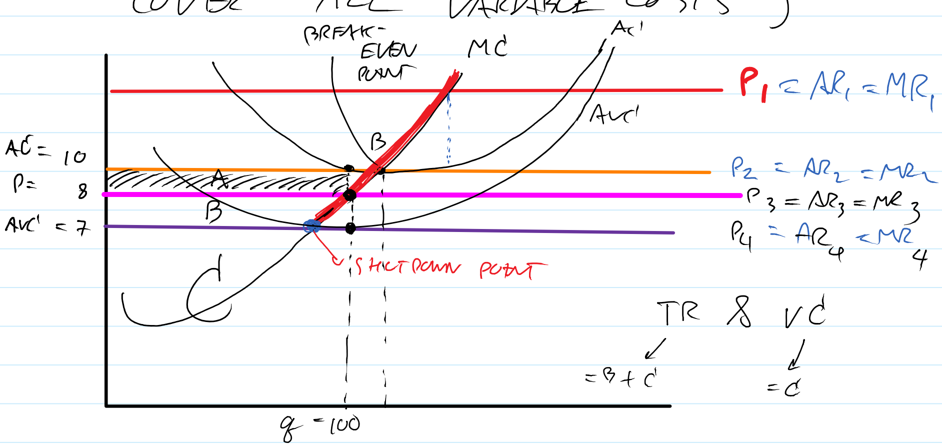
$$TR \le VC \iff \frac{TR}{q} \le \frac{VC}{q}$$

$$\frac{P \cdot q}{q} \le \frac{VC}{q}$$

$$\boxed{P \le AVC}$$

SHUTDOWN RULE

(WHEN THERE IS NOT ENOUGH REVENUE TO COVER ALL VARIABLE COSTS)



TR & VC

TR = B + C

VC = C

WHEN PRODUCED, TR = B + C

VC = C

FC = A + B

THE FIRM SHOULD CONTINUE TO PRODUCE SINCE

TR > VC

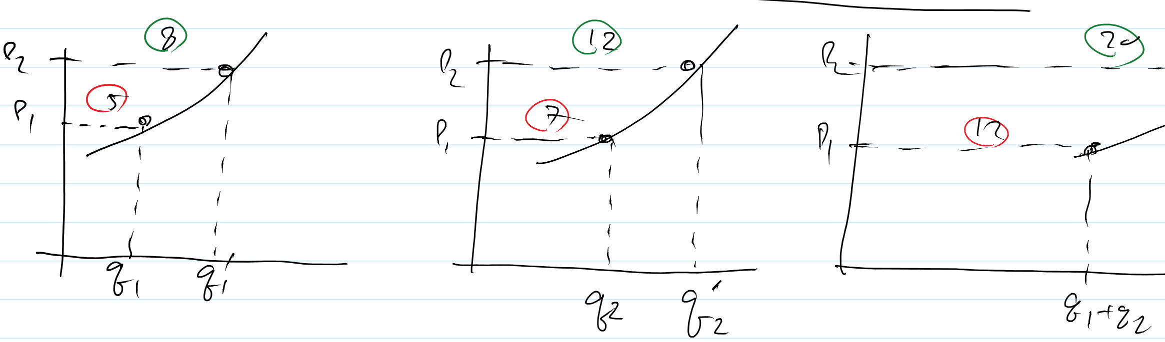
- TO PAY ALL VARIABLE COSTS (C)
- PAY "SOME PART" OF FIXED COST (B)

$LOSS_{q>0} = A < LOSS_{q=0} = A + B$

WHEN PRODUCING — WHEN SHUT DOWN

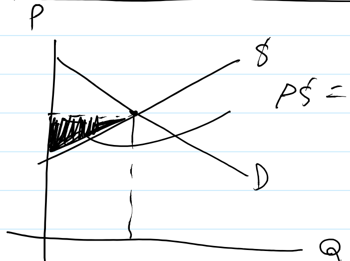
SHORT RUN SUPPLY CURVE (OF A FIRM) IS A PART OF MC CURVE, STARTING FROM THE BOTTOM OF AVC

THE SHORT-RUN MARKET SUPPLY CURVE

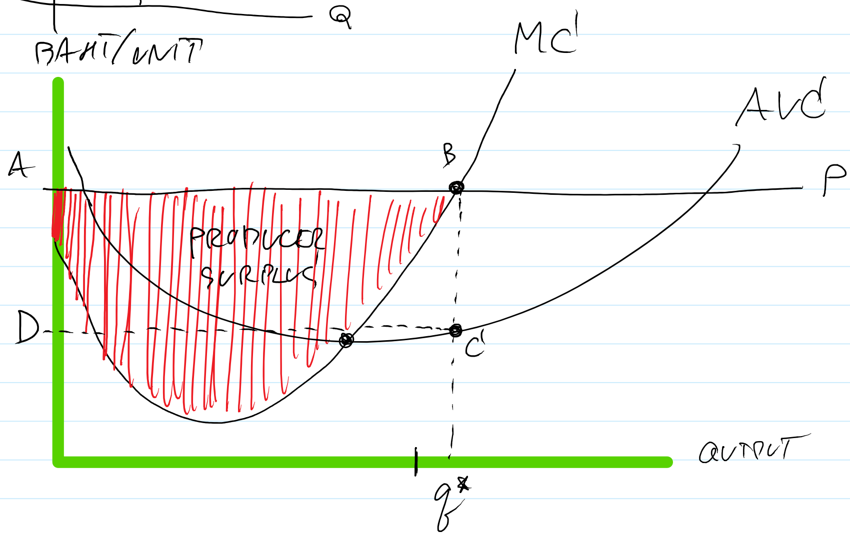


MARKET SUPPLY CURVE BY HORIZONTAL SUM

PRODUCER SURPLUS IN THE SHORT RUN



PS = AREA ABOVE SUPPLY CURVE AND BELOW THE PRICE



PRODUCER SURPLUS

= TR − VC — (1)

(= AREA ABCD)

PRODUCER SURPLUS

= SUM OVER ALL UNITS PRODUCED BY A FIRM OF DIFFERENCES

PRODUCER SURPLUS

$= TR - VC$

, π

$= TR - FC - VC$

PRODUCED BY A FIRM

OF DIFFERENCES

BETWEEN PRICE

AND MARGINAL COST

IN THE SHORT RUN, PRODUCER SURPLUS $> \pi$.

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