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選擇題

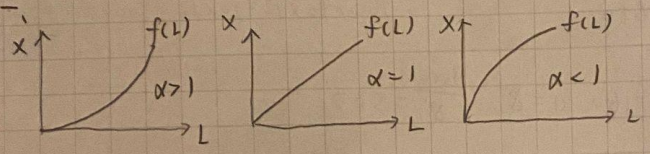
1. C 2. C 3. B 4. B 5. D 6. D 7. D 8. A

9. A 10. D 11. D 12. A 13. D 14. C 15. B 16. C

(1) 短期均衡時，利潤有正有負。

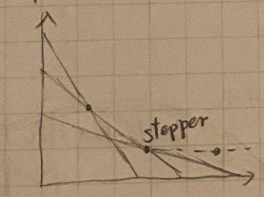
(8) $MC = 6Q$. $TC = 3Q^2$. $TVC = 3 \times 10^2 = 300$

一、



$q = AL^{\alpha}K^{\beta}$. if $(\alpha-1)$ is negative, the AP_L falls with extra labor.

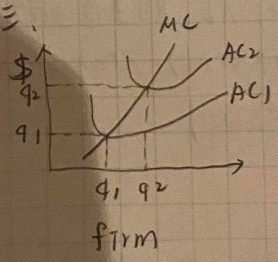
二、

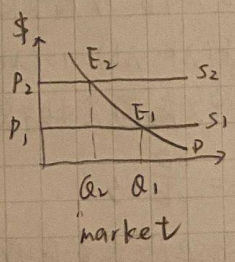


If the firms isoquant were smooth, the firm use a different technology at its foreign plant than in its home plant.

Its isoquant has kninK, so a little change in the relative input price doesn't necessarily lead to a change.

三、





An increase in fixed cost causes the market price and the number of trucking firms to fall as most people would have expected.

四、

(A) $SVC=10q^2$. $AVC=10q$

$\because AVC=10$. $q=0$

(B) $p=MC=20q$. $q=\frac{P}{20}$.（廠商）

$Qs=20P$（市場）

(C) $Qs=20P$. $Qd=4000-5P$

$25P=4000$. $P=160$. $Q=3200$. $q=8$

$\pi=160\times8-10\times8^2=640$

(D) $Qs=20p$. $Qd=6000-5P$

$p=240$. $q=12$

$\pi=240\times12-10\times12^2-1000=440$.

(F) $\because LAC$不變. $p=160$. $q=8$. $\frac{4000}{8}=500$.

五、

(A) $SFC=100$.

$\frac{SFC}{q}=\frac{100}{5}=20$.

(B) $AVC=\frac{q^3-12q^2+q}{q}=q^2+12q+1$

$\frac{dAVC}{dq}=2q-12=0$. $q=6$.

(C) 當$AVC\downarrow$. $\rightarrow APL\uparrow$

$\rightarrow q\leq6$

(D) $MC=\frac{dTC}{dq}=3q^2-24q+1$

$\frac{dMC}{dq}=6q-24=0$. $q=4$.

當$MC\downarrow\rightarrow MPL\uparrow$

$q\leq4$

六、

(1) X → 當K和L同時增加入倍，成為λK和λL，則生產函數

$Q=10K+5L$ 可寫成 $F(\lambda K,\lambda L)=10(\lambda K)+5(\lambda L)=\lambda(10K+5L)=\lambda Q$

產出也增加入倍，故為固定規模報酬

(2) X → $MP_L=\frac{\Delta Q}{\Delta L}=2$、$MP_K=\frac{\Delta Q}{\Delta K}=3$

MP_L, MP_K 皆固定，為邊際產量遞減

(3) X → 技術替代率為一固定值