(1) $q=5L+K$

$MPL=5K$

$MPK=5L$

K/L

遞增

$\varepsilon_L=1$

$\varepsilon_K=1$

$\varepsilon^{\phi}=1+1=2$

$\varepsilon^{LK}=1$

(2) $q=2L+3K$

$MPL=2$

$MPK=3$

$2/3$

固定

$\varepsilon_L=\frac{2L}{2L+3K}$

$\varepsilon_K=\frac{3K}{2L+3K}$

$\varepsilon^{\phi}=\frac{2L}{2L+3K}+\frac{3K}{2L+3K}=1$

$\varepsilon^{LK}=\infty$

(3) $q=\min\{L,K\}$

折点無法微分

1 or 0 or ∞

固定

沒有彈性

$\varepsilon^{\phi}=1$

$MPT_S=0$

$\varepsilon^{LK}=0$

(4) $q=(0.2L^{-0.5}+0.8K^{-0.5})^{-2}$

$MPL=0.2(\Delta)^{-3}L^{-1.5}$

$MPK=0.8(\Delta)^{-3}K^{-1.5}$

$\Delta=(0.2L^{-0.5}+0.8K^{-0.5})$

$\frac{0.2}{0.8}=\frac{1}{4}\left(\frac{K}{L}\right)^{1.5}$

固定

$\varepsilon_L=\frac{0.2L^{-0.5}}{0.2L^{-0.5}+0.8K^{-0.5}}$

$\varepsilon_K=\frac{0.8K^{-0.5}}{0.2L^{-0.5}+0.8K^{-0.5}}$

$\varepsilon^{\phi}=\frac{0.2L^{-0.5}+0.8K^{-0.5}}{0.2L^{-0.5}+0.8K^{-0.5}}=1$

$\varepsilon^{LK}=2/3$

Date / /

$Q = 3K + 2L$

(1)是 CRS　K和L同時增加λ倍 = λL and λK

$F(\lambda K, \lambda L) = 3(\lambda K) + 2(\lambda L) = \lambda(3K + 2L) = \lambda Q$

產出增加λ倍 為CRS

(2) MPL and MPK都是固定 不是DRS

(3) $MRTS = \frac{MPL}{MPK} = \frac{2}{3}$ 為固定值