week3

5.① $MPL = \frac{1}{3} L^{-\frac{2}{3}} \cdot K^{\frac{1}{3}}$

$MPK = \frac{1}{3} K^{-\frac{2}{3}} \cdot L^{\frac{1}{3}}$.

$MRST = \frac{MPL}{MPK} = \frac{K}{L}$.

$\varepsilon = \frac{\Delta(\frac{K}{L})}{\Delta MRTS_{LK}} \times \frac{MRTS_{LK}}{\frac{K}{L}}$.

$\Rightarrow 1 \times \frac{\frac{K}{L}}{\frac{K}{L}} = 1$.

⑨. $MPL = 1$,
$MPK = 2$.

$MRST = \frac{1}{2}$,

$G = 0 \times \frac{\frac{1}{2}}{\frac{K}{L}} = 0$.

$f(Q) = Q(nK, nL) = nQ$

$\Rightarrow 3(nK) + 2(nL) = nQ$

$\Rightarrow n(3K + 2L) = nQ$ (不變)

⑧ $MPL = 2$
$MPK = 3$ → 不變 (X)

⑦ $\frac{MPL}{MPK} = \frac{2}{3}$ → 不變 (O).