week3

5. ① $MPL = \frac{1}{2}L^{-\frac{1}{2}}K^{\frac{1}{2}}$

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

$MRTS = \frac{MPL}{MPK} = \frac{K}{L}$

$G = \frac{\Delta \frac{K}{L}}{\Delta MRTS} \times \frac{MRTS_{LK}}{\frac{K}{L}}$

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

② $MPL = 1$

$MPK = 2$

$MRS = \frac{1}{2}$

$6 - 0 \times \frac{\frac{1}{2}}{\frac{K}{L}} = 4$

8. ① $Q(nK, nL) = nQ$

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

$\Rightarrow n(3K + 2L) = nQ$

② $MP_L = 2$

$MP_K = 3$ → 不變

③ $\frac{MP_L}{MP_K} = \frac{2}{3}$ → 不變