5.

(a) $MRTS = \frac{K}{L}$

$\sigma = \frac{K/L}{K/L} = 1$

(b) $MRTS = 2$

$\frac{K/L}{2} = \infty$

8.

1. O
2. $MRTS = \frac{MRK}{MRL} = \frac{2}{3}$
3. X $\frac{K/L}{3/2} = \infty$

9.

(A) $\lambda q < (\lambda L^{\alpha} + \lambda K^{\alpha})^{B}$ → 遞增

(B) $\lambda \ln q = \lambda 5 + 0.5\lambda \ln L + 0.2\lambda \ln K$ → 固定

(C) $\lambda q \{Min\{a\lambda L, \lambda bk\}\}^{\alpha}$

$\lambda^{\alpha}\{Min\, aL, bk\}^{\alpha}$ → 遞減