

A107260023 week 4.

1. a. $C = 10L + 10K$

B. $MRTS_{LK} = K/L$ $MRTS$ = 等產量直線的切線斜率

C. L 上升, K 上升 $MRTS_{LK}$ 下降, 故等產量
線向外移動, $d(K/L) = -KL^{-2}$.
 $\left(\frac{10 \times \frac{1}{2} L^{-\frac{1}{2}} K^{\frac{1}{2}}}{10 \times L^{\frac{1}{2}} \times \frac{1}{2} \times K^{-\frac{1}{2}}} \right)$

D. $\int \frac{K}{L} = \frac{10}{10}$

$\int q = 10L^{0.5} K^{0.5} \Rightarrow L^* = K^* = 0.19$ $MRTS = \frac{K}{L} = \frac{W}{r} = \frac{10}{10}$

E. $TC = 2q$, $AC = MC = 2$ $LTC = WL^* + rK^*$

$= 10 \times 0.19 + 10 \times 0.19 = 24$

$AC = 2$, $MC = 2$.

F. $TC(10) = 2 \times 10 = 20$.