

成本

隨 7.  $Q = 10L^{\frac{1}{2}}K^{\frac{1}{2}}$   $w=r=10$

(A) 等成本線

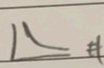
$$C = wL + rK \\ = 10L + 10K \text{ \#}$$

(B) MRTS<sub>LK</sub>

$$|MRTS| = \frac{MP_L}{MP_K} \\ = \frac{5L^{-\frac{1}{2}}K^{\frac{1}{2}}}{5L^{\frac{1}{2}}K^{-\frac{1}{2}}} = \frac{K}{L} \text{ \#}$$

(C) 等產量線方向

隨  $L \uparrow, K \downarrow$ ,  $MRTS \downarrow$

故 凸向原點  #

(D) 條件要素需求函數

$$\frac{MP_L}{MP_K} = \frac{K}{L} = 1 \Rightarrow L^* = K^* = 0.18$$
$$Q = 10L^{\frac{1}{2}}K^{\frac{1}{2}}$$

(E) TC, AC, MC

$$TC = 2Q \text{ \#}$$

$$AC = 2 \text{ \#}$$

$$MC = 2 \text{ \#}$$

(F) 產 10 單位 最低 cost

$$TC(10) = 2 \times 10 = 20 \text{ \#}$$