

(A)  
等成本線

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

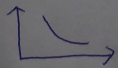
(B)  $MRTS_{LK}$

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

(C) 等產量線方程

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

故凸向原點



(D) 條件要素需求函數

$$\begin{cases} \frac{MP_L}{MP_K} = \frac{K}{L} = 1 \\ q = 10L^{\frac{1}{2}}K^{\frac{1}{2}} \end{cases} \Rightarrow L^* = K^* = 0.1q$$

(E)  $TC, AC, MC$

$$TC = 2q$$

$$AC = 2$$

$$MC = 2$$

(F) 產10單位, 最低TC cost

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