

$$q = 10L^{\frac{1}{2}}K^{\frac{1}{2}}, \quad w = r = 10$$

(A) 等成本線

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

$$\bar{C} = wL + rK \quad |MRTS| = \frac{MP_L}{MP_K}$$

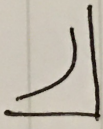
$$= \frac{10L + 10K}{5L^{\frac{1}{2}}K^{\frac{1}{2}}} = \frac{K}{L} \#$$

(C) 等產量線方向

(D) 條件要素需求函數

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

$$\frac{MP_L}{MP_K} = \frac{K}{L} = 1$$

$\Rightarrow$  故凸向原點  #

$$\left\{ \begin{aligned} q &= 10L^{\frac{1}{2}}K^{\frac{1}{2}} \end{aligned} \right. \#$$

$$\Rightarrow L^* = K^* = \underline{0.1q} \#$$

(E) TC, AC, MC (F) 產10單位, 最低 cost.

$$TC = 2q \#$$

$$AC = 2 \#$$

$$MC = 2 \#$$

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