

(H) 以完競定价, 損失? . DWL?

$$P = MC = 20 \Rightarrow q^* = 80, p^* = 20$$

$$\pi^* = -20$$

$$DWL = 0$$

隨 6. $P = 120 - q, TC = 2q^2$

(A) $p^*, q^*, \pi^*, Ed; L$

$$TR = P \times Q = 120q - q^2$$

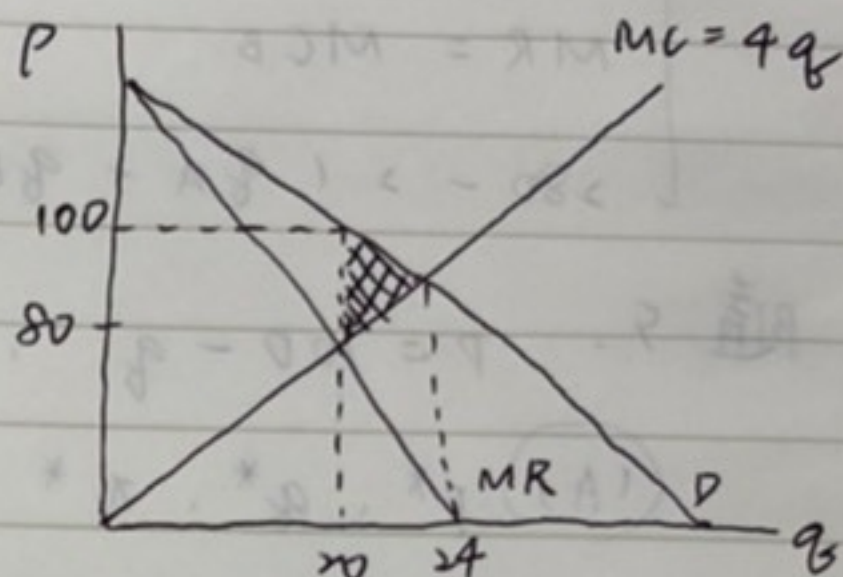
$$\begin{cases} MR = 120 - 2q \\ MC = 4q \end{cases} \Rightarrow \begin{matrix} q^* = 20 \\ p^* = 100 \end{matrix}$$

$$\pi^* = 2400 - 400 - 800 = 1200$$

$$L = \frac{P - MC}{P} = \frac{100 - 80}{100} = \frac{1}{5}$$

$$Ed = \frac{1}{L} = 5$$

(B) DWL.



$$DWL = \frac{20 \times 4}{2} = 40$$

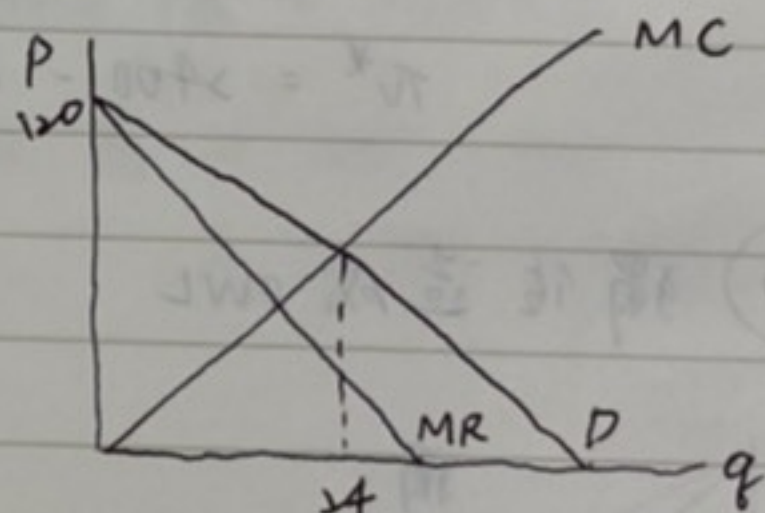
(C) 以 MC 訂价, p^*, q^*, π^*, DWL

$P = MC$ [完競]

$$120 - q = 4q \Rightarrow q^* = 24$$

$$p^* = 96$$

$$\pi^* = 96 \times 24 - 2 \times 24^2 = 1152$$



$$DWL = 0$$

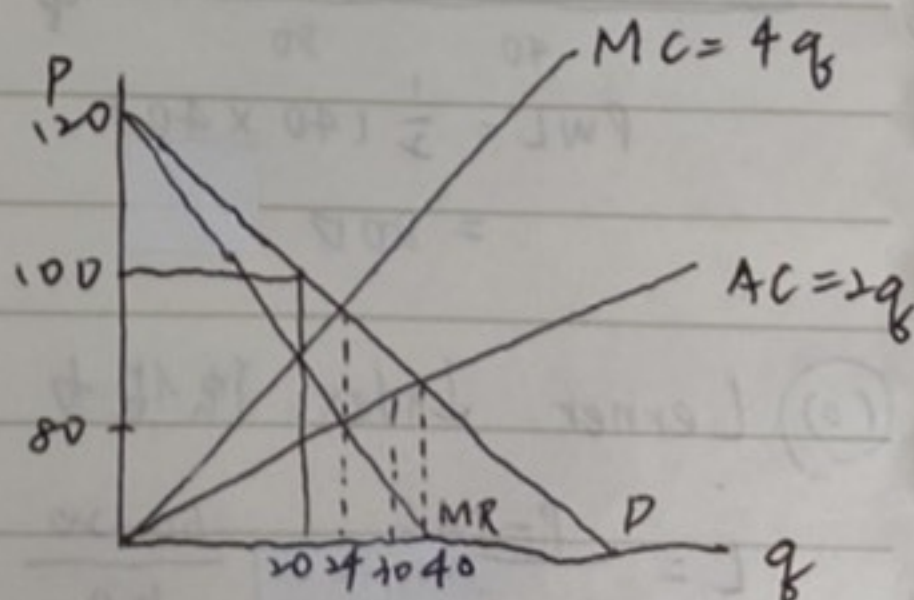
(D) 以 AC 訂价, p^*, q^*, π^*, DWL

$P = AC$

$$120 - q = 2q \Rightarrow q^* = 40$$

$$p^* = 80$$

$$\pi^* = 40 \times 80 - 2 \times 40^2 = 0$$



$$DWL = \frac{120 \times 24}{2} - \frac{40 \times 40}{2} = 640$$