

T4.

(A) $MR = 100 - 2Q = 20 \Rightarrow MC \Rightarrow Q^* = 40 \quad P^* = 60$
 $MC = \frac{2}{3}$

$TV = 400 - 800 = 1570$

(B) $\downarrow (40 \times 40) = 800$

(C) 價格 = $\frac{60 - 20}{60} = \frac{2}{3}$

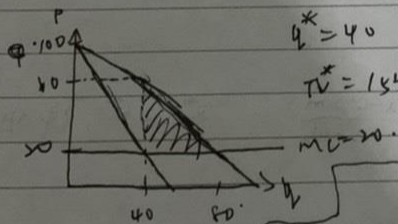
(D) $100 - 2Q = 30 \Rightarrow Q^* = 35 \quad P^* = 65$

$TV = (35 \times 65) - (30 + 35 \times 20) - (10 \times 35) = 1195$

(E) $0.9 MR = MC \Rightarrow 0.9(100 - 2Q) = 20$

$Q^* = 38.89 \quad P^* = 61.11$

(F)



$Q^* = 40 \quad P^* = 60$

$TV = 1570 - 1000 = 570$

T5

$MR = P \left[1 - \frac{1}{\epsilon} \right]$

$\Rightarrow MR = 4MC \left(1 - \frac{1}{\epsilon} \right)$

$= MC$
 $\therefore \epsilon = \frac{4}{3}$

T6

設 $P = a - bQ$

$MR = a - 2bQ$

$MR = MC + t$

$\Rightarrow a - 2bQ = k + t$

$\Rightarrow Q^* = \frac{a - (k + t)}{2b}$

$P = a - \left(\frac{a - (k + t)}{2} \right) \frac{a + (k + t)}{2}$

$P_0 = \frac{a + k}{2}$

$P^* - P_0 = \Delta P = \frac{t}{2}$

T7

$TR = R_A = [(120) - Q]Q$

$MR = -2Q + 120$

$MC_A = 40$

$MC_B = 80$

$40 = 80$

$80 = 120 - 2Q_A - 2Q_B$

$\Rightarrow Q_A = 40 \quad Q_B = 20$

$\therefore P = 200$

(G)

$Q^* = 40 \quad P^* = 60$

$0.8 \times 1570 = 1256$

(H)

$200 - 2Q = 20 \quad Q = 80 \quad P = 20$

$80 \times 20 - (30 + 20 \times 80) = -370$

無謂損失 20