T4:

TR = P × q

(A): TR = (100 − q)q = −q² + 100q

MR = −2q + 100

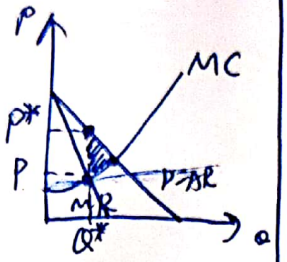
MC = 20

⇒ MC = MR

⇒ −2q + 100 = 20

q* = 40

⇒ P* = 60



π = TR − TC ⇒ π = −q*² + 100q* − 30 − 20q*

= 2010

(B): ∵ q* = 40 ⇒ P = 20 / Q = 80

∴ 无谓损失 = (60 − 20) × 80 × 1/2

= 1600

(C): L = 1 − MC/P = 2/3

(D): TR' = (100 − q − 10q)q = −11q² + 100q

MR' = −22q + 100

⇒ q*' = 3.636 ⇒ P* = 96.364 ⇒ π = TR' − TC = 115.45

(E) $TR_2^* = [(100-q)-10\%(100-q)]q = -0.9q^2 + 90q$

$MR' = -1.8q + 90$

⇒ $q_2^* = 38.89$ ⇒ $p^* = 61.11$

(F) $TR_3 = (100 - q - 1000)q = -q^2 - 900q$

$MR_3' = -2q - 900$

⇒ $q_3^* = 460$

(G)

T5: P = 4MC

⇒ $\frac{P}{MC} = \frac{1}{1-\frac{1}{\varepsilon}}$

⇒ $\varepsilon_d = \frac{4}{3}$

T6:

MC = MR

⇒ K = $(PQ^{\frac{2}{3}} - tQ)'$

T7:

TR = P × q = (280 − q)q = −q² + 280q

⇒ MR = −2q + 280

$\begin{cases} MC_A = 4q_A \\ MC_B = 8q_A \end{cases}$

⇒ MR = MC_A // ⇒ MR = MC_B 联立

$q_{A_1}^* = 46.67$ ⇒ $q_{A_2}^* = 28$

⇓

AJ P = 233.33

BJ P = 252