④

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

$\pi^* = (40 \times 60) - (30 + 20 \times 40) = 1500$

(B) $\frac{1}{2}(40 \times 40) = 800$

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

(D) $MR = MC + 10$

$100 - 2q = 30$ $q^* = 35$ $p^* = 65$

(E) $(1 - 10\%) MR = MC \Leftrightarrow 0.9(100 - 2q) = 20$

(F) $TC^* = 1570 - 1000 = 570$

(G) $q^* = 40$ $p^* = 60$ $(0.8 \times 1570) = 1256$

(H) $P = MC$ $100 - 2q = 20$ $q^* = 80$ $p^* = 20$ 故亏损 $= (80 \times 20) - (30 + 20 \times 80) = -30$

无谓损失 $= 0$

⑤

$MR = P(1 - \frac{1}{E_d})$

$MR = 4MC(1 - \frac{1}{E_d})$

$MC = 4MC(1 - \frac{1}{E_d})$

$E_d = \frac{4}{3}$

⑥

对 $P = a - bq$ 则 $MR = a - 2bq$

$MR = MC + t \Rightarrow a - 2bq = k + t \Rightarrow q^* = \frac{a - (k+t)}{2b}$

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

当 $t = 0$

$P_0 = \frac{a+k}{2}$ $p^* - P_0 = \Delta P = \frac{t}{2}$

⑦

令 $MC_A = MC_B = MR$ $4q_A = 8q_B = 280 - 2q_A - 2q_B$ $q_A = 40$ $q_B = 20$

$P = 720$ 美