HW12W.

4 (A) $MR = 100 - 2q = 20 = MC \Rightarrow q^* = 40 \quad p^* = 60. \quad M_L = \frac{60-20}{60} = \frac{2}{3}$

$\pi^* = 40 \times 60 - (30 + 20 \times 40) = 1570.$

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

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

(D) $MR = MC + 10$

$100 - 2q = 30 \Rightarrow q^* = 35 \quad p^* = 65.$

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

(F) $q^* = 40. \quad p^* = 60 \quad \pi^* = 1570 - 1000 = 570.$

(G) $q^* = 40 \quad p^* = 60$ 稅後利潤 $= 0.8 \times 1570 = \underline{1256}$ 元

(H) $P = MC \quad 100 - 2q = 20 \quad q^* = 40 \quad p^* = 20.$

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

無謂損失. $= 0.$

5、 $MR = (1 - \frac{1}{E_d}) \times p \Leftrightarrow MR = 4MC(1 - \frac{1}{Ed}) \quad Ed = \frac{4}{3}$

6、是，設 $P = a - bq$，則 $MR = a - 2bq$，$MR = MC + t \rightarrow$

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

代回需求函數 $\Rightarrow p^* = a - \frac{a-(k+t)}{2} = \frac{a+(k+t)}{2}$

當 $t = 0 \rightarrow P_0 = \frac{a+k}{2} \quad p^* - p_0 = \Delta p = \frac{1}{2}$

7、令 $MC_A = MR$，$4q_A = 8q_B = 20 - 2q_A - 2q_B$

$\Rightarrow q_A = 4 \quad q_B = 2 \quad \Rightarrow \underline{P = 22}$ 元