Week 12 A10826009 廖思勤

We

3.

4.

(A) $MR = 100 - 2q = 20 = MC \Rightarrow q^* = 40,\ p^* = 60$ $\pi = (40\times60) - (30 + 20\times40) = 1570$

(B) 無謂損失 $= (160-20)\times80\times\frac{1}{2} = 1600$

(C) $L = 1 - \frac{MC}{P} = \frac{2}{3}$

(D) $MR = MC + 10$ $100 - 2q = 30 \Rightarrow q^* = 35$ $p^* = 65$ $\pi = (35\times65) - (30+20\times35) - (60\times35) = 1195$

(E) $\pi^* = (\frac{350}{9}\times\frac{550}{9}\times0.9) - 30 - 120\times\frac{350}{9}) = 1331$

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

(H) $p = MC \Rightarrow 100 - 2q = 20$ $q^* = 5$ $p^* = 20$

虧損 $= |80\times20 - (30+20\times80)| = 70$ 無損失 $= 0$

5. $p = 4MC$

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

$\Rightarrow \varepsilon_d = \frac{4}{3}$

6. $t=0 \Rightarrow p_0$ $\frac{q+c}{2}$, $p^* - p_0 = \Delta p = \frac{4}{2}$

7. $MC_A = MC_B = MR$. $4q_A = 8q_B = 28 - 2q_A - 2q_B \Rightarrow q_A = 4$ $q_B = 2$

$p = 220$