Week 1

(4).

(a). $MR = 100 - 2q = 20 = MC$

$\Rightarrow q^* = 40, \ p^* = 60, \ \pi = 1570.$

(b). 无谓损失 $= (60-20) \times 80 \times \frac{1}{2} = 1600.$

(c). $2 = 1 - \frac{MC}{p} = \frac{2}{3}.$

(d). $MR = MC + 10, \ 100 - 2q = 30.$

$\Rightarrow q^* = 35, \ p^* = 65, \ \pi = (35 \times 65) - 13 + (20 \times 35)$

$\qquad - (60 + 35)) = 1195.$

(e). $\pi^* = (\frac{350}{9} \times \frac{550}{9} \times \frac{2}{10}) - 30 - (20 \times \frac{350}{9}) = 1331.$

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

(g). $p = MC \Rightarrow 100 - 2q = 20, \ q^* = 40, \ p^* = 20.$

利润: $(80 \times 20) - (30 + 20 \times 80) = -30,$ 无谓损失 $= 0.$

5. $p = 4 MC$

$\Rightarrow \frac{p}{MC} = \frac{1}{1 - \frac{1}{2}}$

$\Rightarrow 2P_B = \frac{4}{3}$

6. $\pi = 0, \ P: \frac{q + k}{q}$

$7^* - P_0 - 2q = \frac{4}{2}.$