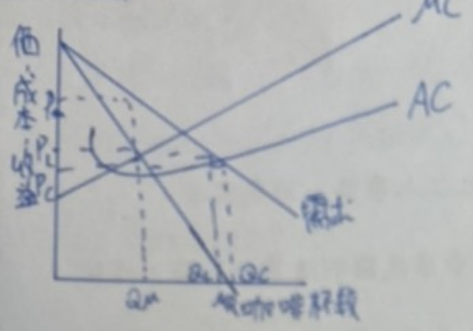
Week11

1.



2. (a) $MR=MC$, $P=a-bQ$

$MR=a-2bQ$

$a-2bQ=c-eQ$

$Q=\frac{a-c}{2b+e}$

$\therefore P=a-b\left[\frac{a-c}{2b+e}\right]$

$P=\frac{ab+ae+bc}{2b+e}$

(b) $Q=\frac{a-c}{2b+e}$

(c) $P=\frac{ab+ae+bc}{2b+e}$

3. (A) $MR=MC$.

$120-2q=4q$, $q^*=20$

$P^*=100$

$\pi^*=100\times20-2(20)^2=1200$

$E_d=100/20=5$, $MC^*=4q^*=80$

獨占力 $=(100-80)/100=0.2$

(B) $20\times4/2=40$ #

(C) $P=MC$ $\therefore 120-q=4q$, $q=24$

$P=96$

$\pi=96\times24-2(24)^2=1152$

MC訂價 $\therefore$ 無謂損失 $=0$ #

(D) $P=AC$ $\therefore 120-q=2q$

$q=40$, $P=80$

$\pi=80\times40-2(40)^2=0$

AC訂價 $(120-80)*40/2=800$

$1440-800=640$ #