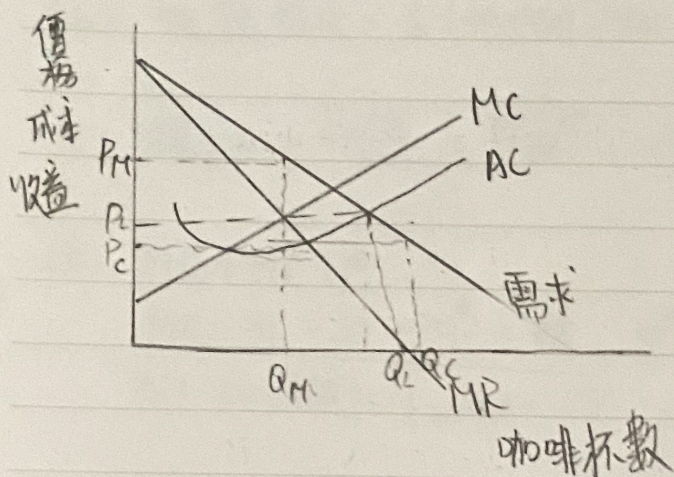


Week 11 作業 = 1.2.3

- 1) 學生會根據平均成本 (AC) 曲線與需求曲線 (D) 的交點訂出  $(P_L, Q_L)$  的價格組合。悟能會根據  $MR=0$  決定出  $Q_C$  的產量，並將價格訂在  $P_C$ 。悟淨會根據  $MR=MC$  決定出  $Q_H$  的產量，並將價格定為  $P_H$ 。



2a) The monopolist will operate where  $MR=MC$ . With demand  $P=a-bQ$ , marginal revenue is given by  $MR=a-2bQ$ . Setting this equal to marginal cost implies  $a-2bQ=c+eQ$ ,  $Q=(a-c)/(2b+e)$ . At this quantity price is  $P=a-b((a-c)/(2b+e))$ ,  $P=(ab+ae+bc)/(2b+e)$ .

b) Since  $Q=(a-c)/(2b+e)$ , increasing  $c$  or decreasing  $a$  will reduce the numerator of the expression, reducing  $Q$ .

c) Since  $e > 0$  and  $P=(ab+ae+bc)/(2b+e)$ , increasing  $a$  will increase the numerator for this expression. This will therefore increase the equilibrium price.