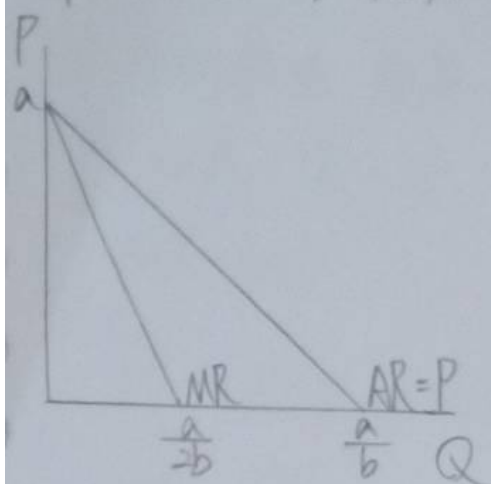


1. 假設獨占市場的需求曲線為線性

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$$P = a - bQ, TR, MR, AR$$

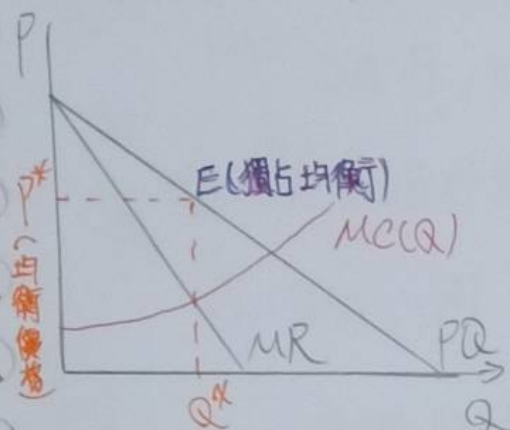


$$TR = P \cdot Q = aQ - bQ^2$$

$$AR = \frac{TR}{Q} = a - bQ$$

$$MR = \frac{dTR}{dQ} = a - 2bQ$$

2 假設獨占市場的需求為線性，即 $P = a - bQ$
追求利潤極大化，均衡價格如數量



$$\text{Max } \pi = TR - TC$$

$$\frac{d\pi}{dQ} = MR - MC = 0$$

$$MR = MC$$

$$TR = P \cdot Q - TC(Q) \quad P^* = a - b \times \left(\frac{a-c}{2b} \right)$$

$$\begin{aligned} \updownarrow \\ MR = MC \end{aligned}$$

$$\frac{d(a-bQ)Q}{dQ} = a - 2bQ$$

$$a - 2bQ = c$$

$$Q^* = \frac{a-c}{2b}$$

$$= \frac{2a - a + c}{2}$$

$$= \frac{a+c}{2}$$