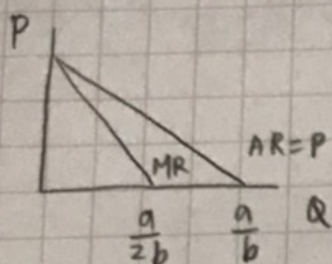


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1. 假設獨占市場的需求曲線為線性

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



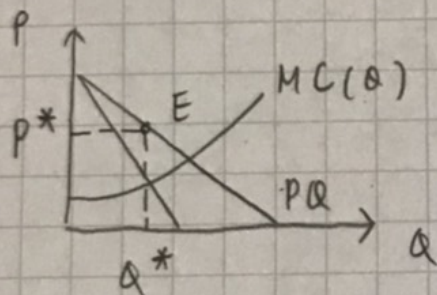
$$TR = P \cdot Q = aQ - bQ^2$$

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

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

2. 假設獨占市場的需求為線性, 即 $P = a - bQ$

追求利潤極大化, 均衡價格和數量



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

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

$$MR = MC$$

$$TR = P \cdot Q - TC(Q)$$

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

$$a - 2bQ = c$$

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

$$P^* = a - b \cdot \left(\frac{a - c}{2b} \right)$$

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

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