

隨 5 獨佔廠商需求函數  $p = 100 - q$ ，成本函數  $C = 30 + 20q$

$$MC = 20 \quad TR = p \cdot q = 100q - q^2 \quad MR = 100 - 2q$$

(A) 均衡價格、產量及利潤為多少？

$$Max \pi = TR - TC \quad 100 - 2q = 20$$

$$MR = MC$$

$$80 = 2q$$

$$q^* = 40$$

$$100 - q = 100 - 40 = 60$$

$$\pi = TR - TC = (40 \times 60) - (30 + 20 \times 40) = 1570$$

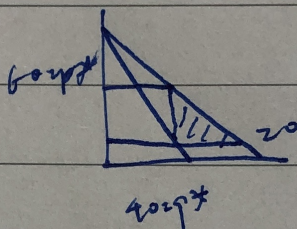
$$A \cdot p^* = 60, q^* = 40, \pi^* = 1570$$

(B) 獨佔者所造成的卡塔無謂損失為多少？

$$\frac{1}{2} \times (60 - 20) \times (80 - 40)$$

$$= 800$$

$$A = 800$$



(C) Lerner 獨佔力測度值等於多少？

$$\frac{60 - 20}{60} = \frac{40}{60} = \frac{2}{3} \quad A = \frac{2}{3}$$

(D) 若政府對廠商每單位課以 10 元之從量稅，求稅後均衡價格、產量及利潤

$$MR = MC + 10$$

$$100 - 2q = 30$$

$$2q = 70$$

$$q^* = 35$$

$$p = 100 - q$$

$$p^* = 65$$

$$\pi^* = (65 \times 35) - (30 + 20 \times 35) - 350 = 1195$$

$$A = p^* = 65, q^* = 35, \pi^* = 1195$$