

Alibaba 260000 连接点 经济三甲

Note week 14

$$(A) \quad MR_A = MC : 100 - 2Q_A = 20 \Rightarrow Q_A = 40 \Rightarrow P_A = 60$$

$$MR_B = MC : 80 - 2Q_B = 20 \Rightarrow Q_B = 30 \Rightarrow P_B = 50$$

$$\pi = 60 \times 40 + 50 \times 30 - 20 \times (40 + 30) = 2500 = P_S$$

$$CS = CS_A + CS_B = 800 + 450 = 1250 : TS = CS + P_S$$

$$= 3750$$

$$(B) \quad \begin{cases} P = 100 - Q & Q \leq 20 \\ P = 90 - Q & Q > 20 \end{cases} \Rightarrow \begin{cases} MR_1 = 100 - 2Q & Q \leq 20 \\ MR_2 = 90 - Q & Q > 20 \end{cases}$$

$$\hat{MR}_1 = MC \Rightarrow 100 - 2Q = 20 \Rightarrow Q = 40 \text{ (不合)}$$

$$MR_2 = MC = 90 - Q = 20 \Rightarrow Q = 70 \text{ (合)} \Rightarrow P = 55$$

$$\Rightarrow \pi = 55 \times 70 - 20 \times 70 = 2450 = P_S$$

$$CS = CS_A + CS_B = 1012.5 + 312.5 = 1325 \quad TS = 3775$$

$$(C) \quad F = (P - P) \times \frac{Q}{2} = \frac{(80 - P)(80 - P)}{2} = \frac{(80 - P)^2}{2}$$

$$\pi = 2F + (P - 20)(Q_A + Q_B) = \frac{(80 - P)^2}{2} + (P - 20)(180 - 2P)$$

$$= -P^2 + 60P + 2800$$

$$P = 30 \quad F = 1250 \quad Q = 20 \quad \pi = 3750$$

$$CS = CS_A(P = 30) + CS_B(P = 30) - 2F = 2450 + 1250 - 2500 = 1200$$

$$TS = CS + P_S = 1200 + 3700 = 4900$$