例1：$Q^d = 2000 - 10P$，$n=40$

$STC = q^2 + 50q + 100$

(1) 廠商短期供給曲線 ＊P>AVC的MC曲線

$P = MC = 2q_1 + 50$

$AVC = q_1 + 50$

$P > AVC$　$2q_1 + 50 > q_1 + 50$ (恆成立)

$P = 2q_1 + 50$

$q_1 = \frac{P}{2} - 25$

(2) 市場供給曲線 ＊個別水平加總

$Q = \sum^{40} q_1$

$= 40(\frac{P}{2} - 25)$

$= 20P - 1000$＃

(3) 市場均衡.價格,數量

＃$S=P$

$20P - 1000 = 2000 - 10P$

$P^* = 100$, $Q^* = 1000$＃

(4) 廠商最適產量,利潤

$q_1 = \frac{P}{2} - 25 = \frac{100}{2} - 25 = 25$

$TV = TR - TC$

$= 100 \cdot 25 - (25^2 + 50 \times 25 + 100)$

$= 525$＃

延伸：$Q^d = 3500 - 10P$，$STC = q_1^2 + 50q_1 + 100$，$n=40$

(1) $MC = 2q_1 + 50 = P$

$AVC = q_1 + 50$

$q_1 = \frac{P}{2} - 25$＃

(2) $Q = \sum^{40} q_1$

$= 20P - 1000$＃

(3) $20P - 1000 = 3500 - 10P$

$P^* = 150$, $Q^* = 2000$＃

(4) $q_1 = \frac{P}{2} - 25$

$= \frac{150}{2} - 25 = 50$＃

$TV = 150 \cdot 50 - (50^2 - 50 \cdot 50 + 100) = 2400$＃

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延伸2 $Q^d = 200 - 10P$, $n = 40$

$STC = q_1^2 + 80q + 300$

(1) $MC = 2q_1 + 80 = P$

$AVC = q_1 + 80$

$q_1 = \frac{P}{2} - 40$ #

(2) $Q = \sum^{40} q_1$

$= 40\left(\frac{P}{2} - 40\right)$

$= 20P - 1600$ #

(3) $20P - 1600 = 2000 - 10P$

$P^* = 120$, $Q^* = 800$ #

(4) $q_1 = \frac{P}{2} - 40$

$= \frac{120}{2} - 40 = 20$ #

$\pi = 120(20) - (20^2 - 80 \cdot 20 + 300)$

$= 100$ #