

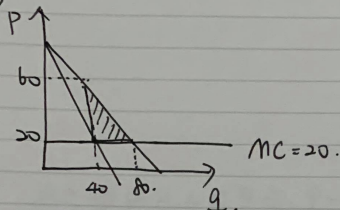
4. $P = 100 - q$, $C = 30 + 20q$

(A) $MR = 100 - 2q = 20 = MC \Rightarrow q^* = 40, P^* = 60$

$ML = (60 - 20) / 60 = 2/3$

$\pi^* = (40 \times 60) - (30 + 20 \times 40) = 1570$

(B)



無謂 = $1/2 (40 \times 40) = 800$

(C) 獨占力 = $(P - MC) / P = (60 - 20) / 60 = 2/3$

(D) $MR = MC + 10$

↳ 從量稅

$100 - 2q = 30 \Rightarrow q^* = 35, P^* = 65$

$\pi = (35 \times 65) - (30 + 20 \times 35) - (10 \times 35) = 1195$

(E) $(1 - 10\%) MR \Leftrightarrow 0.9(100 - 2q) = 20$

$Q = 38.9, P = 550/9$

(F)

(G) 利潤稅對產出、價格均無影響 故 $q^* = 40, P^* = 60$

稅後利潤 = $(0.8 \times \text{稅前利潤}) = (0.8 \times 1570) = 1256$

(H) $P = MC \Leftrightarrow 100 - 2q = 20 \Leftrightarrow q^* = 80, P^* = 20$

故虧損 = $(80 \times 20) - (30 + 20 \times 80) = -30$

無謂損失 = 0