

Week 13 習題 4. 翁瑞姬.

(A) $MR = 100 - 2q = 20 = MC \Rightarrow q^* = 40, p^* = 60$ $MC = \frac{60-20}{60} = \frac{2}{3}$

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

(B) 由上圖可知, 無謂損失 = $\frac{1}{2} (60 \times 40) = 800$

(C) 獨佔力 = $\frac{p-MC}{p} = \frac{60-20}{60} = \frac{2}{3}$

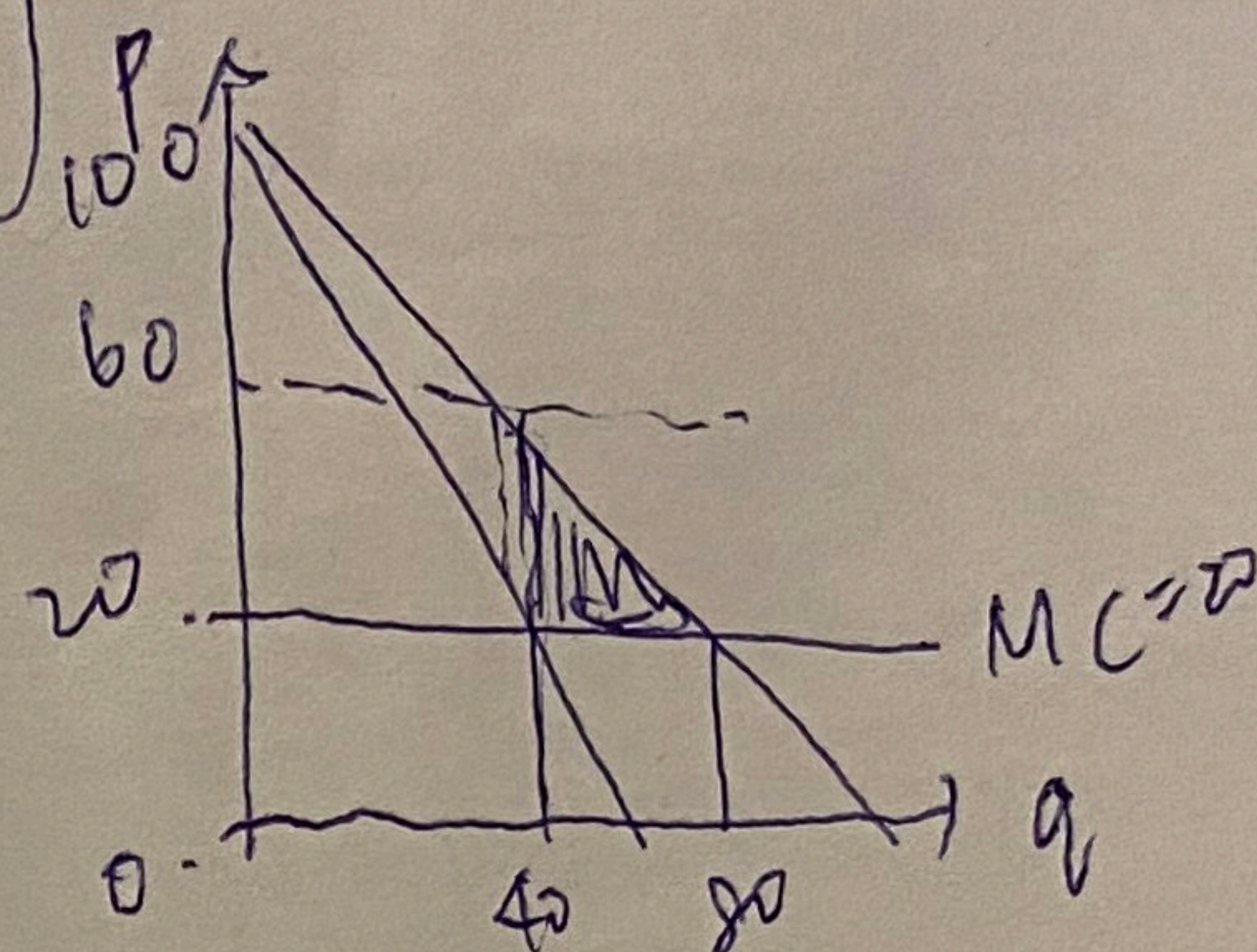
(D) $MR = MC + 10$ $100 - 2q = 30 \Rightarrow q^* = 35, p^* = 60$

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

(E) $(1 - 10\%) MR = MC \Rightarrow 0.9(100 - 2q) = 20$
 $\Rightarrow q^* = \frac{350}{9}, p^* = \frac{550}{9}$

$\pi^* = \left(\frac{350}{9} \times \frac{550}{9} \times 0.9 \right) - 30 - \left(20 \times \frac{350}{9} \right) = 1331$

(F) 定額稅產出, 價格均無影響 故,



$q^* = 40, p^* = 60$

利潤則減少稅額部分

故 $\pi^* = 1570 - 1000 = 570$

(G) 利潤稅產出, 價格均無影響 故,

$q^* = 40, p^* = 60$ 稅後利潤 = $0.8 \times$ 稅前利潤,
 $= 0.8 \times (1570) = 1256$

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

故虧損 = $(80 \times 20) - (30 + 20 \times 80) = -150$

無謂損失 = 0.