4.

(A) $MR = 100-2q = 20 = MC \Rightarrow q^* = 4 \Rightarrow P^* = b \Rightarrow ML = \dfrac{60-20}{60} > \dfrac{2}{3}$

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

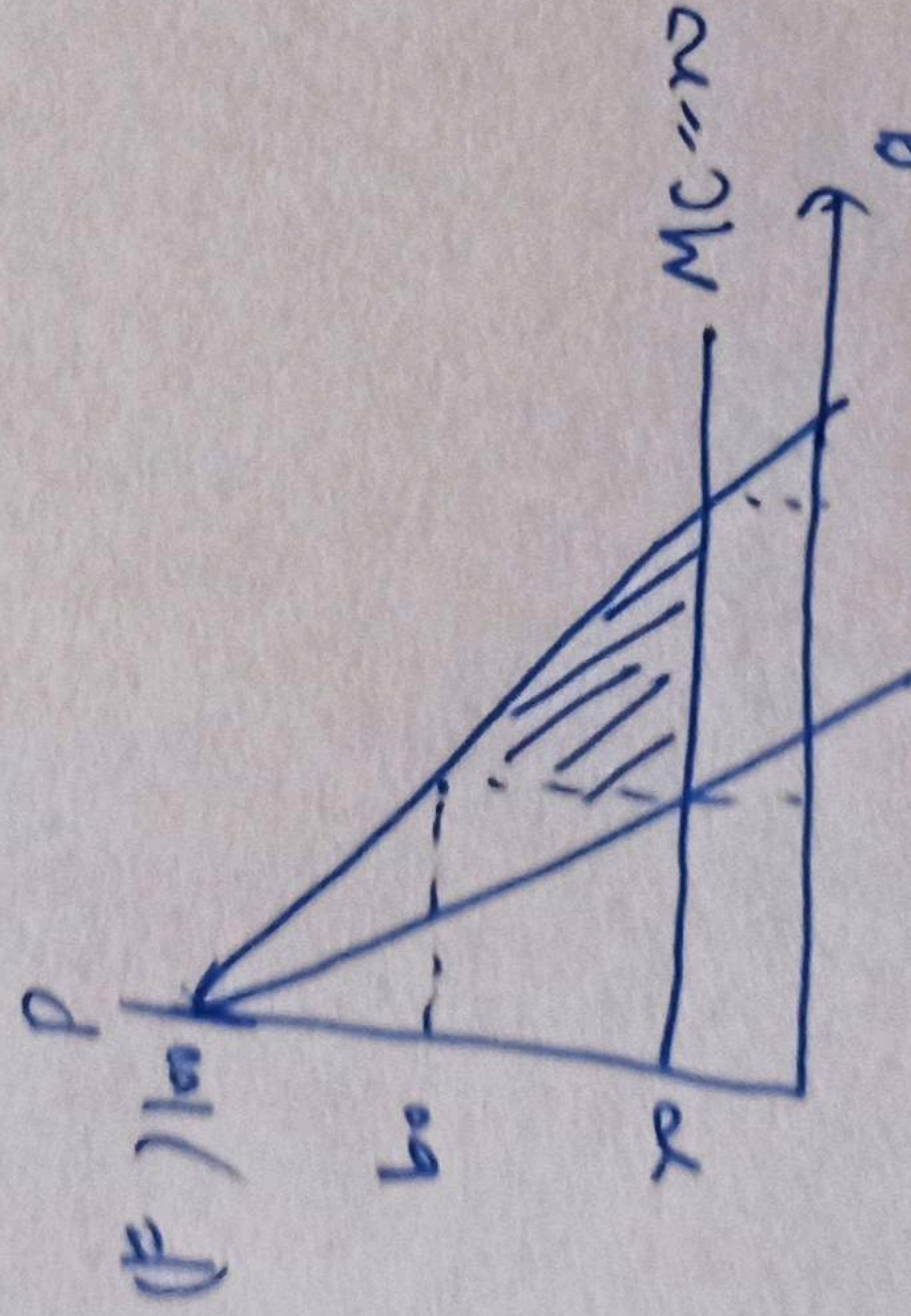(B) 無謂損失 $= \dfrac{1}{2}(40 \times 40) > 800$

(C) 獨占力 $= \dfrac{P - MC}{P} = \dfrac{60 - 20}{60} > \dfrac{2}{3}$

(D) $MR = MC + 10$

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

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

(E) $(1 - 10\%)\, MR = MC \Rightarrow 0.9(100 - 2q) > 20$

$q^* > 3 \quad P^* > b$

利潤減少較額的部分

$\pi^* > 1570, \ 1000 + 50$

(G) 利潤稅對產出、價格打有無影響 收

$q^* > 40 \quad P^* > b$

稅後利潤 $= 1.0 \times ... = (0.8 \times 1575) = 1260$

$\pi = (0.8 \times 1575) < 1575$

(H) $P = MC \Rightarrow 100 - 2q = 20 \Rightarrow q^* > b \quad P^* > a$

取餘報 $= (40 \times 40) - (20 \times 40) - 3$

無謂損失 $= 0$