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①

K	L	Q	AP_L	AP_K	MP_L
20	0	0			
20	5	20	4	1	4
20	10	43	4.3	2.15	4.6
20	15	57	3.85	2.85	2.8
20	20	67	3.35	3.35	2
20	25	75	3	3.75	1.6

$AP_L = \frac{Q}{L}$

$AP_K = \frac{Q}{K}$

$MP_L = \frac{\Delta Q}{\Delta L}$

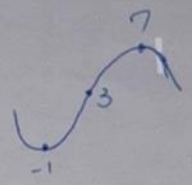
②

$q = 21L + 9L^2 - L^3$

$f'(q) = 21 + 18L - 3L^2$

$(3L+3)(-L+7) \Rightarrow L = -1, 7$

$f''(q) = -6L + 18 \Rightarrow L = 3$



(A) L 大於 7 (MP_L 遞減)

(B) L 等於 7 (TP Max)

(C) L 大於 3 (AP_L 遞減)

③

$L = 10$

$K = 5$

$MP_L = 5$

$Q = 500$

$\frac{MP_L}{L} = \frac{MP_K}{K} \Rightarrow \frac{5}{10} = \frac{MP_K}{5}$

Ans: $MP_K = 2.5$

④

(A) $5A + 10B = Q$

(B) $L = 2$

$K = 1$