

個體經濟. A107260097 李羽翔

(Week 2.)

$$APL = \frac{q}{L} \quad MPL = \frac{\partial q}{\partial L}$$

1.  $APK = \frac{q}{K}$

K	L	Q	APL	APK	MPL
20	0	0	0	0	0
20	5	20	4	1	4
20	10	43	4.3	2.15	4.6
20	15	57	3.8	2.85	2.8
20	20	67	3.35	3.35	2
20	25	75	3	3.75	1.6

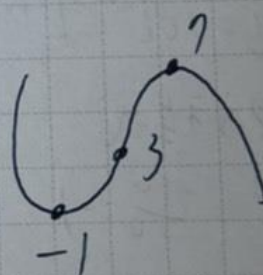
2.  $q = 21L + 9L^2 - L^3$

$$21 + 18L - 3L^2 \quad (-L+7)(L+1) \rightarrow L = -1, +7$$

$$7 + 6L - L^2 - 1 \quad (A) 7$$

$$18 - 6L \rightarrow L = 3 \quad (B) 7$$

$$(C) 3$$



3.  $L = 10$

$$K = 5$$

$$MPL = 5$$

$$q = 500$$

$$MPK = 2.5$$

$$\frac{MPL}{L} = \frac{MPK}{K}$$

$$\rightarrow MPK = 2.5$$

4. (A)  $5A + 10B = 4$

(B)  $L = 2$   
 $K = 1$