$AP_L = \frac{q}{L}$ $MP_L = \frac{\Delta q}{\Delta L}$

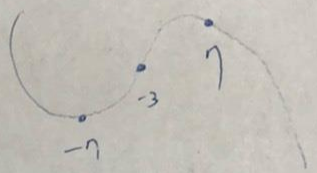
1. $AP_K = \frac{q}{K}$

2. $q = 12L + 9L^2 - L^3$

$12 + 18L - 3L^2 > (-L+1)(L+1) \Rightarrow L = -1 + 7$

$7 + 6L - L^2 - 1$

(A) $= 7$
(B) $= -7$
(C) $= 3$



3. $L = 10$

$K = 5$

$MP_L = 5$

$q = 500$

$MP_K = 21.5$

$\frac{MP_L}{L} = \frac{MR_K}{K}$

$\Rightarrow MP_K = 21.5$

4.

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

(B) $L = 2$

$K = 1$