

Week 2 A18260019 廖思勤

Q	APC	APK	MPL
0	0	0	0
20 ÷ 5 = 4	20 ÷ 20 = 1	20 ÷ 5 = 4	
43 ÷ 10 = 4.3	43 ÷ 20 = 2.15	25 ÷ 5 = 5	
57 ÷ 15 = 3.8	57 ÷ 20 = 2.85	14 ÷ 5 = 2.8	
67 ÷ 20 = 3.35	67 ÷ 20 = 3.35	10 ÷ 5 = 2	
	75 ÷ 20 = 3.75	8 ÷ 5 = 1.6	

3. $APL = \frac{200}{10} = 50$
 $MPL = \frac{50}{10} = 5$
 $APK = \frac{500}{5} = 100$
 $MPK = \frac{100}{5} = 20$

2.

4. 生產函數 $Q = f(L, K)$

① $MP_L = \frac{dQ}{dL} = 21 + 18L - 3L^2$ $\frac{dMP_L}{dL} = 18 - 6L$ $L = 3$

② $\frac{5}{10} \times \frac{1}{2}$

② $21 + 18L - 3L^2 = 0$
 $18L - 3L^2 = 0$ $L(L-6) = 0$ $L = 6$

③ $Q = \min\left[\frac{L}{2}, \frac{K}{1}\right]$

③ $MP = AP$ $21 + 18L - 3L^2 = 21 + 9L - L^2$ $9L - 2L^2$ $L = 4.5$