

Production Function: $Q=F(K,L)=2KL$

		Capital (equipment-hours/wk)				
		1	2	3	4	5
Labor (person-hours/wk)	1	2	4	6	8	10
	2	4	8	12	16	20
	3	6	12	18	24	30
	4	8	16	24	32	40
	5	10	20	30	40	50

Fill in the table.

Output	Total Cost		Average Cost		Marginal Cost	
	LR	SR	LR	SR	LR	SR
50						
60						

Why are costs always higher in the short run?

What is the cost of the "lumpy" decision to increase output from 50 to 60 in the short run and long run?

Short run marginal cost may also be defined as follows:

$$SMC = \frac{w}{MP_L} \quad \text{where labor is assumed the only variable input.}$$

Confirm that the short run marginal cost function could be calculated from the above formula.