

resource A and B (labor and capital).

$P_x = \$50$ .

	Qa	MPa	Qb	MPb
1	12	1	20	
2	11	2	18	
3	10	3	16	
4	9	4	14	
5	8	5	12	
6	6	6	10	
7	5	7	8	
8	3	8	6	

$P_A = \$250$  and  $P_B = \$400$ .

Solution:

We can find maximized profit from the formula:

$TP = TR - TC = P_a \cdot q - (P_A + P_B) = \max$

Value of marginal products of labor and capital should be equal to their wages and rental rate respectively, so:

$P_x \cdot MP_a = P_A$ ,  $50 \cdot MP_a = 250$ ,  $MP_a = 5$ ,

$P_x \cdot MP_b = P_B$ ,  $50 \cdot MP_b = 400$ ,  $MP_b = 8$ , so we can see from the table, that  $q = 7$

Now we can calculate maximizing profit:

$TP = 50 \cdot 7 - (250 + 400) = -300$  thousand dollars.

So, there is a loss, that is minimized.