

**Practice 6 – Introduction to Labor Economics (deadline: before next tutorial)**

Answer the following questions based on what was seen during the last week.

1) The marginal revenue product (of labor) in a telephone company is given by the following formula  $MRPL = 20 - 0.5T$ , where  $T$  is the number of workers. If wages are \$10 / h, how many workers will the company hire? (*Remember the equilibrium condition or decision rule*)

2) The following information was taken from the records of a certain pot factory:

Number of Workers	Total # of Pots Produced Per Day
0	0
1	6
2	13
3	18
4	21
5	23
6	22

1. The law of diminishing returns starts with the \_\_\_\_ worker.
2. The MPL of the 3<sup>rd</sup> worker is \_\_\_\_.
3. If pots are sold at \$20 each, then the unit MRPL for pot 18<sup>th</sup> is \_\_\_\_.
4. True or false. The revenue corresponding to the marginal product of labor is the marginal product of labor multiplied by the additional revenue received by unit produced/sold.
5. If wages are \$50 / day, and pots are sold at \$20 each, how many workers will be hired?

3) A factory's output depends on the number of overseers hired (see table below). The factory sells its product at \$0.50 per unit, hires 50 workers at a \$100 daily wage, and needs to decide the number of overseers to be hired. The daily wage for the latter is \$500, and the output grows following the evolution in the table below. How many overseers should the company hire?

Overseers	Output
0	11.000
1	14.800
2	18.000
3	19.500
4	20.200
5	20.600

4)The following table shows the number of cakes that can be cooked daily in the local cake shop, which depends on the number of working cooks.

Cooks	Cakes
0	0
1	10
2	18
3	23
4	27

- Calculate the MPL
- Does the law of diminishing returns enter into effect? Explain.
- Suppose that each cake is sold at \$10. Calculate the MRPL.
- Draw the MRPL curve or, what is the same, the...?
- If each cook is paid \$80 per day, how many cooks will be hired considering the maximizing profit condition? How many cakes will be cooked and sold every day?