Poll #3

Consider the following local lamp maker who sells lamps locally to folks in the town at a competitive market price of **P=$30.**

How many Lamps should the Lamp maker make?

Output	Total Revenue	Total Costs	Marginal Revenue	Marginal Costs	Average Revenue	Average Cost	Profit
0		$15					
1		$16					
2		$20					
3		$29					
4		$45					
5		$70					
6		$106					

1. What is the optimal number of lamps the lamp maker should producer?

   a) 3
   b) 4
   c) 5
   d) 6

2. What is slope of the lamp maker's total revenue and is it increasing, decreasing or constant?

   a) 15, increasing
   b) 4, decreasing
   c) 30, constant
   d) 30, increasing

3. At what quantity and price at which the Average Total Cost (ATC) curve is at it's minimum?

   a) Q=3, P=$9.67
   b) Q=4, P=$11.25
   c) Q=5, P=$14
   d) Q=6, P=$17.67

4. What is the profit of the lamp maker at the optimal quantity of lamps?

   a) $80
   b) $75
   c) $61
   d) $40

5. Make another column on your table and subtract the marginal revenue (MR) and the marginal cost (MC) for each unit of production up to the optimal quantity Q* of the lamp maker. What does it sum up to?

   a) $95
   b) $75
   c) $61
   d) $80

Output	Total Revenue	Total Costs	Marginal Revenue	Marginal Costs	Average Revenue	Average Cost	Profit	MR-MC
0	$0	$15		$15.00	N/A	N/A	($15.00)	($15.00)
1	$30	$16	$30.00	$1.00	$30.00	$16.00	$14.00	$29.00
2	$60	$20	$30.00	$4.00	$30.00	$10.00	$40.00	$26.00
3	$90	$29	$30.00	$9.00	$30.00	$9.67	$61.00	$21.00
4	$120	$45	$30.00	$16.00	$30.00	$11.25	$75.00	$14.00
5	$150	$70	$30.00	$25.00	$30.00	$14.00	$80.00	$5.00
6	$180	$106	$30.00	$36.00	$30.00	$17.67	$74.00	($6.00)