

ECO 201-01
Homework II
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Summer 2010

This assignment is due June 30, 2010

Do not complete this assignment on this sheet. Use separate paper. Chapters 6, 7, and 8 in your text will be helpful for answering these questions (as will the study guide section of my website). This assignment will be graded up to 50% for accuracy.

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1. a) Write out the equation for calculating total cost (TC).
b) If fixed cost is \$40 and variable cost is \$90, what is total cost?
 2. a) Write out the equation for calculating average total cost (ATC).
b) If $ATC = \$40$ when five units of output are produced, what is total cost?
 3. a) Write out the equation for calculating average variable cost (AVC).
b) If $AVC = \$25$ when eight units of output are produced, what is variable cost?
 4. a) Write out the equation for calculating average fixed cost (AFC).
b) If $AFC = \$20$ when six units of output are produced, what is fixed cost?
 5. a) Define marginal cost.
b) Write out the equation for calculating marginal cost (MC).
 6. Given that, in the short run, fixed costs will remain constant if you produce nothing, or if you produce all of the output you possibly can, is it absolutely necessary that you recover all of your fixed costs in the short run? Give a "yes" or "no" answer and support that with a brief explanation.
 7. Given that the number of producers in a market is a supply determinant:
 - a. What happens to price if more firms enter a market (hold demand constant)?
 - b. What happens to price if firms suddenly leave a market (hold demand constant)?
 8. Calculate total revenue (TR) for all quantities of output in part "a" then in part "b". Next calculate marginal revenue (MR) for all quantities of output greater than "0" for part "a" then in part "b".

<u>a.</u>	<u>Price</u>	<u>Quantity</u>	<u>b.</u>	<u>Price</u>	<u>Quantity</u>
	\$2.00	0		\$2.00	0
	\$2.00	1		\$1.90	1
	\$2.00	2		\$1.80	2
	\$2.00	3		\$1.70	3
	\$2.00	4		\$1.60	4
	\$2.00	5		\$1.50	5

9. Refer back to the question number 8 to answer parts "a" and "b" below:
- How does marginal revenue compare to price (equal to, greater than, or less than) in part a?
 - How does marginal revenue compare to price (equal to, greater than, or less than) in part b?
10. Use the following table to answer parts "a" & "b" about utility.

<u>Q Nachos</u>	<u>TU</u>	<u>Q Milk</u>	<u>TU</u>	<u>Q Twinkies</u>	<u>TU</u>	<u>Q Music</u>	<u>TU</u>	<u>Q Savings</u>	<u>TU</u>
1	10	1	15	1	12	1	20	1	25
2	19	2	28	2	22	2	35	2	40
3	27	3	38	3	30	3	45	3	50
4	34	4	46	4	36	4	52	4	55
5	40	5	52	5	40	5	58	5	58
6	44	6	56	6	42	6	62	6	60

- Suppose a consumer has \$66 to spend. Nachos cost \$3.00; Milk costs \$4.00; Twinkies cost \$1.00; Music costs \$3.50; and Savings costs \$5.00. How much of each will this consumer purchase and what is the total utility from these purchases?
- Suppose a consumer has \$40 to spend. Nachos cost \$3.00; Milk costs \$2.00; Twinkies cost \$4.00; Music costs \$5.00; and Savings costs \$5.00. How much of each will this consumer purchase and what is the total utility from these purchases?