
SECTION I: Multiple Choice. (1 point each) Choose the one best answer for the question and place the letter corresponding to that answer in the space provided to the left of the question number.

- _____ 1. When marginal cost is greater than average total cost
- a. average total cost is decreasing.
 - b. average total cost is minimized
 - c. average total cost is increasing.
 - d. both "a" and "b" are true.
- _____ 2. If you change the quantity of a product that you have consumed and the marginal utility of the last unit of the product consumed is less than it was before, _____ of the product has been consumed.
- a. more.
 - b. less.
 - c. the same amount.
 - d. we can't tell how much
- _____ 3. In which market structure is there no incentive for advertisement?
- a. monopoly
 - b. oligopoly
 - c. monopolistic competition
 - d. pure competition
- _____ 4. Variable costs are
- a. Items such as foregone rent that you give up when you use your own building yourself instead of renting it to someone else.
 - b. Costs that stay the same regardless how much output is produced.
 - c. Costs that vary directly with the amount of output produced.
 - d. All of the above are true.
- _____ 5. If indifference curve A shows a higher level of utility than indifference curve B:
- a. indifference curve A is straight while indifference curve B is convex.
 - b. indifference curve A is closer to the origin of the graph than indifference curve B.
 - c. indifference curve A is further away from the origin of the graph than indifference curve B.
 - d. indifference curve B will be concave while indifference curve A will be convex.

1. Assume a firm has fixed costs of \$25 and variable costs as indicated in the table below. **(12 points)**

a. Complete the cost table.

| Quantity | Variable Cost | Total Cost | ATC | AVC | MC |
|----------|---------------|------------|-------|-------|-------|
| 0 | \$0 | _____ | NA | NA | NA |
| 1 | \$11 | _____ | _____ | _____ | _____ |
| 2 | \$20 | _____ | _____ | _____ | _____ |
| 3 | \$27 | _____ | _____ | _____ | _____ |
| 4 | \$32 | _____ | _____ | _____ | _____ |
| 5 | \$35 | _____ | _____ | _____ | _____ |
| 6 | \$40 | _____ | _____ | _____ | _____ |
| 7 | \$47 | _____ | _____ | _____ | _____ |
| 8 | \$56 | _____ | _____ | _____ | _____ |
| 9 | \$67 | _____ | _____ | _____ | _____ |
| 10 | \$80 | _____ | _____ | _____ | _____ |

- b. What is this firm's shut down price? What information in the above table indicates this?

- c. Assuming this is a perfectly competitive firm selling its' output in a perfectly competitive market, how much would this firm produce if the market price were \$9, and what would its' economic profits (or losses) be?

Quantity Produced _____ Profit (or loss) _____

- d. Assuming this is a perfectly competitive firm selling its' output in a perfectly competitive market, how much would this firm produce if the market price were \$5, and what would its' economic profits (or losses) be?

Quantity Produced _____ Profit (or loss) _____

2. Use the following table to answer the following question regarding utility.
(7 points)

| <u>Quantity</u> | <u>Total Utility Apples</u> | <u>Total Utility Bananas</u> | <u>Total Utility Chocodiles</u> |
|-----------------|-------------------------------------|--------------------------------------|---|
| 1 | 34 | 21 | 44 |
| 2 | 62 | 39 | 84 |
| 3 | 78 | 54 | 116 |
| 4 | 90 | 66 | 144 |
| 5 | 98 | 75 | 160 |
| 6 | 102 | 81 | 172 |
| 7 | 104 | 84 | 180 |
| 8 | 105 | 86 | 184 |

- a. If the price of Apples is \$4, the price of Bananas is \$3, and the price of Chocodiles is \$8, what is the utility maximizing combination that should be purchased given a budget of \$78. How much total utility will this consumer derive from these goods?

| | | | |
|----------------------------------|-------|----------------------------------|-------|
| Units of Apples Purchased | _____ | Total Utility from Apples | _____ |
| Units of Bananas Purchased | _____ | Total Utility from Bananas | _____ |
| Units of Chocodiles Purchased | _____ | Total Utility from Chocodiles | _____ |
| Total Utility from All Purchases | | | _____ |