Economics Assignment 1

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## Chapter 4: Problem # 2

Between the group, the seniors would not be affected by price increases and the least price-elasticity of demand would be the least for membership in the Association of Business Professionals. The juniors earn lower than seniors and more than students, thus they would be in-between the senior executives and the student i.e. they would be having an intermediate level of price-elasticity of demand. Price-elasticity of demand for students would be the maximum. Amid the factors that determine the price-elasticity of demand an important role is played by the prortion of spending of the consumer’s out of the total income. As the senior executives earn the most and are also having the most disposable income, the junior executives are in-between their disposable income is lower than senior executives, and the students are earning the lowest and their disposable income is the lowest. Moreover, the location of elastic region is on the left side of the center of the demand graph and price increases suddenly decrease demand for the lower income class, therefore the senior executive’s demand would not be affected as much as would be affected in case of junior executives or the students (R, 2019) (Anon, SECTION 3: DETERMINANTS OF PRICE ELASTICITY OF DEMAND, 2019).

## Chapter 5: Problem # 8

1. The maximum expense a person can make on all needed items is determined by the constraints set by his/her budget. At times the marginal utility earned by each additional dollar is similar in that case rational and optimal spending occurs. Maximum marginal utility earned is given by the following formula:

MUx/Px = MUy/Py

 Marginal utility of good X is represented by MUx, and the marginal utility of good Y is represented by MUy, Px is the value of commodity X, and Py is the value of commodity Y.

As the fare has increased from $10 to $20 per trip, and there are 20 trips per month. So, the increased expenditure (keeping the number of trips at the same level) per month is $10 x 20 =$200. Ann compensates the increase in fares by reducing the expenditure by the same amount previously incurred on food. As a result, the marginal utility against each dollar for the train would decline and the marginal utility per dollar for food would rise. Economically we cannot infer from it that Ann behavior is rational, but practically the problem is that train ride to office is needed and due to limited resources Ann does not have enough resources to manage even if the prices increase (BLOOMENTHAL, 2019).

1. Because Ann’s budget is constrained because of having a limited and fixed budget. Due to increased expenditure on one good a smaller amount would be left behind to spend on the other goods. The same is the case here an increase in train’s fare has made Ann cut down other expenditure i.e. food in this case.

## Chapter 5: Problem # 10

Graphically consumer surplus is the amount that a buyer pays in the marketplace and worth placed on product by the consumer (MURPHY, 2019). It is calculated as the area of the triangle below the market demand curve and above the price line. In the following diagram, consumer surplus is the red colored zone in triangle:



Numerically:

 = 0.5 x ($10-$2) x 80,000

 = 0.5 x $8 x 80,000

= $320k

## Chapter 6: P4

There are six specific conditions that give rise to a perfectly competitive industry. One of these is the profit maximization rule, to maximize profits a company should select that level of productivity where MC equals MR and the MC curve is rising. In another way, production should be on the level where MC = MR. In addition economic efficiency condition that P = MC is the normal state for commercial productivity. This state means that the incomes are being utilized in a way that generates the maximum possible level of satisfaction (Anon, 2019).

In the given case the amount for which P = MC, i.e. $2.50 at 570 slices per day. So, the seller would need to make sales of 570 slices/day. It profits would be (Price – Average Total Cost) x (Quantity) = $2.50 - $1.40 x 570 = $627 per day.

## Chapter 6: P7

The primary objective of every private firm is to maximize profits, and the formula for profit is as follows:

 Profit = Total Income – Total Expenses

1. The variable portion of direct expenses of the company is waging i.e $15/labor hour, and the fixed expenses are $60 on daily basis. So, the company would strive to decide that particular level of production where its revenue is maximized and resultantly profits are maximized after deducting the total costs (total of variable and fixed costs).

For example, at production level of 15 bats per day the revenue would be $10 x 15 = $150, variable costs are $15 x 4 = $60, and the fixed costs are $60. So, Profit = ($150 – ($60 + $60)) = $30.

At production level of 20 bats per

revenue would be $10 x 20 = $200, variable costs are $15 x 7 = $105, and the fixed costs are $60.

So, Profit = ($200 – ($105 + $60)) = $35$

At production level of 25 bats per

revenue would be $10 x 25 = $250, variable costs are $15 x 11 = $165, and the fixed costs are $60.

So, Profit = ($250 – ($165 + $60)) = $25.

From the above, we can conclude that at 20 bats per day the profits are maximized. Any quantity higher or lower than 25 bats per day decrease the profits.

1. If the fixed costs are only $30 per day the profits would be maximized at 20 bats per day in the following way.

Variable costs $15 x 7 = $105, Fixed cost = $30, Revenue = $10 x 20 = $200

Profit = ($200 – ($105 + $30)) = $65

Increasing the production to 25 bats per day would affect the profits in the following way: Variable costs $15 x 711= $165, Fixed cost = $30, Revenue = $10 x 25 = $250

Profit = ($250 – ($165 + $30)) = $55

The profit has decreased by $10 by increasing the production by 5 units only.

# References

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