UNIVERSITY OF THE PEOPLE

BUS 1103-01 Microeconomics- AY2024-T1

Learning journal Unit 3

Instructor: Galin Todorov

Question 1:

Calculate the price elasticity of demand from point B to point C.

% change in quantity = Quantity 2- Quantity 1 / Quantity 2 + Quantity 1 / 2 * 100

= 3500 – 2000 / 3500 + 2000 / 2 * 100

= 1500 / 5500 / 2 * 100

= 1500 / 2750 * 100

= 0.545 * 100

= 54.50

% change in price = price 2- price 1 / price 2 + price 1 / 2 * 100

= 30 – 20 / 30 + 20 / 2 * 100

= 10 / 25 * 100

= 0.4 * 100

= 40

price elasticity of demand = % change in quantity / % change in price

= 54.50 / 40

= 1.36

Question 2:

Classify the elasticity for point B to point C as elastic, inelastic, or unitary.

The demand for the product is elastic between point B and point C on the demand curve. This means that quantity demanded is highly responsive to changes in price in this range. A small change in price leads to a large change in quantity demanded.

Question 3:

Provide an explanation for the elasticity for point B to point C.

The elasticity of demand between the two points is greater than 1, indicating that demand is elastic in this range. This tells us that if price changes by more than 1%, the quantity demanded will change by 1.36%. The elastic demand in this interval could be attributed to factors like income changes in the economy or an increase in consumer interest for the product in the country. The high elasticity demonstrates that quantity demanded is highly sensitive to price changes between these two points on the demand curve. Even small price fluctuations yield significant changes in the amount consumers are willing and able to purchase.

Question 4:

Calculate the price elasticity of demand from point D to point E.

% change in quantity = Quantity 2- Quantity 1 / Quantity 2 + Quantity 1 / 2 * 100

= 1700 – 1800 / 1700 + 1800 / 2 * 100

=- 5.71

% change in price = price 2- price 1 / price 2 + price 1 / 2 * 100

= 50 – 40 / 50 + 40 / 2 * 100

= 22.2

price elasticity of demand = % change in quantity / % change in price

=- 5.71 / 22.2

=- 0.26

Question 5:

Classify the elasticity for point D to point E as elastic, inelastic, or unitary.

It is inelastic.

Question 6:

Provide an explanation for the elasticity for point D to point E.

When the price was increased, there was little change observed in the quantity demanded. Specifically, when price rose by 22.2%, the quantity affected only by-5.71%. This shows there was low responsiveness or sensitivity of quantity demanded to the price change. The small change in quantity despite the large increase in price indicates that demand was relatively inelastic in this case. The demand did not change much as price rose, demonstrating that consumers were not highly responsive and continued purchasing close to original quantities even at higher prices.

Question 7:

Calculate the price elasticity of demand from point G to point H.

% change in Quantity = 1600 – 2200 / (1600 + 2200) / 2 * 100

=- 31.58

% change in Price = 80 – 70 / (80 + 70) / 2 * 100

= 13.33

Price elasticity of demand =- 31.58 / 13.33 =- 2.4

Question 8:

Classify the elasticity for point G to point H as elastic, inelastic, or unitary.

It is elastic.

Question 9:

Provide an explanation for the elasticity for point G to point H.

When the price of athletic shoes increased by 13.33%, the quantity demanded affected by 31.6%. This indicates that the quantity demanded was highly responsive to the price increase, with a significant negative relationship between price and quantity. As the price rose, the quantity demanded lowered substantially. This demonstrates an elastic demand, where changes in price have a large influence on the amount consumers are willing and able to purchase. The data shows that a moderate increase in price led to a more than proportional decrease in

quantity demanded, reflecting the sensitivity of consumers to the higher prices. In essence, the paraphrase is that as the price increased, the quantity demanded lowered considerably.

Question 10:

Calculate the price elasticity of supply from point K to point L.

% change in Quantity = 1100 – 1000 / (1100 + 1000) / 2 * 100 = 9.52

% change in Price = 8- 4 / (8 + 4) / 2 * 100 = 66.67

Price elasticity of supply = 9.52 / 66.67 = 0.14

Question 11:

Classify the elasticity for point K to point L as elastic, inelastic, or unitary.

Inelastic.

Question 12:

Provide an explanation for the elasticity for point K to point L.

Supply is not sensitive to changes in price. Supply exhibits very low responsiveness or elasticity to price fluctuations. As price rises, there is little impact on the quantity supplied, which remains largely unchanged. Suppliers continue to produce and deliver approximately the same quantity even with higher prices. There is no motivation for suppliers to significantly expand production and supply more to the market as prices increase. The relationship between price and quantity supplied is inelastic.

Question 13:

Calculate the price elasticity of supply from point N to point P.

% change in Quantity = 3200 – 1600 / (3200 + 1600) / 2 * 100 = 66.67

% change in Price = 64- 32 / (64 + 32) / 2 * 100 = 66.67

Price elasticity of supply = 66.67 / 66.67 = 1

Question 14:

Classify the elasticity for point N to point P as elastic, inelastic, or unitary.

Unitary.

Question 15:

Provide an explanation for the elasticity for point N to point P.

The 66.7% price increase caused an equal 66.7% rise in quantity supplied, indicating Unitary elasticity.

Question 16:

Calculate the price elasticity of supply from point Q to point R.

% change in Quantity = 1400 – 1000 / (1400 + 1000) / 2 * 100 = 33.3

% change in Price = 256- 128 / (256 + 128) / 2 * 100 = 66.67

Price elasticity of supply = 33.33 / 66.67 = 0.5

Question 17:

Classify the elasticity for point Q to point R as elastic, inelastic, or unitary.

Inelastic.

Question 18:

Provide an explanation for the elasticity for point Q to point R.

A 67% price increase only caused a 33% rise in quantity supplied, demonstrating low elasticity and an inelastic supply response to the price change.

Questions:

What did you like most about the Unit 3 learning journal?

What did you least like about completing the Unit 3 learning journal?

What is the most interesting thing have you learned about Microeconomics since beginning this course?

I greatly enjoyed learning the various calculations for price elasticity of demand and supply in Unit 3. Applying these concepts to economic changes in my country improved my comprehension. However, I initially struggled to grasp elasticity fully and explain it through examples after completing the computations. My primary goal was understanding the factors driving the changes. Though challenging at times, mastering elasticity proved very worthwhile.

Thus far, my favorite aspect of the course is the ability to comprehend economic jargon from experts in my country. Additionally, I can now analyze demand and supply more intricately.

Moreover, I have applied supply and demand principles to my personal finances, striving for greater responsibility amidst global economic uncertainty.

Reference:

Greenlaw, S. A. & Shapiro, D. (2018). Principles of microeconomics, 2e. Open Stax Rice University. https://d3bxy9euw4e147.cloudfront.net/oscms-prodcms/media/documents/Microeconomics2e-OP.pdf

Word count: 1276