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**ECO 550**

**Week 2 Check Your Understanding Submission**

**Chapter 3: 3, 4, 7**

**Chapter 4: 5, 6, 7**

**Chapter 3 Problem 3**

Now if the Olde Yogurt Factory reduced the price of its popular Mmmm Sundae from $2.25 to $1.75. As a result, the firm’s daily sales of these sundaes have increased from 1500 per day to 1800 per day. Compute the arc price elasticity of demand over this price consumption quantity range.

ED = [(1800 −1500)/ (1800+1500)]/[(1.75 − 2.25)/(1.75 + 2.25)], so ED = −0.727 for Mmmm Sundaes. This is inelastic in this price range. Suggests that the OldeYoguart Factory should consider a price increase, as this will increase revenues and reduce costs. Which be approximated to be = -.22 or -22% P, = .20 or 20% Q.

**Chapter 3 Problem 4.** (a). ED = −30%/+100% = −0.3 is the price elasticity for subway rides. This is inelastic.

(b). Ridership probably may not return to the original level because some people may have invested in another. (Cars, etc.). Ridership to decrease by 30%

**Chapter 3 Problem 7.**

Any attempt to increase revenues and profits, Demand function can be decomposed into percentage changes and elasticity of the component parts. If Q = f (P, A), where P is price, A is advertising, ED and EA are price and advertising elasticity, then: %ΔQ = %ΔP(ED) + %ΔA(EA) = (+4%)(-1.5) + (+11%)(.6) = +.6%. We expect a small increase in quantity of .6%.Total revenue will increase since both price and quantity increase. With 6% higher prices and .6% higher quantity, revenue rises to 6.6%. The prediction is less precise than this analysis suggests, because it is based on calculus which works best for very small changes. The total revenues are affected because of a decrease in demand

**Chapter 4 Problem 5**

Demand for Tweetie Sweeties by General Cereal’s question:

a) The price elasticity is -2.15, which is elastic.

b) The advertising elasticity 1.05.

c) The population elasticity is 3.70. A one-percent increase in the population over under the age of 12 will lead to a 3.7% increase in the demand for Tweetie Sweeties.

**Chapter 4 Problem 6.**

Demand for haddock question:

(a). The price elasticity is -2.174, which is elastic.

(a). The income elasticity is 0.461, which is a normal good, but a necessity like most food items.

(b). The cross price elasticity with meat and poultry is 1.909. Fish and meat/poultry are substitutes.

(c). Haddock is elastic, a necessity, and other meats are close substitutes.

(d). A 5% increase in income leads to a (.461) (5%) = 2.305% increase in the demand for Haddock.

**Chapter 4 Problem 7.**

Demand for furniture question:

(a). The income elasticity of furniture is 1.08, which makes it to be luxury category. The price elasticity (using real prices) is -0.48, which is inelastic.

(b).Then the R will be the value of private construction per household. For any 1% increase in the private residential construction, there is a .16% increase in furniture purchases. The greater the amount spent purchasing families housing commodity, the more furniture that they will acquire.

(c). Another things is that If all furniture was alike, using physical units could work. Some furniture is elaborate, with rare wood or costly fabrics, while others are constructed cheap. Revenue is not perfect, but it allows chairs, tables, and Armoires to be added together in dollar values. In units, the price elasticity is shows how a 1% price jump in real prices affects units sold; whereas in revenue, the price elasticity shows how a 1% real price increase impacts the dollar value of goods sold.