Week #4 Worksheet Solutions – Elasticity ~ Case Study

For questions 1 – 5, decide which good is more elastic based on the determinants of price elasticity of demand (assume not a lot of time has gone by since price change).

1. Foreign Travel vs. Shoe.
2. Cigarettes vs. Housing
3. Coffee vs. Automobiles
4. Gasoline vs. Private Education
5. Restaurant Meals vs. Chevrolet Automobiles

6. If the price elasticity of demand for the movie "Dirty Harry" is -0.44, how would you classify the demand for this movie? -0.44 means that the % change in quantity demanded is less than the percent change in price. Inelastic.

7. Recently, a downtown movie theater reduced its ticket price on Monday evenings from $5 to $2 and (everything else staying constant) average ticket sales on Monday evening rose from 100 to 400.
$$\varepsilon = \frac{\Delta Q/(Q_1 + Q_2)}{\Delta P/(P_1 + P_2)}$$ ➔ = 7/5 ➔ use arc elasticity since you are given two sets of P and Q.

8. The price of oysters increases by 14%. As a result, the quantity demanded decreases by 27%. What is the price elasticity of demand for oysters? $\varepsilon = \frac{\Delta Q/Q}{\Delta P/P}$ ➔1.93.

9. A 10% increase in the price of Redskins jerseys causes the quantity demanded to fall by 10%. How would you classify demand for these jerseys? Unit elastic.

10. Suppose the price elasticity of demand for gasoline is - 0.4 and the price of gas increased by 22%. What is the expected change in quantity demanded? -8.8%

11. The price elasticity of demand for iPods is -4. A 20% decrease in the price of iPods would cause the quantity demanded to increase by 80%.

12. The demand for airline tickets is elastic. Other things equal, if the price of airline tickets decreases, total revenue from the sales of airline tickets will increase/decrease/not change/indeterminate. Increase. Since the price elasticity of demand is elastic, % 1 decrease will cause more than %1 increase in quantity demanded. Therefore, total revenue=P*Q increases.

13. If the supply of a good is unit elastic and the price of that good increases by 10%, quantity supplied decreases by 10%.

14. Suppose the price elasticity of demand for gasoline is = .4 and the price of gas increased by 22%. What is the expected change in quantity demanded? -8.8%, but technically price elasticity of demand cannot be positive!!!