Answer on Question #63290 -Economics - Microeconomics

A policy analyst has shown that the price elasticity of demand for salt is 0.85 while that of visitation to the national parks is 2.1.

i) Argue whether this scenario is feasible

ii) By what percentage the demand for these two commodities change, if as a result of a tax policy the prices are increased by 8 percent?

Answer.

I) Because salt is essential commodity, the demand for it is inelastic, and this is illustrated by the coefficient of elasticity that less than 1. The visitation to the national parks is not necessary, and such entertainment has a lot of alternatives, so the demand is price elastic and this is illustrated by the coefficient of elasticity that greater than 1.

II) 6.8%; 16.8%

Solution.

The point price elasticity of demand is calculated as

$$K_d = \frac{\Delta Q}{Q1} : \frac{\Delta \mathrm{P}}{\mathrm{P1}}$$

As Kd=0.85, it means that a 1% increase in the price of salt leads to a 0.85% decrease in quantity demanded. So, if as a result of a tax policy the prices are increased by 8 percent, quantity demanded decreases in 8*0.85=6.8%

As Kd=2.1, it means that a 1% increase in the price of visitation to the national parks leads to a 2.1% decrease in quantity demanded. So, if as a result of a tax policy the prices are increased by 8 percent, quantity demanded decreases in 8*2.1=16.8%