Answer on Question #39299 – Economics - Economics of Enterprise

Assignment

At Roy's Music Shack, when the price of CDs is $13, 500 are demanded. When the price of CDs is $14, 200 are demanded. Using the averages of the two and quantities, the price elasticity of demand for CDs is ?

Solution

Price elasticity of demand (**PED** or **E_d**) is a measure used in economics to show the responsiveness, or elasticity, of the quantity demanded of a good or service to a change in its price. More precisely, it gives the percentage change in quantity demanded in response to a one percent change in price.

$$E_d = \frac{\frac{P_1+P_2}{2}}{\frac{Q_{d_1}+Q_{d_2}}{2}} \times \frac{\Delta Q_d}{\Delta P} = \frac{P_1 + P_2}{Q_{d_1} + Q_{d_2}} \times \frac{\Delta Q_d}{\Delta P}$$

In our case Ed = (13 + 14)/(500 + 200)*(200 – 500)/(14 – 13) = -27/700*300/1 = -81/7 = -11.57

So, the demand is very elastic, as its absolute number is much more higher than 1.