

Answer on question #58843- Economics - Microeconomics

Price of Bananas	Quantity Demanded of Bananas
\$1	15
\$2	6
\$3	4

When the price is \$3, a 10% decrease in the price of bananas will increase the quantity demand of bananas by_____.

Solution

A measure of the relationship between in the quantity demanded of bananas and and a change in its price called price elasticity of demand and calculated the following formula:

$$\eta = \frac{(Q_1 - Q_0) \div (Q_1 + Q_0)}{(P_1 - P_0) \div (P_1 + P_0)}$$

The symbol Q_0 represents the initial quantity demand when the price equals P_0 ,

The symbol Q_1 represents the new quantity demand when the price changes to P_1 .

$$\eta = \frac{(4 - 6) \div (4 + 6)}{(3 - 2) \div (3 + 2)} = -\frac{0.2}{0.2} = -1$$

When price of bananas decrease by 1% will increase the quantity demand of bananas by 1% .

When price of bananas decrease by 10% will increase the quantity demand of bananas by 10% .

Answer

The quantity demand of bananas increase by 10% if price of bananas drop by 10%.