

Elastic, unitary elastic or inelastic definition essay



**ASSIGN
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Everyday there is a change in prices of a good due to economic changes. The outcome of any situation determines the price of a good. There are three types of elasticity of demand that each good has, which are elastic, a situation in which the supply and demand for a good or service can vary significantly due to the price (Elastic Definition, 2012); unitary elastic, a situation where a change in one factor causes an equal or proportional change in another factor (Unitary Elasticity, 2012); and inelastic, situation in which the supply and demand for a good are unaffected when the price of that good or service changes (Inelastic Definition, 2012).

PROBLEM: Suppose you are a painter, and the price of a gallon of paint increases from \$3. 0 a gallon to \$3. 50 a gallon. Your usage of paint drops from 35 gallons a month to 20 gallons a month. Perform the following: Compute the price elasticity of demand for paint and show your calculations. Decide whether the demand for paint is elastic, unitary elastic, or inelastic. Explain your reasoning and interpret your results. Compute the price elasticity of demand for paint and show your calculations. In order to compute the price elasticity, I must use the following formula:

$$E_d = \frac{\% \text{ Change in quantity demanded}}{\% \text{ Change in price}} = \frac{(Q_2 - Q_1)/Q_1}{(P_2 - P_1)/P_1}$$

P_1 = Price before change

P_2 = Price after change Q_1 = Quantity before change Q_2 = Quantity after change E_d = Price elasticity of demand

Now I can enter in my values: $E_d = (20-35)/35/(3.50-3.00)/3.00$, $E_d = (-15)/35/(.50)/3.00$, $E_d = -0.429/0.167$, $E_d = -2.569$ So every month, the price elasticity of demand for paint is -\$2. 57. Decide whether the demand

for paint is elastic, unitary elastic, or inelastic. Based on the definitions above, it seems that the supply and demand of the paint varies significantly due to the price raising from \$3. 00 to \$3. 50 a gallon.

So the demand for paint is Elastic. Explain your reasoning and interpret your results. The demand for paint is elastic because when the price of the paint increased, it changed the quantity of the paint demanded. When the results were interpreted, it seems that the quantity demanded went down because the PeD coefficient in a change of the price went up. So there is an immediate response to the change in quantity, causing revenues to go down.

References:

- Elastic Definition. (2012). Retrieved February 13, 2012, from Investopedia ULC: <http://www.investopedia.com/terms/e/elastic.asp#axzz1mCXH0ucW> Inelastic Definition. (2012).
- Retrieved February 13, 2012, from Investopedia: <http://www.investopedia.com/search/default.aspx?q=inelastic#axzz1mCXH0ucW> Microeconomics- Price Elasticity of Demand. (2012).
- Retrieved February 13, 2012, from tutor2u.net: <http://tutor2u.net/economics/revision-notes/as-markets-price-elasticity-of-demand.html> Unitary Elasticity. (2012).
- Retrieved February 13, 2012, from BusinessDictionary.com: <http://www.businessdictionary.com/definition/unitary-elasticity.html>