

Answer on Question #56116

a) Suppose the monthly income of an individual increases from Rs 20,000 to Rs 25,000 which increases his demand for clothes from 40 units to 60 units. Calculate the income elasticity of demand.

Solution:

Income elasticity of demand = % change in quantity demanded / % change in income

% change in quantity demanded = $60/40 = 1,5$. Increase on 50%

% change in income = $25\ 000/20\ 000 = 1,25$. Increase on 25%

Income elasticity of demand = $50\%/25\% = 2$

Answer: Income elasticity of demand = 2

b) Quantity demanded for tea has increased from 300 to 400 units with an increase in the price of the coffee powder from Rs 25 to Rs 35. Calculate the cross elasticity of demand between tea and coffee.

Solution:

Cross elasticity of demand between tea and coffee = % change in quantity demanded of tea / % change in price of coffee.

% change in quantity demanded of tea = $400/300 = 1,33$. Increased on 33,3%

% change in price of coffee = $35/25 = 1,4$. Increased on 40%

Cross elasticity of demand between tea and coffee = $33.3/40 = 0.8325$

Answer: Cross elasticity of demand between tea and coffee = 0.8325