

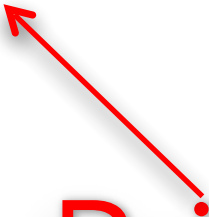
% change in Price

% change in Q_d

Size of the change in Q_d

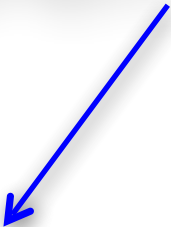
Size of the change in Price

$e_p^d =$



Price

Demand



Formula to calculate the elasticity

Formula to calculate the price elasticity of
demand






$$\left(\frac{\text{Change in } Q_d}{\text{Average } Q_d} \right)$$

$$\left(\frac{\text{Change in Price}}{\text{Average Price}} \right)$$

$$e_{p_d} = \frac{\% \Delta Q_d}{\% \Delta \text{Price}}$$



Δ means "change in"

→ % change in Q_d

→ % change in Price

Formula to calculate the **price** elasticity of **demand**

Demand

Price

$$e_{p^d} = \frac{\text{Size of the change in } Q^d}{\text{Size of the change in Price}} = \frac{\left(\frac{\text{Change in } Q^d}{\text{Average } Q^d} \right)}{\left(\frac{\text{Change in Price}}{\text{Average Price}} \right)}$$

% change in Q^d

% change in Price

Δ means "change in"

$$e_{p^d} = \frac{\% \Delta Q^d \rightarrow \% \text{ change in } Q^d}{\% \Delta \text{Price} \rightarrow \% \text{ change in Price}}$$

To measure a consumer's sensitivity to price changes