% 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

$$\left(\frac{\text{Change in } Q^d}{\text{Average } Q^d} \right)$$

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

$$e_p^d = \frac{\%\Delta Q^d}{\%\Delta Price}$$

Formula to calculate the price elasticity of demand

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

Demand

Price

% change in Q^d

% change in Price

Δ means "change in"

$$e_p{}^d = \frac{\%\Delta Q^d}{\%\Delta \text{Price}}$$

To measure a consumer's sensitivity to price changes