



% change in Income

% change in  $Q_d$

Size of the change in  $Q_d$

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Size of the change in Income

$e_y d =$



Income

# Demand





Formula to calculate the income elasticity of  
demand







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

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

$$e_{y_d} = \frac{\% \Delta Q_d}{\% \Delta \text{Income}}$$

# Formula to calculate the **income** elasticity of demand

**Demand**  **Income** 

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

$$e_{y^d} = \frac{\% \Delta Q^d}{\% \Delta \text{Income}}$$

Income	Quantity Demanded for Good X
1000	300
2000	400