









Example: The price elasticity of demand = -0.5

Calculate the size of the **change in price** necessary to cause a **10% reduction in Q^d**



$$\% \Delta P = \frac{-10}{-0.5}$$

$$\% \Delta P = +20$$



n





d

e









a

U

S



a







d





p



n

Q

d

p







e

m

u

S





n







a

S



b

Y

2





$$\% \Delta P = \frac{\% \Delta Q_d}{e_p^d}$$



Rearrange

$$e_{pd} = \frac{\% \Delta Q_d}{\% \Delta P}$$


$$e_p^d = \frac{\% \Delta Q^d}{\% \Delta P} \quad \text{Rearrange} \quad \% \Delta P = \frac{\% \Delta Q^d}{e_p^d}$$

Example: The price elasticity of demand = -0.5

Calculate the size of the **change in price** necessary to cause a **10% reduction in Q^d**

$$\% \Delta P = \frac{?}{-0.5}$$

$$\% \Delta P = +20$$

In order to cause a **10% drop** in Q^d price must **increase by 20%**

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

