



$$e_{p_d} = \frac{\% \text{ change in quantity demanded}}{\% \text{ change in Price}}$$

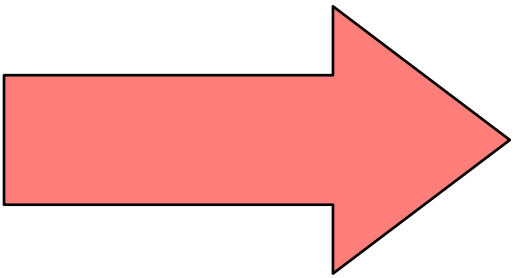
If the number on the top (%change in quantity demanded) is **larger** than the number in the bottom (%change in Price)

If the %change in quantity demanded  
is smaller than the %change in Price

If the  $\% \Delta Q^d$  is

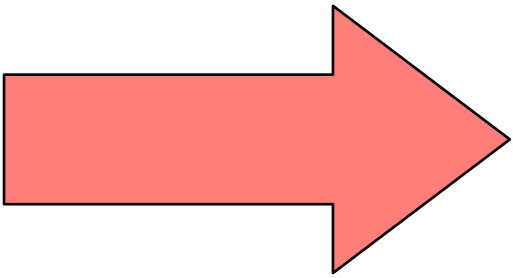
equal to the  $\% \Delta P$

The elasticity will  
be a number  
**larger** than one

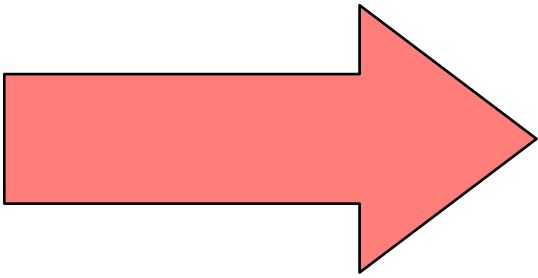


The elasticity will  
be a number  
**smaller than one**





The elasticity will be  
a number equal to  
one



$$e_{pd} = \frac{\% \Delta Q^d = 60\%}{\% \Delta P = 10\%}$$

$$e_p d = -6$$

Ignoring the sign:

Demand is Elastic

$$e_{pd} = \frac{\% \Delta Q_d = 12\%}{\% \Delta P = 25\%}$$



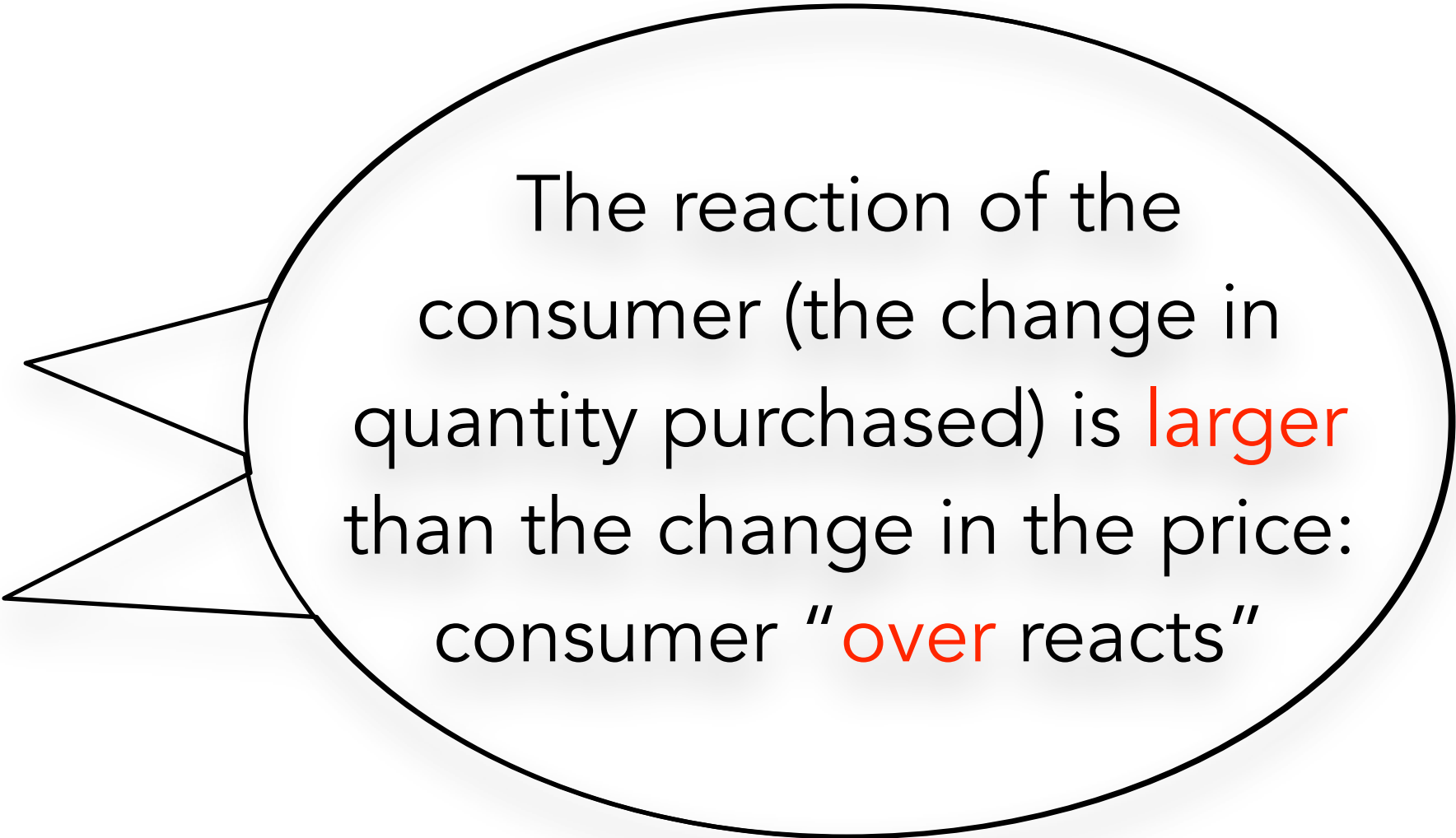
$$e_p^d \equiv -0.48$$

Demand is Inelastic

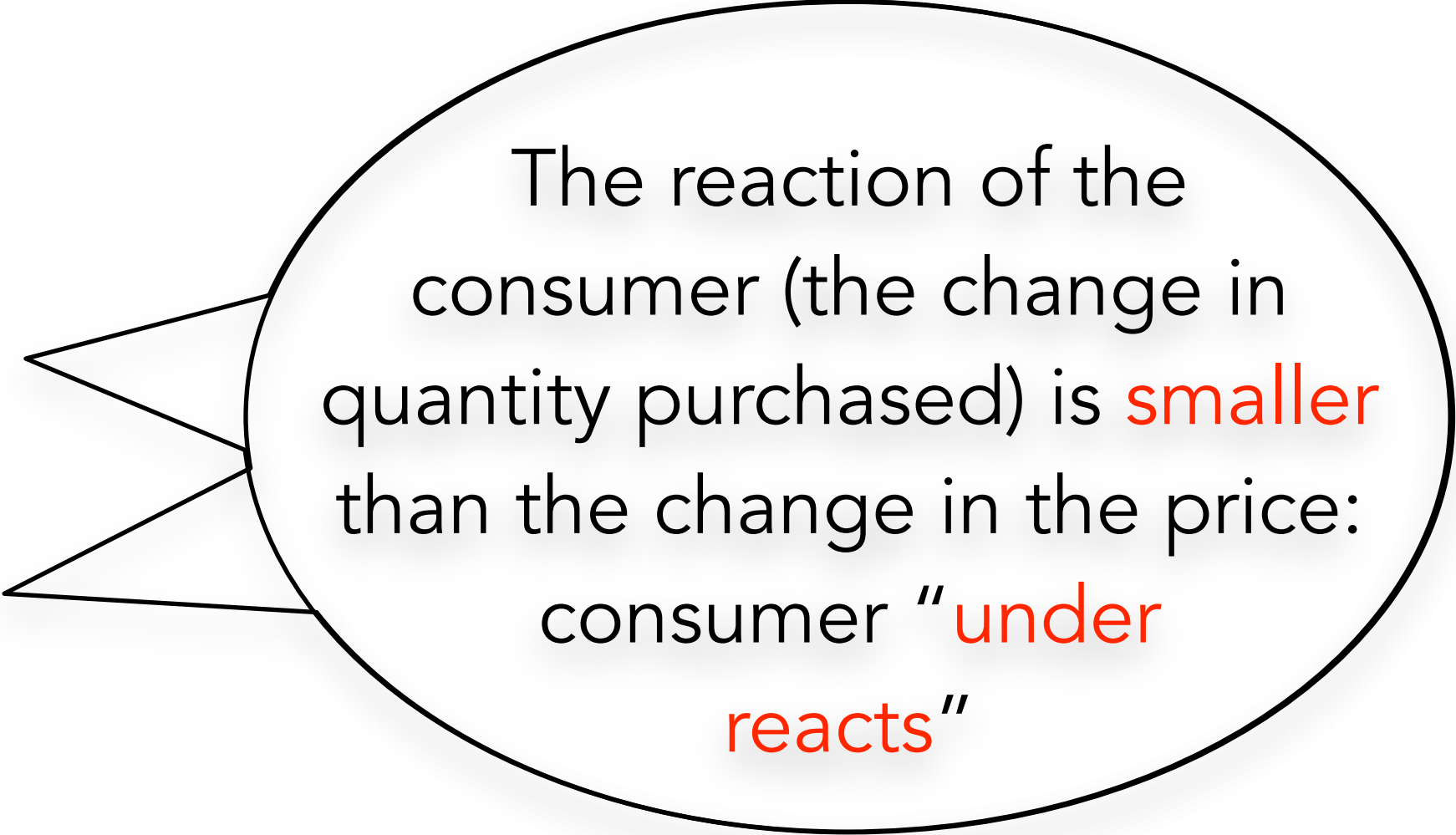
$$e_{pd} = \frac{\% \Delta Q_d = 12\%}{\% \Delta P = 12\%}$$

$$e_p d = -1$$

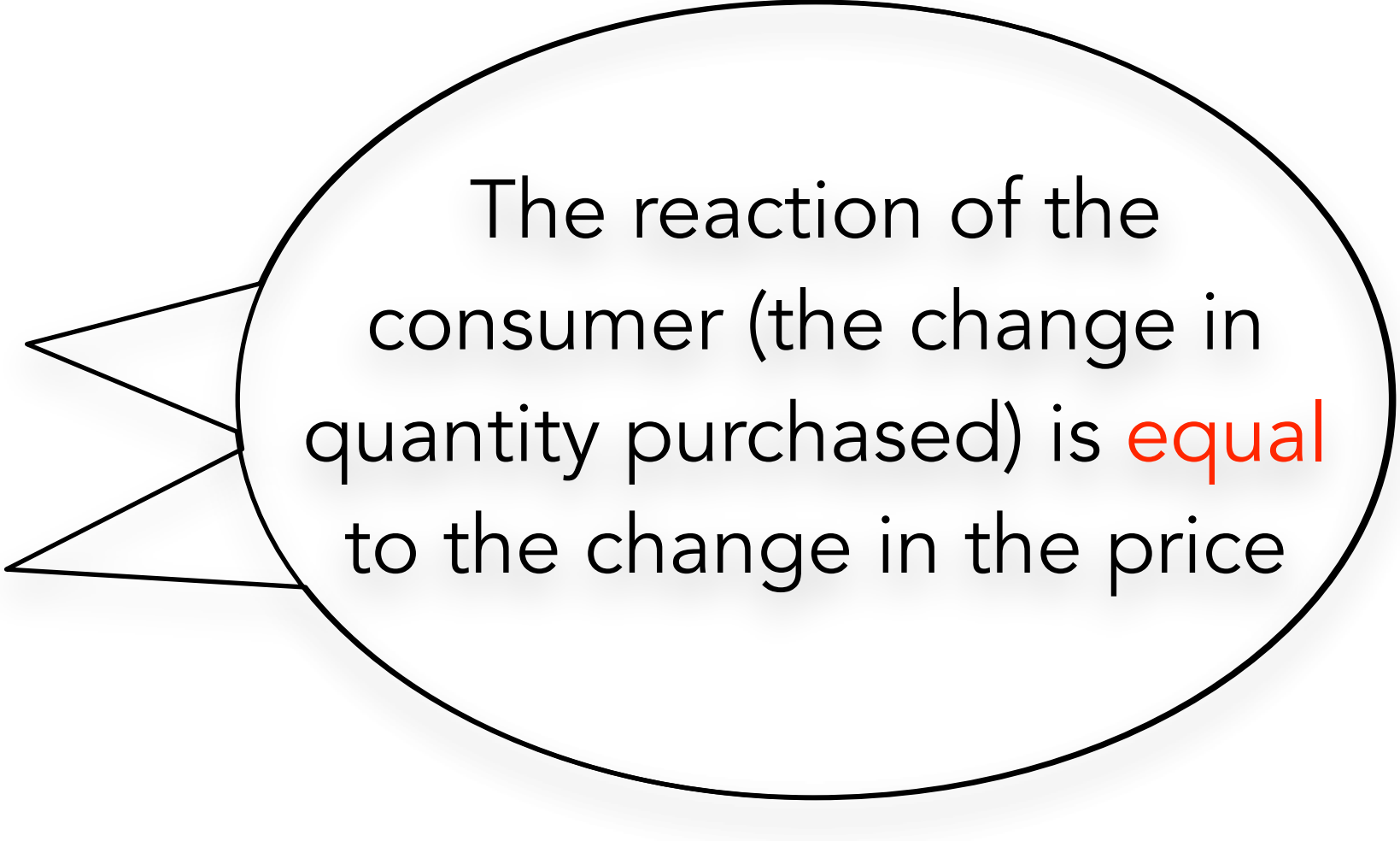
Demand is Unit Elastic



The reaction of the consumer (the change in quantity purchased) is **larger** than the change in the price: consumer "**over** reacts"



The reaction of the  
consumer (the change in  
quantity purchased) is **smaller**  
than the change in the price:  
consumer "**under**  
**reacts**"

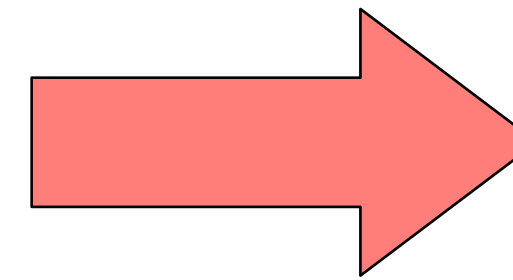


The reaction of the  
consumer (the change in  
quantity purchased) is **equal**  
to the change in the price



$$e_p^d = \frac{\% \text{ change in quantity demanded}}{\% \text{ change in Price}}$$

$$e_p^d = \frac{\% \Delta Q^d = 60\%}{\% \Delta P = 10\%}$$

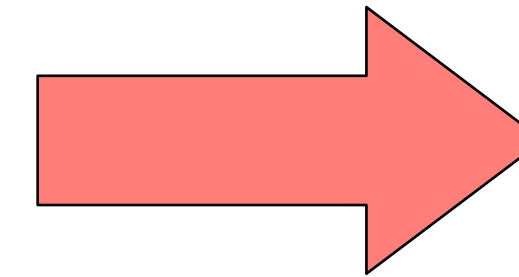


Ignoring the sign:

$$e_p^d = -6$$

Demand is Elastic

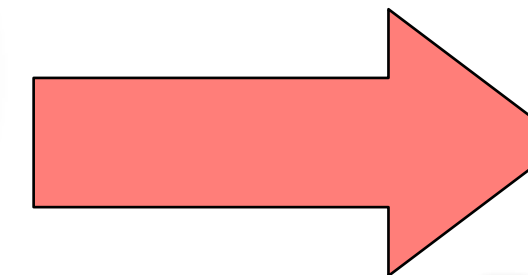
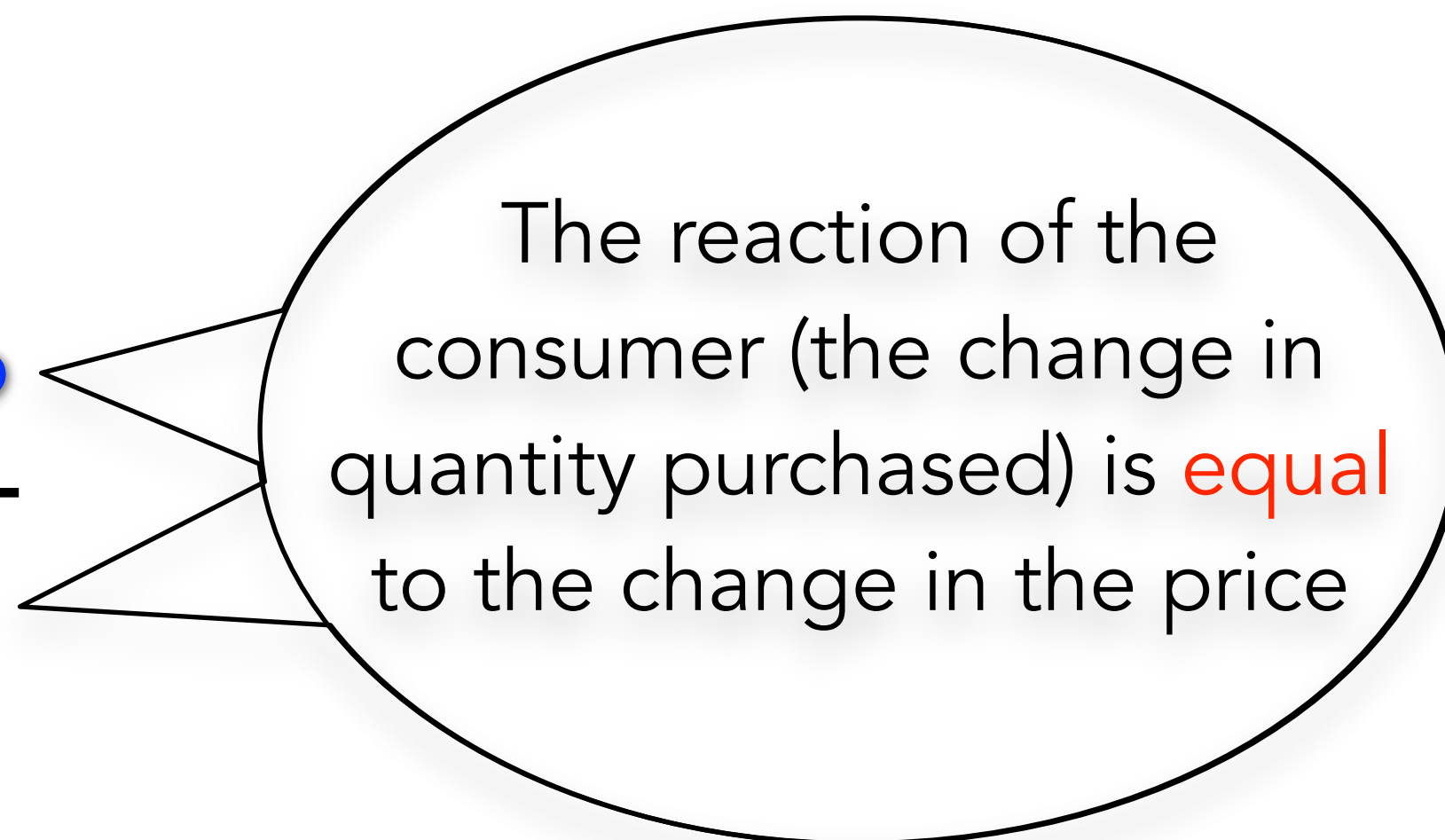
$$e_p^d = \frac{\% \Delta Q^d = 12\%}{\% \Delta P = 25\%}$$



$$e_p^d = -0.48$$

Demand is Inelastic

$$e_p^d = \frac{\% \Delta Q^d = 12\%}{\% \Delta P = 12\%}$$



$$e_p^d = -1$$

Demand is Unit Elastic

Price

$P_0$

$P_1$

Larger change in in Q

$Q_0$

$Q_1$

