

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

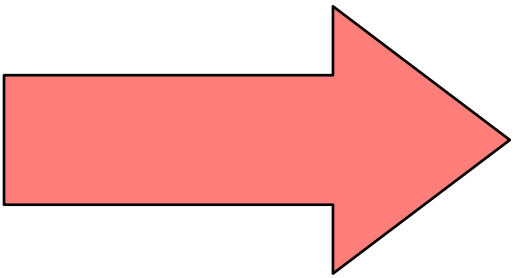
If the number on the top (%change in quantity demanded) is **larger** than the number in the bottom (%change in Price)

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

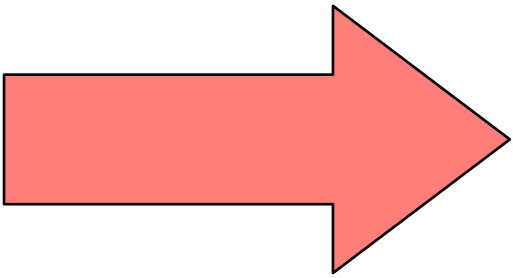
If the $\% \Delta Q^d$ is

equal to the $\% \Delta P$

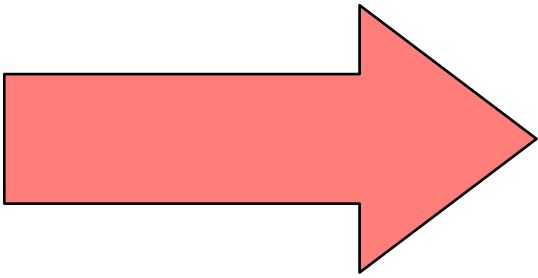
The elasticity will
be a number
larger than one



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

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

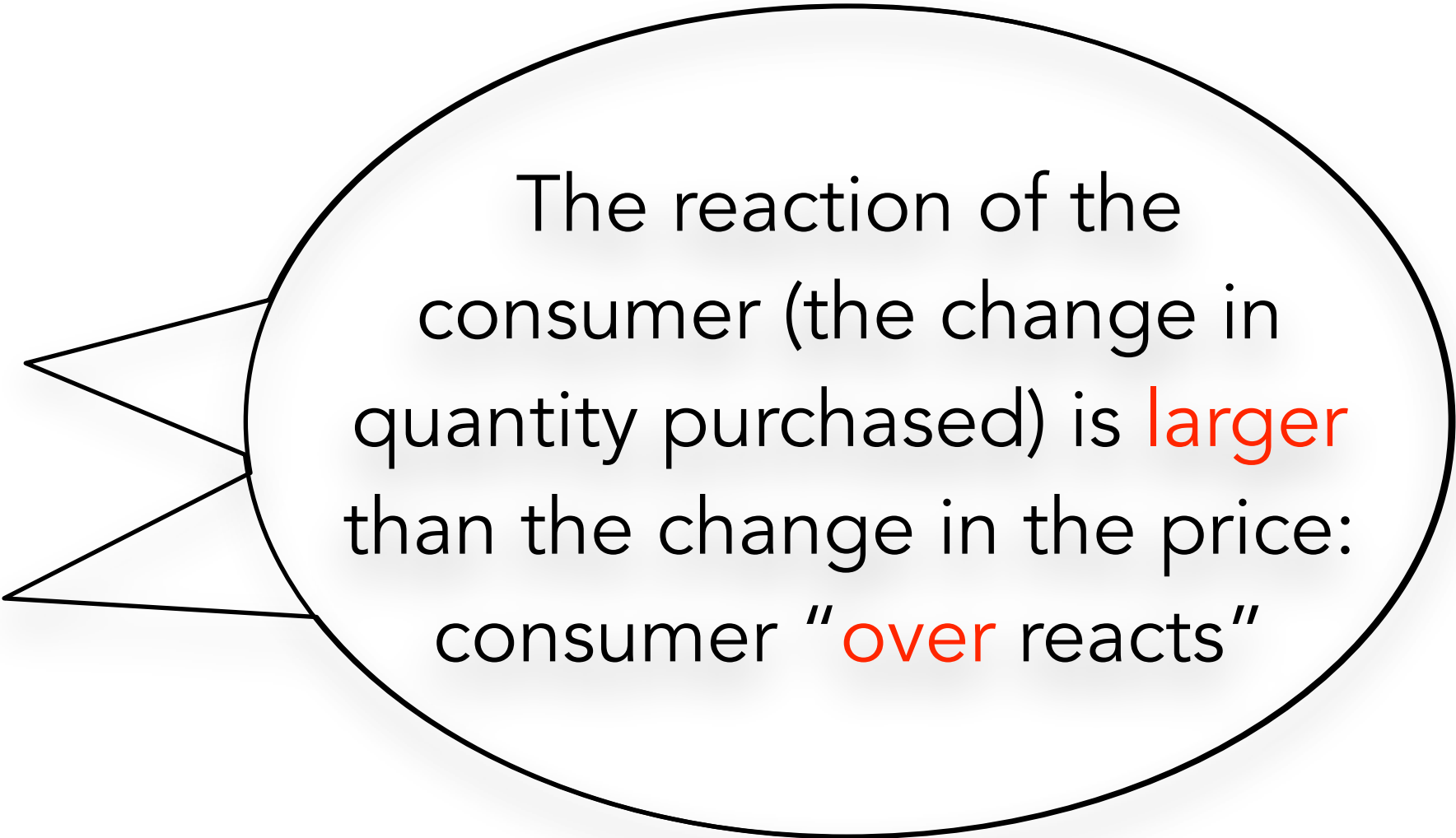
$$e_p^d \equiv -0.48$$

Demand is Inelastic

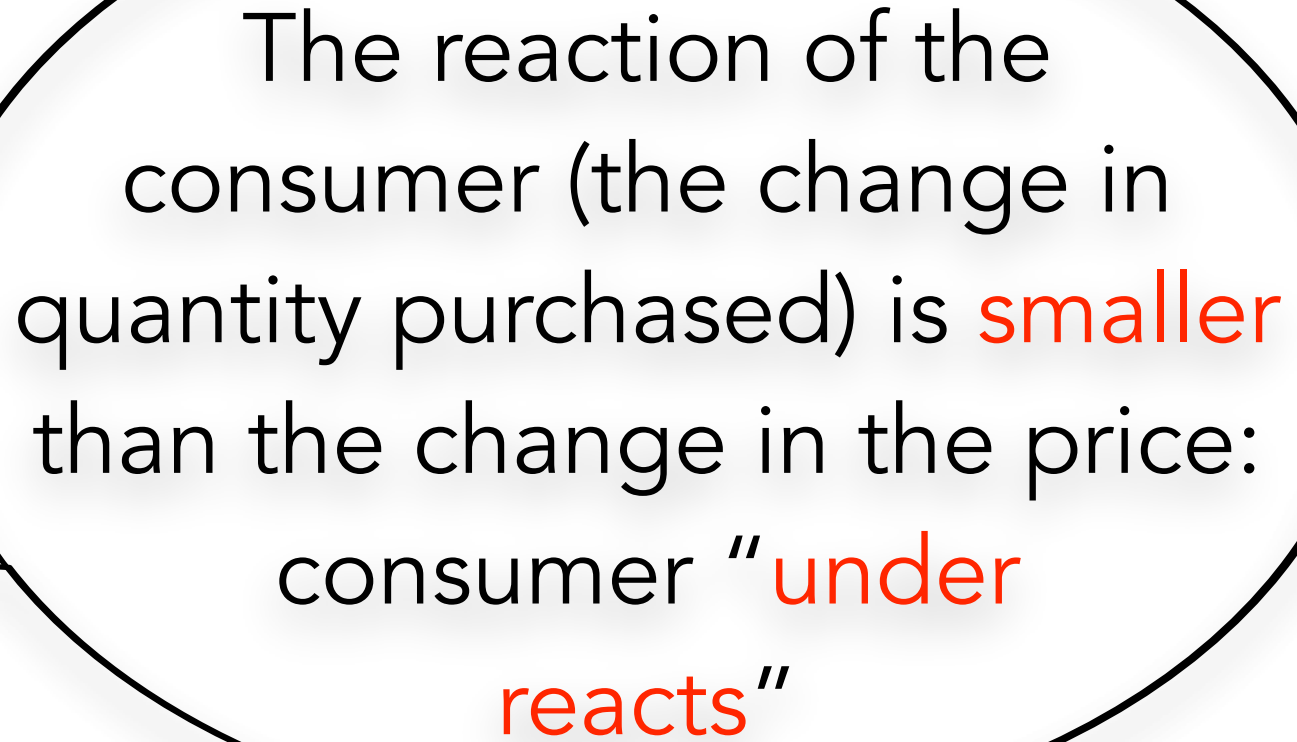
$$e_{pd} = \frac{\% \Delta Q_d = 12\%}{\% \Delta P = 12\%}$$

$$e_p d = -1$$

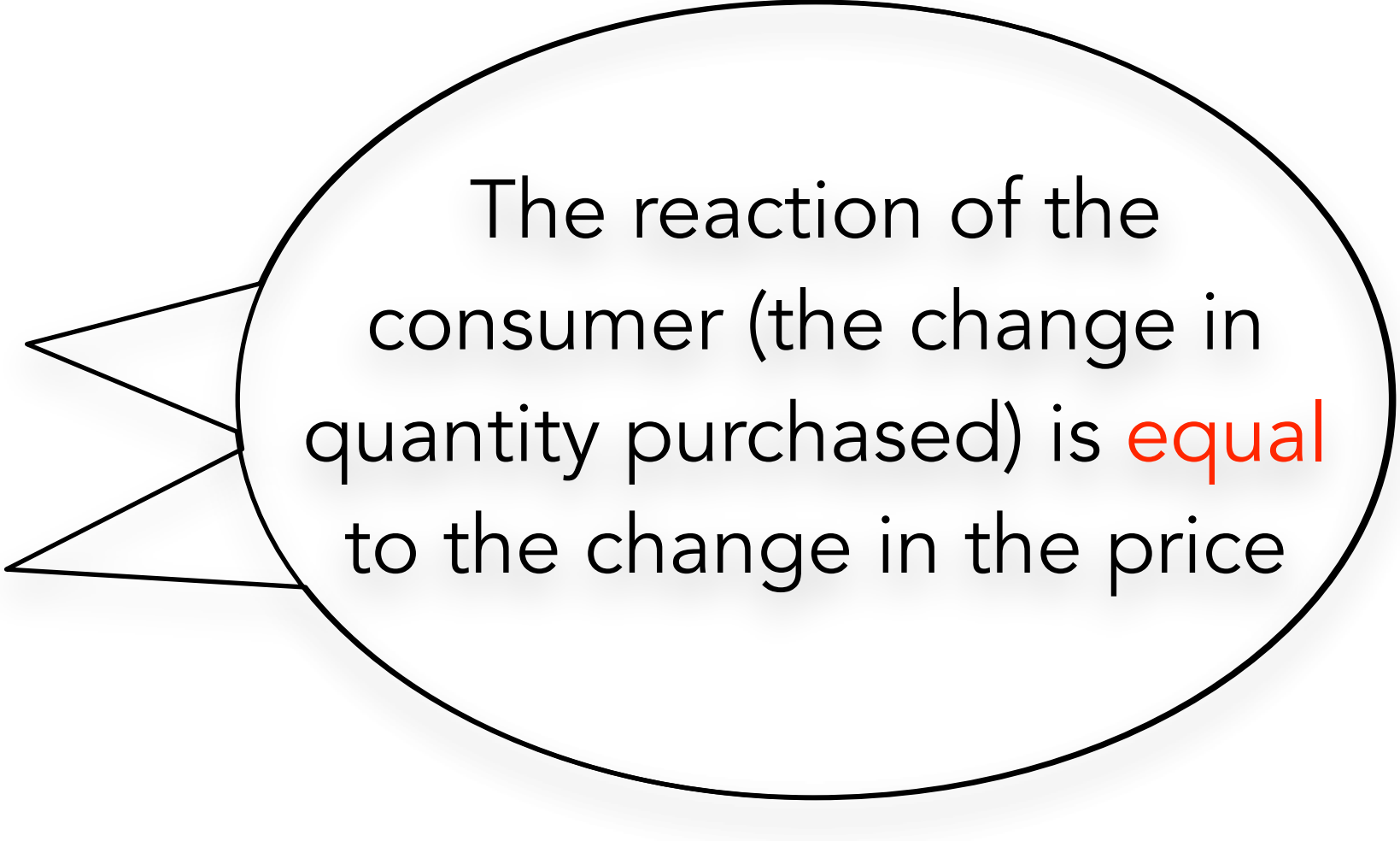
Demand is Unit Elastic



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



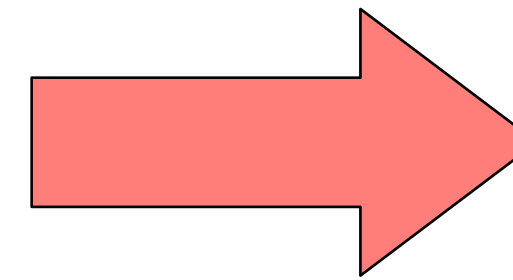
The reaction of the
consumer (the change in
quantity purchased) is **smaller**
than the change in the price:
consumer "**under**
reacts"



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

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

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

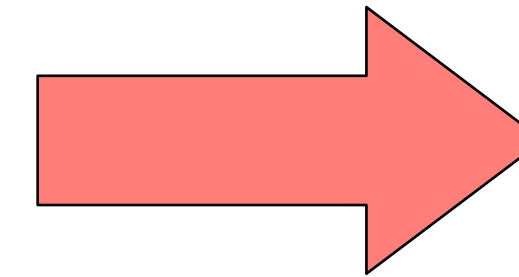


Ignoring the sign:

$$e_p^d = -6$$

Demand is Elastic

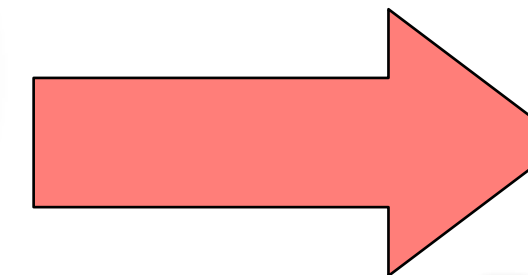
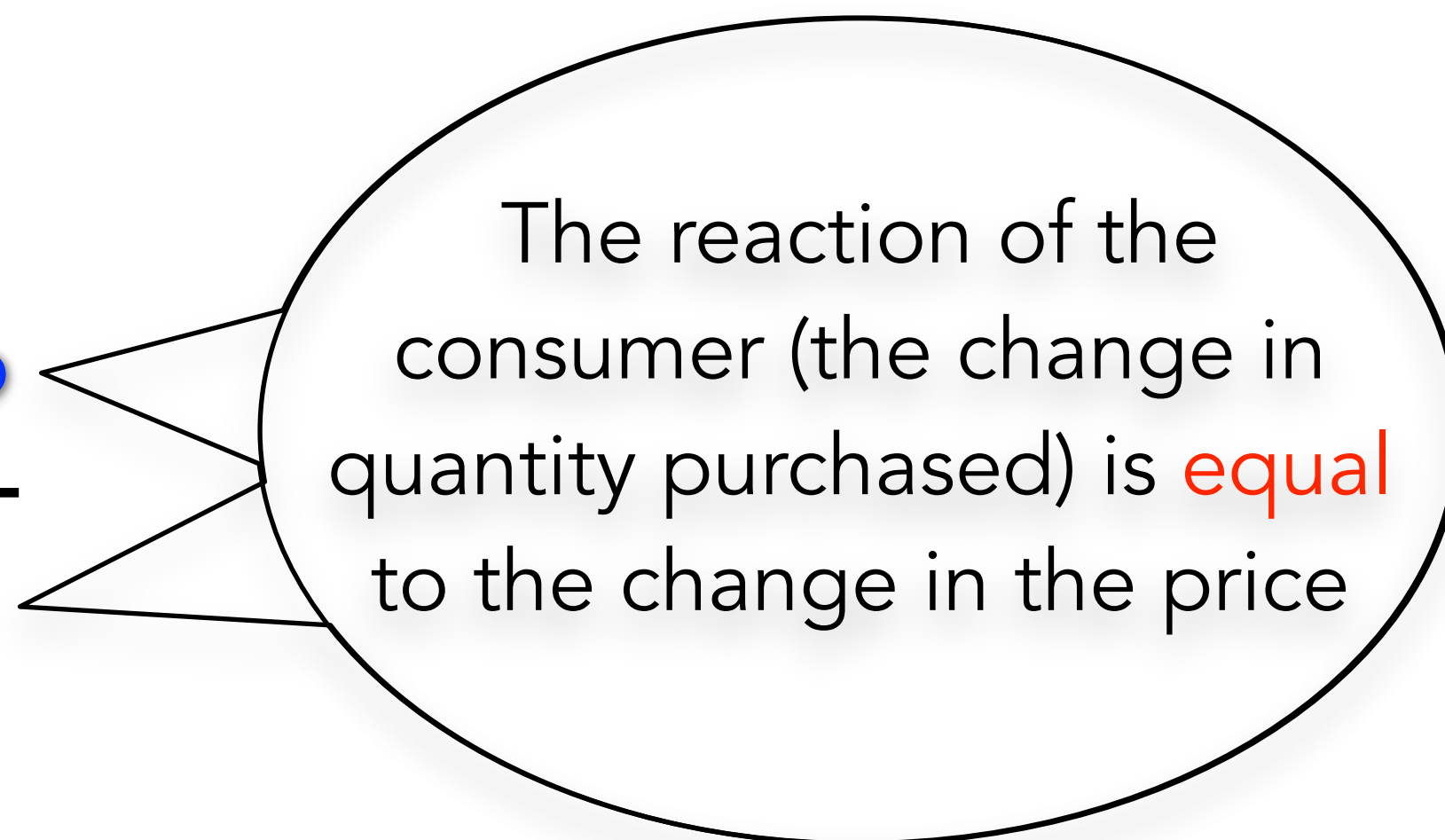
$$e_p^d = \frac{\text{\%}\Delta Q^d = 12\%}{\text{\%}\Delta P = 25\%}$$



$$e_p^d = -0.48$$

Demand is Inelastic

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



$$e_p^d = -1$$

Demand is Unit Elastic

Price

P_0

P_1

Larger change in in Q

Q_0

Q_1

