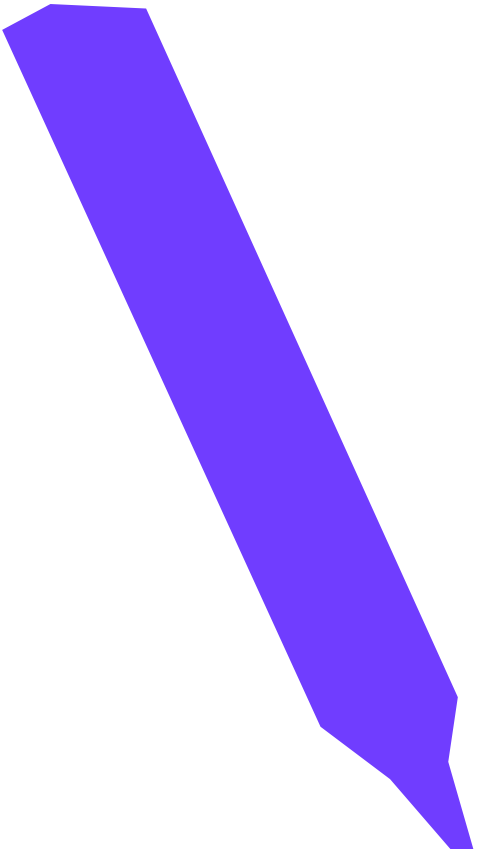
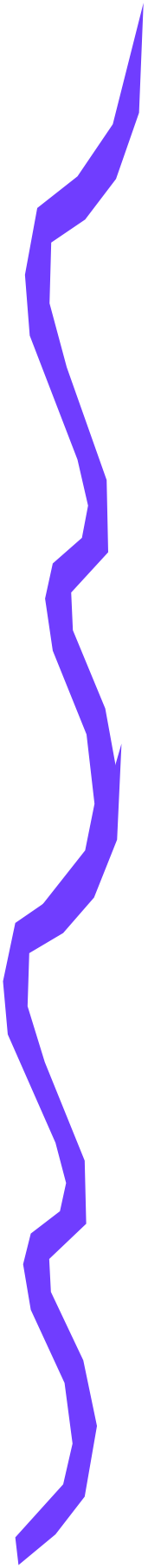
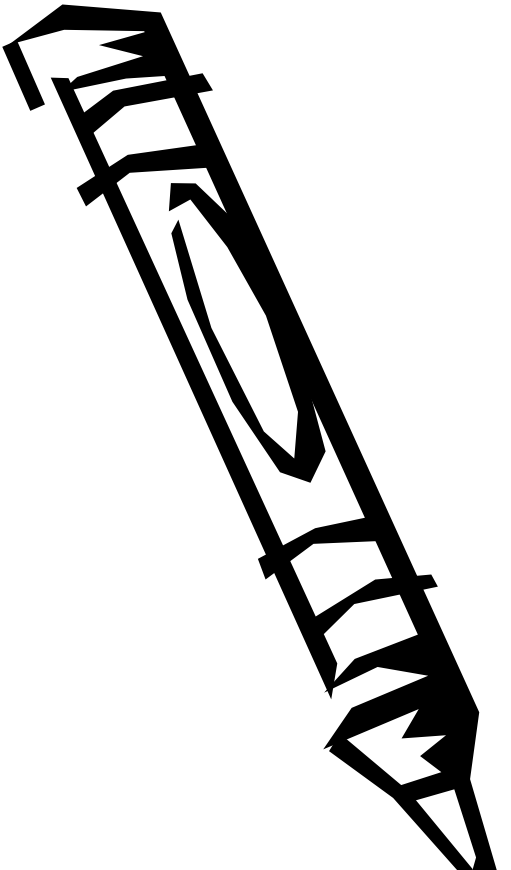




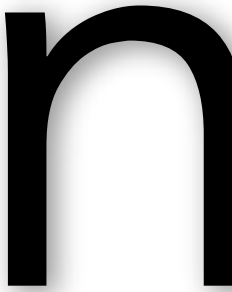


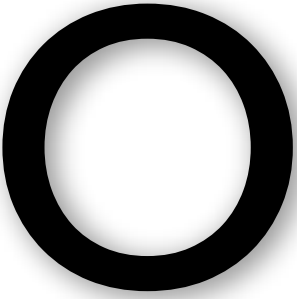
The price elasticity of demand = -0.5

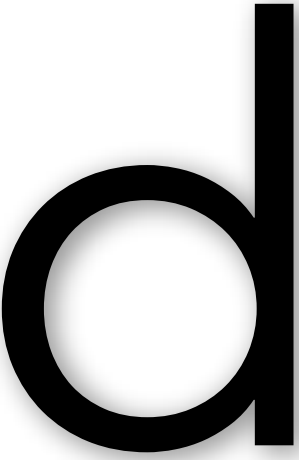
Calculate the necessary change in price to cause a 10% reduction in Q^d

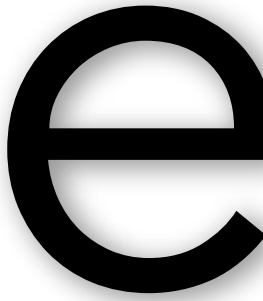
$$\%\Delta P = \frac{-10}{-0.5}$$

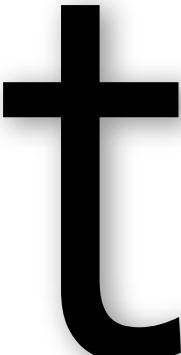
$$\%\Delta P = +20$$

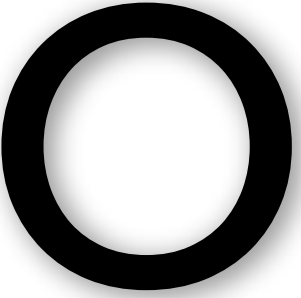


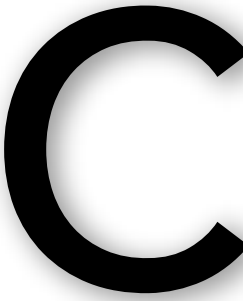


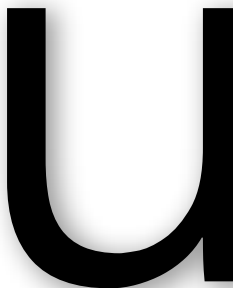


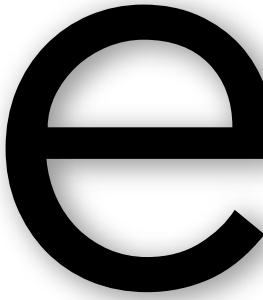




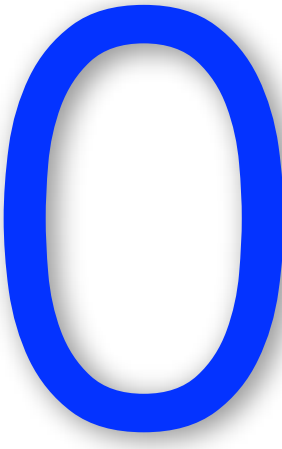


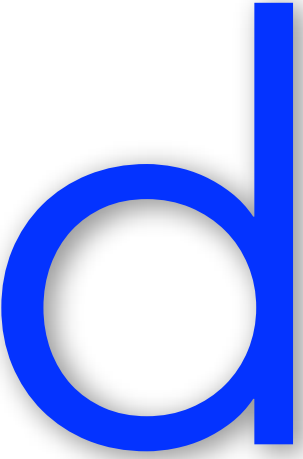


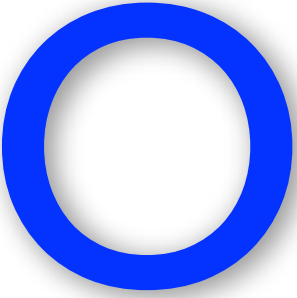


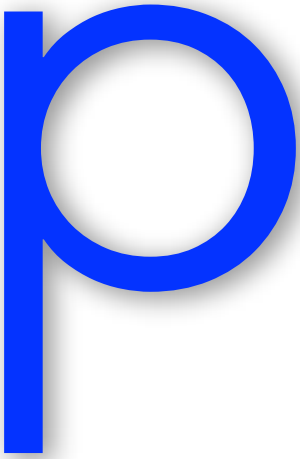


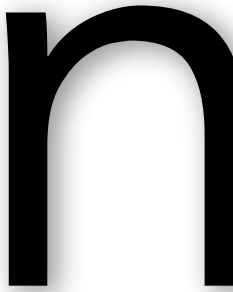
a

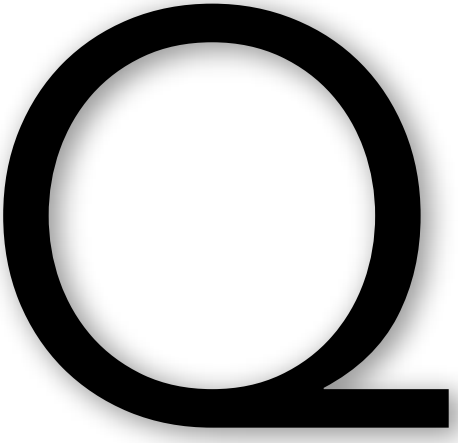


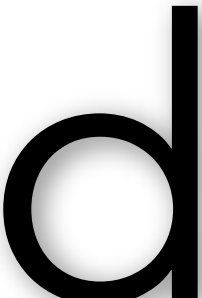


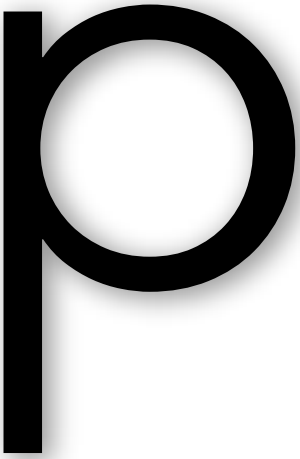


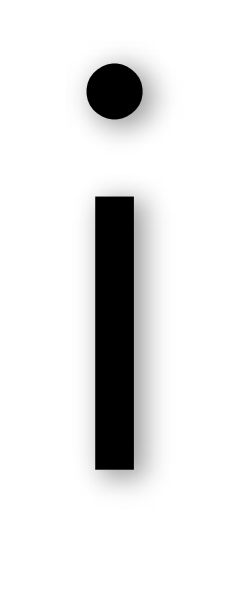


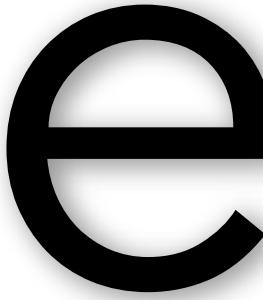


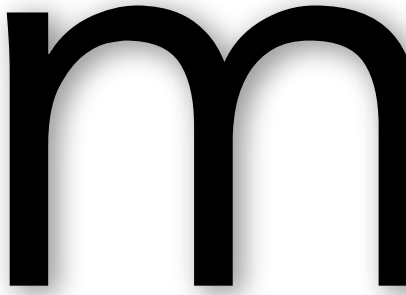


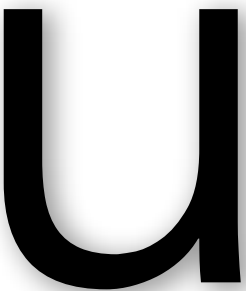


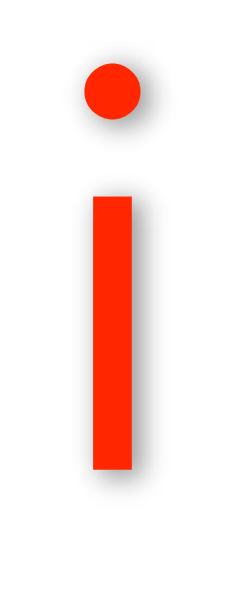


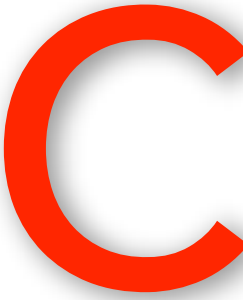




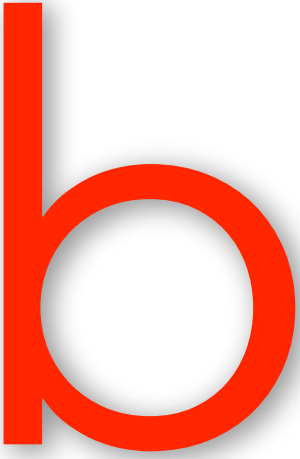


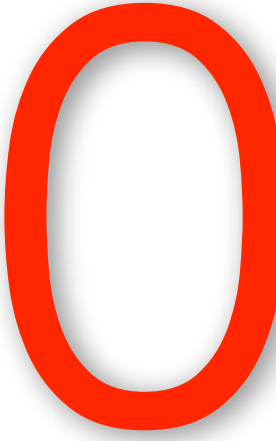






a





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

Rearrange

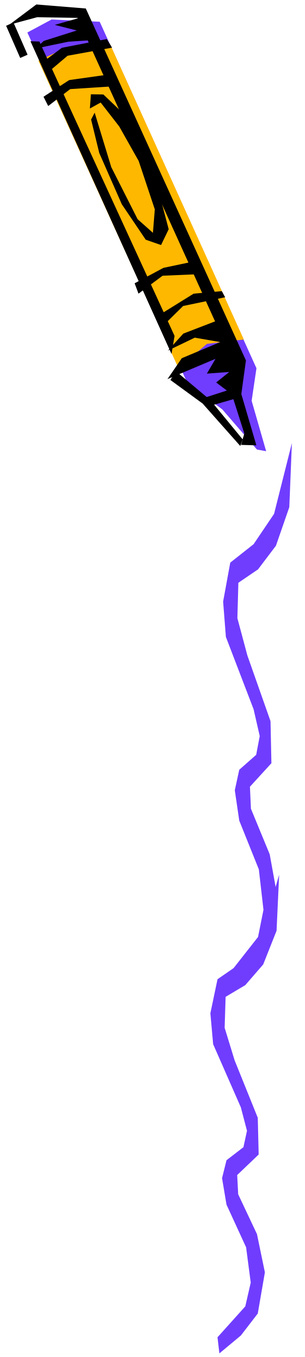
$$e_p^d = \frac{\%\Delta Q^d}{\%\Delta P}$$

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

The price elasticity of demand = -0.5
Calculate the necessary change in price
to cause a 10% reduction in Q^d

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

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

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

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