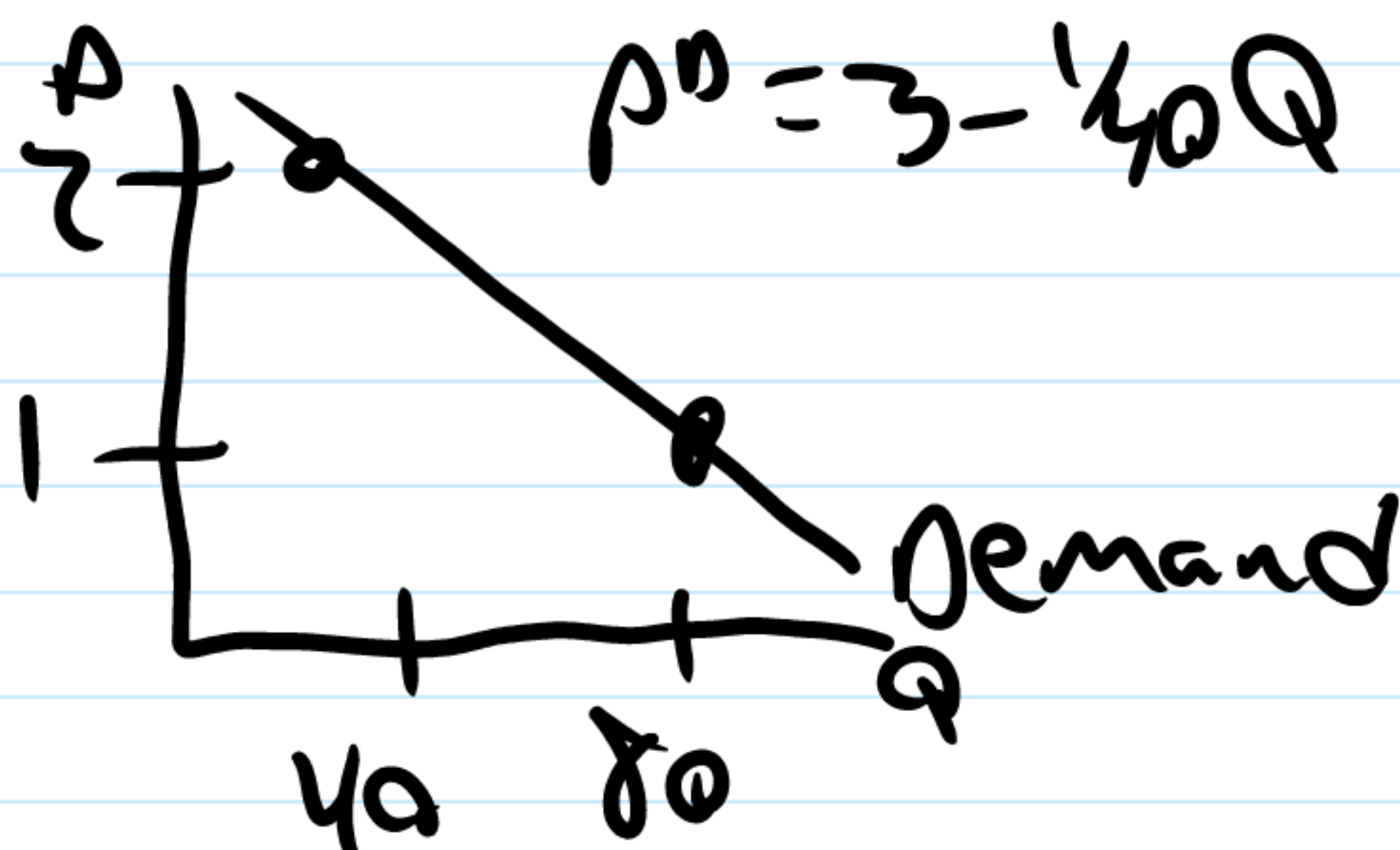$$\frac{\Delta Y}{\Delta X} \qquad \frac{\Delta Q^D}{\Delta P}$$

$$\frac{\Delta Q^D}{\Delta P} \qquad \frac{\% \Delta Q^D}{\% \Delta P} = 3_P^D$$

$$P^D = 3 - \frac{1}{40} Q$$



Demand

40    80

$$\% \Delta Q = \frac{80 - 40}{40} = \frac{40}{40} = 100\%$$

$$\% \Delta P = \frac{2 - 1}{1} = \frac{-1}{1} = -100\%$$

$$3^D = -1$$

$$\% \Delta Q = \frac{40 - 80}{80} = -\frac{1}{2}$$

$$\% \Delta P = \frac{2 - 1}{1} = 1$$

$$3^D = \frac{-50\%}{100\%} = -\frac{1}{2}$$

$$3^P = \frac{\% \Delta Q}{\% \Delta P} = \frac{\Delta Q / Q}{\Delta P / P}$$

$$= \left(\frac{\Delta Q}{\Delta P}\right) \cdot \left(\frac{P}{Q}\right)$$

"Point elasticity"