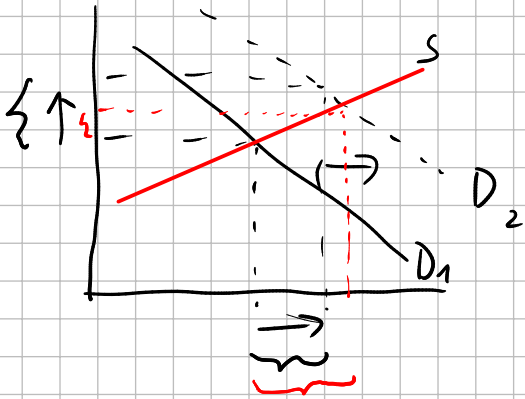


qualitative prediction
describing

≠ don't know how much things change



Recall: slope = $\frac{\text{rise}}{\text{run}} = \frac{\text{vertical distance}}{\text{horizontal distance}}$
 actual change in price
 change in qty (demanded/supplied)
 slope of demand/supply

price elasticity = $\frac{\% \text{ change in quantity demanded/supplied}}{\% \text{ change in price}}$
 start 10 kg end 15 kg

change = $15 - 10 = 5 \text{ kg}$ (absolute)

→ % change = $\frac{15 - 10}{10} = 0.5$ (relative) has no units
 $\hookrightarrow \frac{5 \text{ kg}}{10 \text{ kg}} = \frac{5}{10} = 0.5$

$\frac{15}{10} > 1$

price elasticity of demand = $\left| \frac{\text{change in qty}}{\text{change in price}} \right|$ } one of them has to be negative

absolute value → positive number

$|3| = 3$ $|-3| = 3$

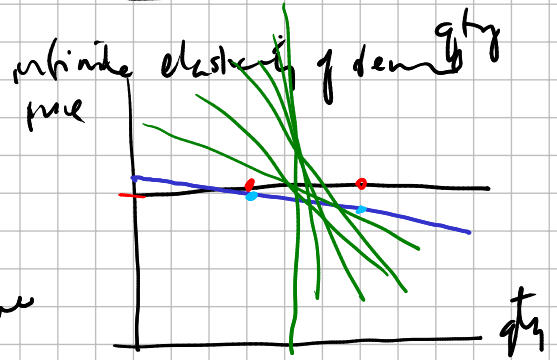
$\left| \frac{\% \text{ change in qty demanded}}{\% \text{ change in price}} \right| = \frac{0.01}{1.47} = 0.0068$
 $\% \text{ change in qty demanded} = 1.47 \times \left[\frac{\% \text{ change in price}}{0.005} \right]$
 $= 0.735 = 73.5\% \text{ decrease}$
 50% increase

$$\frac{\% \text{ change in } q_d}{\% \text{ change in price}} = 0$$



very small \rightarrow component to

$$\frac{\% \text{ change in } q_d}{\% \text{ change in price}} = \text{very large number in absolute value}$$



data

Item 34

demand curve

Q P
 $(\frac{2}{5}, 5)$

$(\frac{1}{2}, 4)$

$$P = \frac{2}{Q}$$

$$5 = \frac{2}{Q}$$

$$4 = \frac{2}{Q}$$



$$\frac{2}{Q} = 5 \Rightarrow$$

$$5 \cdot Q = 2$$

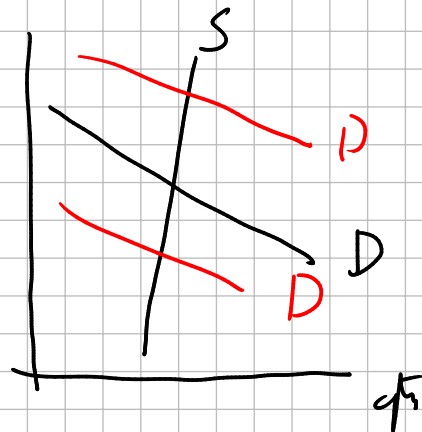
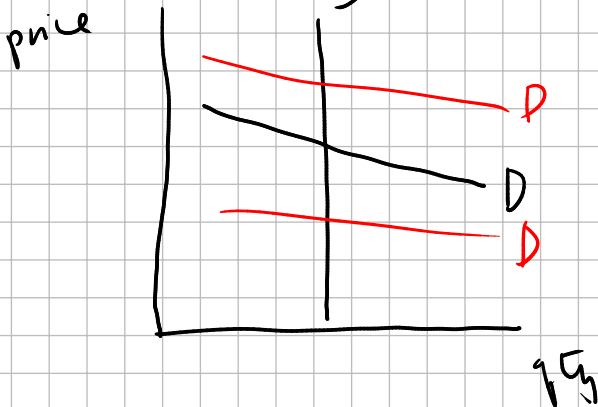
$$Q = \frac{2}{5}$$

$$\Rightarrow 4Q = 2$$

$$Q = \frac{1}{2}$$

price elasticity of demand = . . .

Item 37





Item 40

