

- 1) b) very inelastic
- 2) c) inelastic
- 3) b) increase the price elasticity of demand.
- 4) d) increase

Problem:

1) Furniture store:

Price elasticity of demand $= E_d = -0.5$ (inelastic demand)
lower price by 10% next month.

total revenue

$$\Rightarrow E_d = \frac{\% \Delta Q}{\% \Delta P}$$

$$E_d = -0.5 \text{ \& } \% \Delta P = -10\%$$

$$\Rightarrow -0.5 = \frac{\% \Delta Q}{-10\%}$$

$$\% \Delta Q = (-0.5) \times (-10\%) = +5\%$$

quantity sold (↑) by 5% ; total revenue falls 5.5%

2) Brussels:

$E_d = 3$ (elastic demand)

Government want to (↑) consumption by 15%

$$E_d = \frac{\% \Delta Q}{\% \Delta P}$$

$$\% \Delta Q = +15\% \Rightarrow -3 = \frac{15\%}{\% \Delta P}$$

$$\% \Delta P = \frac{15\%}{-3} \Rightarrow \% \Delta P = -5\%$$

Price must fall 5%.

$$P_0 = 1; Q_0 = 1$$

$$P_1 = 0.95; Q_1 = 1.15$$

$$TR_1 = 0.95 \times 1.15 = 1.0925$$

$E_d > 1$, price cut (↑)

∴ Total expenditure rise by 9.25%.