

7. Elastisitas harga dari permintaan untuk suatu produk adalah -4. Hitunglah perubahan presentase (%) terhadap jumlah yang diterima apabila:
- Harga produk tersebut naik menjadi 5%
 - Harga produk tersebut naik menjadi 10%
 - Harga produk tersebut turun menjadi 15%
 - Harga produk tersebut turun menjadi 20%
 - Harga produk tersebut naik menjadi 25%

JAWABAN !

Rumus :

$$Ed = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

$$Ed = -4$$

$$\Delta P = 5\%$$

a. Diket :

$$Ed = -4$$

$$\Delta P = 5\%$$

Di jawab :

$$-4 = \frac{\Delta Q}{5\%}$$

$$\Delta Q = 5\% \cdot -4$$

$$\Delta Q = \frac{5}{100} \cdot -4$$

$$\Delta Q = \frac{-20}{100}$$

$$\Delta Q = \frac{-2}{10}$$

$$\Delta Q = \frac{1}{5} = 0,2$$

$$\frac{\Delta Q}{Q} \cdot \frac{\Delta P}{P}$$

$$\frac{20\%}{-4} \cdot \frac{5\%}{-4}$$

$$\frac{100}{16} = \frac{100}{16} = 6.25\%$$

b. Diket :

$$Ed = -4$$

$$\Delta P = 10\%$$

Di jawab :

$$-4 = \frac{\Delta Q}{10\%}$$

$$\Delta Q = 10\% \cdot -4$$

$$\Delta Q = \frac{10}{100} \cdot -4$$

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

$$\Delta Q = \frac{-4}{10}$$

$$\Delta Q = \frac{2}{5} = 0,4$$

$$\frac{\Delta Q}{Q} \cdot \frac{\Delta P}{P}$$

$$\frac{40}{-4} \cdot \frac{10\%}{-4}$$

$$\frac{4}{16} = \frac{16}{4} = 16\%$$

c. Diket :

$$Ed = -4$$

$$\Delta P = -15\%$$

Di jawab :

$$-4 = \frac{\Delta Q}{-15\%}$$

$$\Delta Q = -15\% \cdot -4$$

$$\Delta Q = \frac{-15}{100} \cdot -4$$

$$\Delta Q = \frac{60}{100}$$

$$\Delta Q = \frac{6}{10}$$

$$\Delta Q = \frac{3}{5} = 0,6$$

d. Diket :

$$Ed = -4$$

$$\Delta P = -20\%$$

Di jawab :

$$-4 = \frac{\Delta Q}{-20\%}$$

$$\Delta Q = -20\% \cdot -4$$

$$\Delta Q = \frac{-20}{100} \cdot -4$$

$$\Delta Q = \frac{80}{100}$$

$$\Delta Q = \frac{8}{10}$$

$$\Delta Q = \frac{4}{5} = 0,8$$

e. Diket :

$$Ed = -4$$

$$\Delta P = 25\%$$

Di jawab :

$$-4 = \frac{\Delta Q}{25\%}$$

$$\Delta Q = 25\% \cdot -4$$

$$\Delta Q = \frac{25}{100} \cdot -4$$

$$\Delta Q = \frac{-100}{100}$$

$$\Delta Q = -1$$

$$\frac{\Delta Q}{Q} \cdot \frac{\Delta P}{P}$$

$$\frac{-1}{-4} \cdot \frac{25\%}{-4}$$

$$\frac{1}{16} = \frac{16}{1} = 16\%$$

