① Question from Practice

#14 $q = 80 - 2p$ $\emptyset \leq p \leq 40$

Find price elasticity of D

$E = -\dfrac{dq}{dp} \cdot \dfrac{p}{q}$; Find $q = \ldots p$

only way to solve for elasticity — has to be in this format

Step 1 Find $\dfrac{dq}{dp} = -2$ * Is a constant

Step 2 $E = -(-2) \cdot \dfrac{p}{80 - 2p}$ then clean up algebra

$E = \dfrac{2p}{4080 - 2p} = \dfrac{p}{40 - p}$ Formula for elasticity of D.