Var. C

Name: .....

1. [1 point]

Demand for x is given by function $x = 100 - 2P_x$

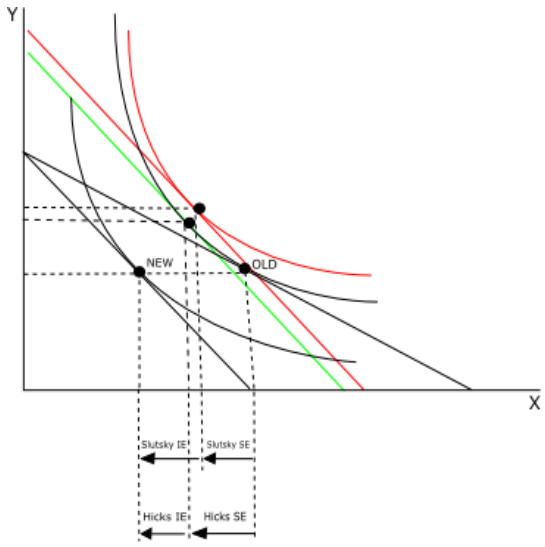
P_x=4

- Calculate the price elasticity

$$P_x = 4 \quad \Rightarrow \quad x = 100 - 2P_x = 100 - 2 \times 4 = 92$$
$$x = 100 - 2P_x \quad \Rightarrow \quad \frac{\Delta x}{\Delta P_x} = -2$$
$$\epsilon_P = \frac{\Delta x / x}{\Delta P_x / P_x} = \frac{\Delta x}{\Delta P_x} \frac{P_x}{x} = -2 \times \frac{4}{92} = \frac{2}{23} \approx 0.087$$

2. [2 points]

- Decompose graphically total effect of price change to income and substitution effect (choose Slutsky's or Hick's decomposition). Please label **ALL** axis, curves, lines, points...
- What type of good have you depicted with respect to income effect? Explain.



Decrease in income causes decrease in consumption of good x. Hence, x is normal good.