#1

12. Five consumers have the following marginal utility of apples and pears:

	Marginal Utility of Apples (y)	Marginal Utility of Pears (x)
Claire	6	12
Phil	6	6
Haley	6	3
Alex	3	6
Luke	3	12

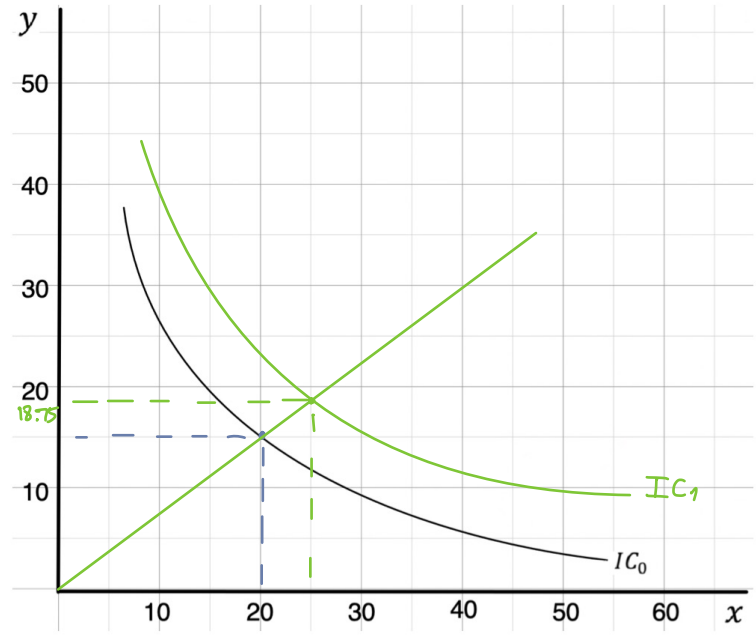
The price of an apple is $1, and the price of a pear is $2. Which, if any, of these consumers are optimizing their choices of fruit? For those who are not, how should they change their spending?

	$\frac{MU_A}{P_A}$	$\frac{MU_P}{P_P}$	
Clair	$\frac{6}{1}$	$\frac{12}{2} = 6$	= 12
Phil	$\frac{6}{1}$	$\frac{6}{2} = 3$	= 9
Haley	6	$\frac{3}{2} = 1.5$	= 7.5
Alex	3	$\frac{6}{2} = 3$	= 6
Luk	3	$\frac{12}{2} = 6$	= 9

From a total $ 3, Claire is optimizing choices of fruit.

- Haley may spend money only on apples

#2 Given the price of x = 3, price of y = 4, and budget = 120.



A) budget $ 120

$3 \times 20 = 60$

$4 \times 15 = 60$

$\therefore$ E (20, 15)

B) $\eta_I^x = 1$, budget = $ 150

$3 \times 25 = 75$

$4 \times 18.75 = 75$

$\therefore$ E (25, 18.75)

c) $\eta_I^y = 1$