

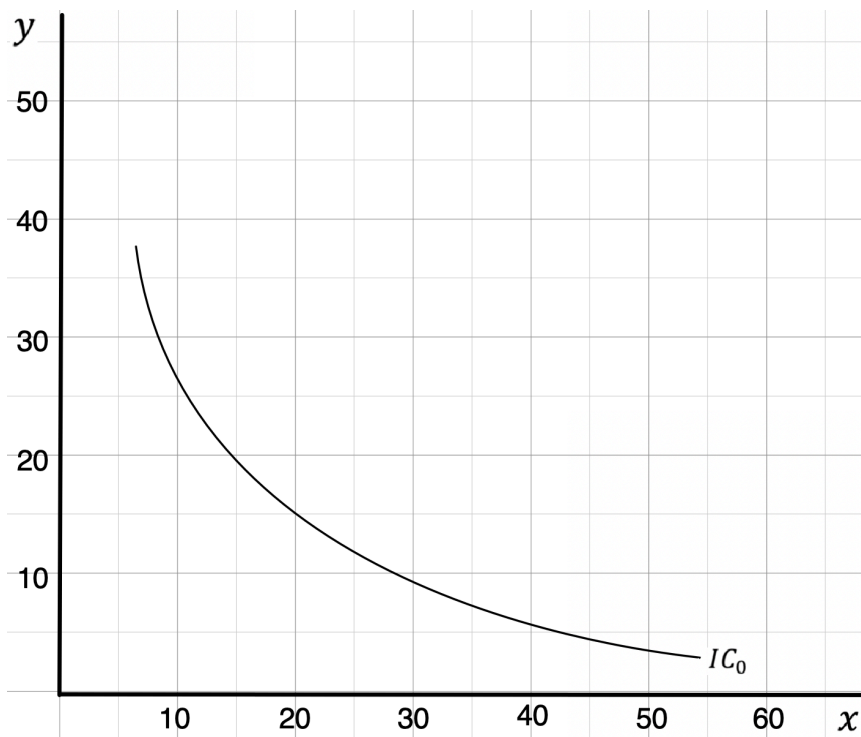
#1

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

	Marginal Utility of Apples	Marginal Utility of Pears
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?

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



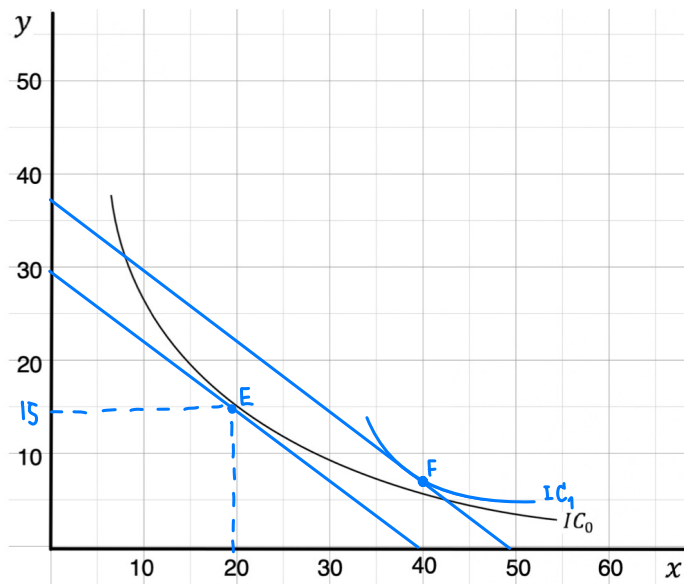
- Draw the budget line and find the equilibrium with the given indifference curve  $IC$  in the diagram below.
- If the income increases from 120 to 150, where will be the new equilibrium so that the change in the consumption of  $x$  be such that the Income Elasticity of  $x$  is equal to 1.
- With the change of equilibrium you found in (B), what will be the Income Elasticity of  $y$ ?

#1

Name	Apple	Pears
Claire	$\frac{6}{1} = 6$	$\frac{12}{2} = 6$
Phil	$\frac{6}{1} = 6$	$\frac{6}{2} = 3$
Haley	$\frac{6}{1} = 6$	$\frac{3}{2} = 1.5$
Alex	$\frac{3}{1} = 3$	$\frac{6}{2} = 3$
Luke	$\frac{3}{1} = 3$	$\frac{12}{2} = 6$

The consumers that have equal marginal utilities are Claire and Alex.  
Phil should consume more apples and reduce the consumption of pears.  
Haley should consume more apples and reduce the consumption of pears.  
Luke should consume less apples and increase the consumption of pears.

#2



A) At point E (20, 15)

B) At point F (40, 7.5)

$\therefore$  Consumption of x will increase and consumption of y will decrease.

C) The elasticity of y will decrease and the demand for product y will be less.

$\eta_y < 0$ , inferior