

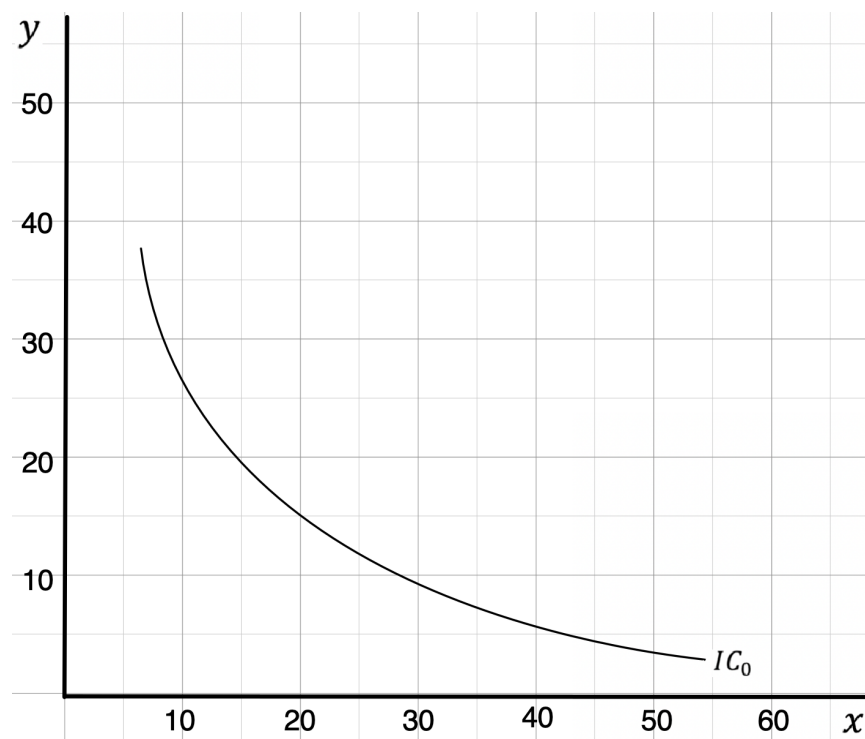
#1

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 ?

Q1. apple \$1 pear \$2

maximize condition

$$\frac{P_a}{P_p} = \frac{MU_a}{MU_p} = \frac{1}{2}$$

Claire

$$\frac{6}{12} = \frac{1}{2}$$

Claire has
the same
as max condition

Philp

$$\frac{6}{6} = 1$$

$$1 \neq \frac{1}{2}$$

Philp don't
has the same
as max condition.

Therefore, Philp should
consume more apple until
 $MU=3$ so that it could
satisfies the maximum condition.

Haley

$$\frac{6}{3} \neq 2$$

Haley also this case
did not has the same
as maximum condition.
Therefore, Haley should
consume less pear until
 $MU=12$.

Alex

$$\frac{3}{6} = \frac{1}{2}$$

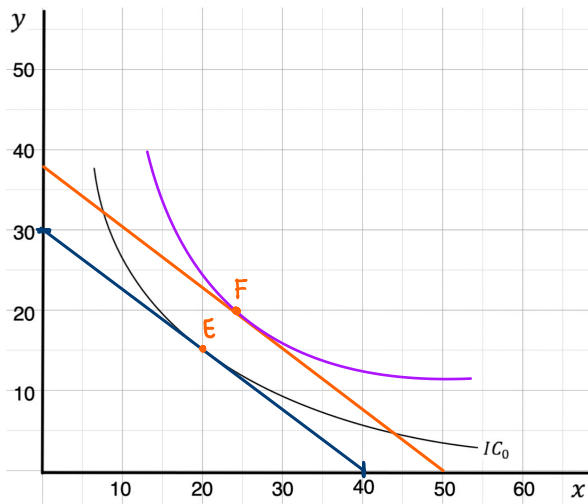
satisfy max
condition.

Luke

$$\frac{3}{12} = \frac{1}{4}$$

Luke should consume
more pear until $MU=6$
to satisfy the maximum condition

Q2. a)



the equilibrium is at point E (20,30)

b) when income increases from 120 to 150
 , consumer's budget will increase so they can
 consume more x and y .

$$\overset{x}{150/3} = 50$$

$$\overset{y}{150/4} = 37.5$$

c) YED of Y is also 1 as a normal good.