

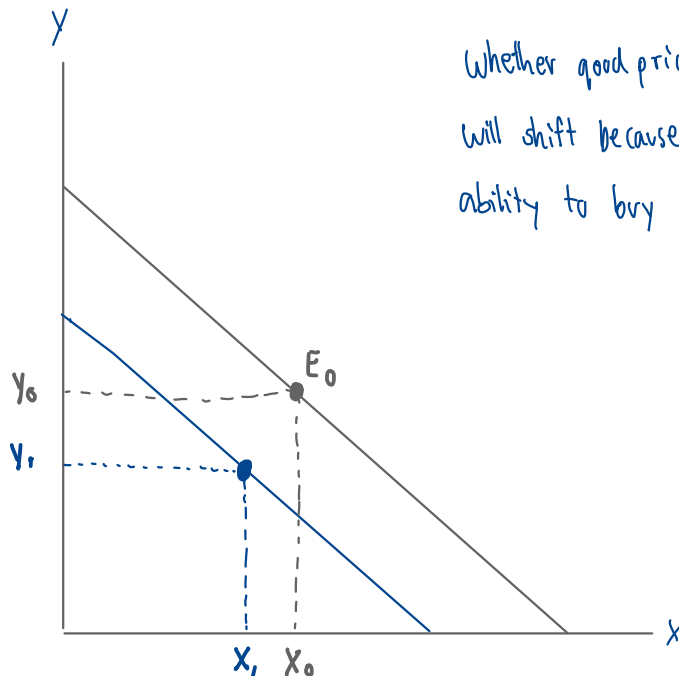
Guntinan 6309690276

#1 If the price P_x and P_y increase 10% at the same time, with income Remaining unchanged, show that this is equivalent to a reduction in income.

#2 Demonstrate how PCC with varying price P_y , (P_x and Income are fixed) can give us the price elasticity of Y to be equal to, less than, or greater than 1 in absolute value

7. A college student has two options for meals: eating at the dining hall for \$6 per meal, or eating a Cup O' Soup for \$1.50 per meal. Her weekly food budget is \$60.
- Draw the budget constraint showing the trade-off between dining-hall meals and Cups O' Soup. Assuming that she spends equal amounts on both goods, draw an indifference curve showing the optimum choice. Label the optimum as point A.
 - Suppose the price of a Cup O' Soup now rises to \$2. Using your diagram from [part \(a\)](#), show the consequences of this change in price. Assume that our student now spends only 30 percent of her income on dining-hall meals. Label the new optimum as point B.
 - What happened to the quantity of Cups O' Soup consumed as a result of this price change? What does this result say about the income and substitution effects? Explain.
 - Use points A and B to draw a demand curve for Cup O' Soup. What is this type of good called?

(I)

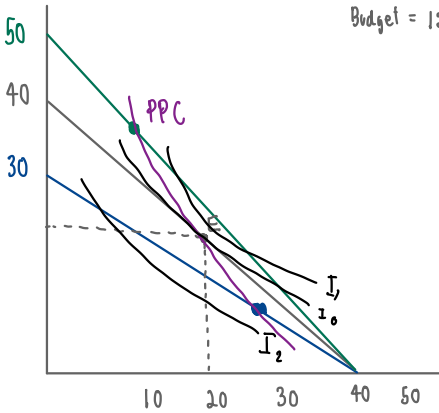


Whether good prices or income changes, the budget line will shift because it means that the consumer will have less or more ability to buy that leads to the change of budget line

II

$P_x = 3$
 $P_y = 4$
 Budget = 120

$5y + 4x = 120$
 $4y + 4x = 120$
 $3y + 4x = 120$



$5y + 4x = 120$

$4y + 4x = 120$

$\eta_y = \frac{\% \Delta Q_y}{\% \Delta P_y} =$

$\eta_y = 1$

$\% \Delta Q_y = \frac{y_1 - y_0}{(y_1 + y_0)/2} \times 100$
 $= \frac{50 - 40}{(50 + 40)/2} \times 100$

$3y + 4x = 120$

$\% \Delta Q_y = \frac{30 - 40}{(30 + 40)/2} = -\frac{10}{35} = -0.28 = 0.28$

normal good
necessary

$= \frac{10}{45} \times 100$

$= 22.2\%$

$\% \Delta P_y = \frac{5 - 4}{(5 + 4)/2} \times 100$

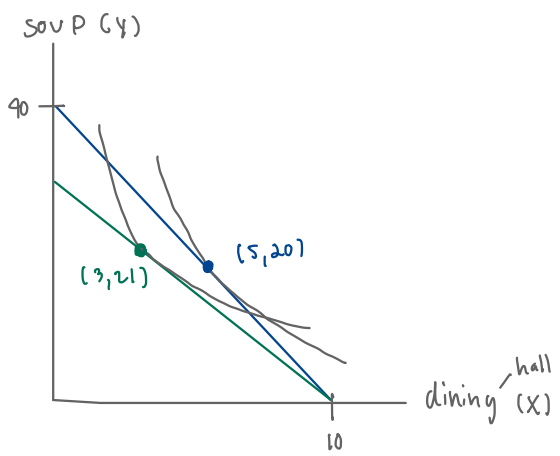
$= \frac{1}{4.5} \times 100$

$= 20\%$

$\eta_y = \frac{22.2}{20} = 1.11$
 $= 0.111$

normal good
necessary

III



$$6x + 1.5y = 60$$

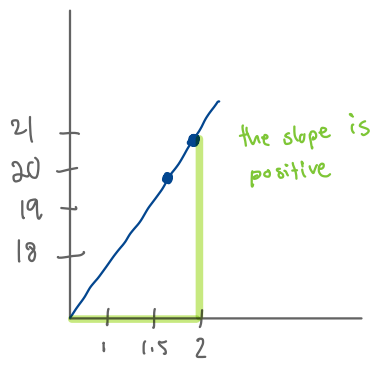
$$6x + 2y = 60$$

B Students are spending 30% of 60 \$ of her income on dining-hall meal
 Label the new equilibrium as point B

$$18 \$ = 3 \text{ unit } \times$$

C A consumer consumes more of soup than dining-hall meals.
 But his income remains the same. It means that his condition is not related to substitution effect because with the rise of price in soup, he still buys its more and more. This leads to that Soup is "Giffen good".

D



this good is giffen good.

Law of demand - $P \uparrow D \downarrow$
 Giffen good - $P \uparrow D \uparrow$