

#1 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

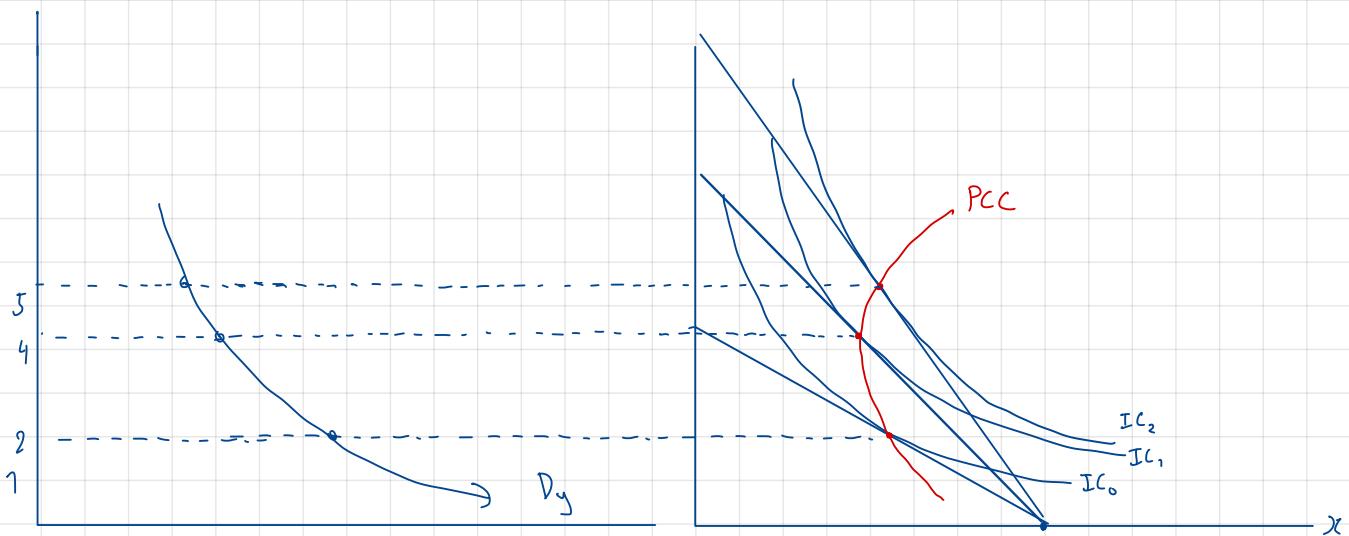
#2

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.
 - a. 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.
 - b. 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.
 - c. 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.
 - d. Use points A and B to draw a demand curve for Cup O' Soup. What is this type of good called?

#3

11. Economist George Stigler once wrote that, according to consumer theory, "if consumers do not buy less of a commodity when their incomes rise, they will surely buy less when the price of the commodity rises." Explain this statement using the concepts of income and substitution effects.

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Income \uparrow $D \uparrow$ Price \uparrow buy \downarrow

#3

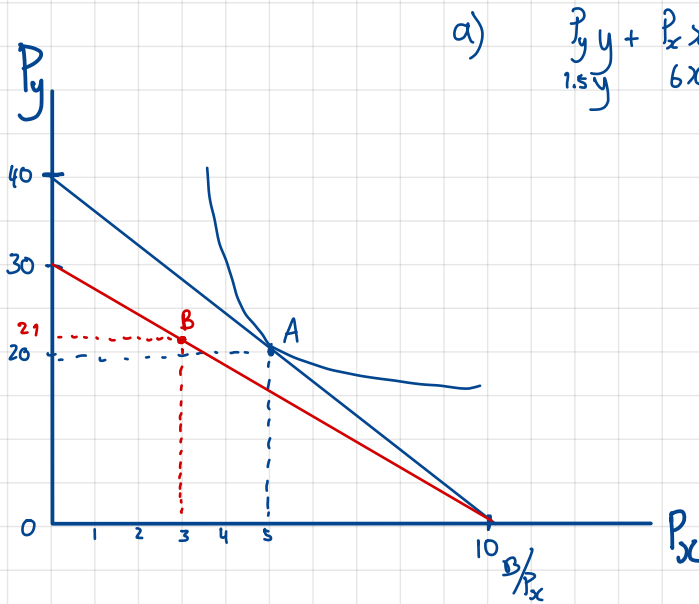
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Firstly, this type of commodity is a normal good since when people want to buy more due to a rise in consumers' income. According to this type of good, the income and substitution effects will work as the same direction. For example, a decrease in the relative price of the good will increase quantity demanded both due to the facts that good is now cheaper than substitute goods as well as the lower price mean more total purchasing power

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$$a) \quad \begin{aligned} P_y y + P_x x &= B \\ 1.5y + 6x &= 60 \end{aligned}$$

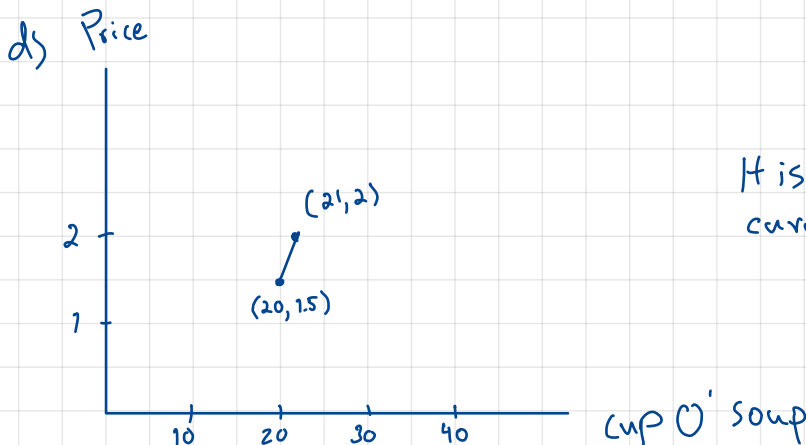
$$\begin{aligned} 30 &= 1.5y = 20 \\ 30 &= 6x = 5 \end{aligned}$$

$$b) \quad \begin{aligned} 2y + 6x &= 60 \\ 60 \times 0.3 &= \frac{60}{2} \end{aligned}$$

$$\begin{aligned} 2y + 18 &= 60 \\ y &= 21 \end{aligned}$$

c) It increases the consumption of meal at Cups O' Soup by 1 unit (from 20 to 21)

As a result of income and substitution effect, in substitution effect states that an increase in the price of a good will encourage consumers to buy substitute goods. The income effect effectively cuts disposable income and there will be lower demand for the good (P_y increases) due to the fall in disposable income.



It is called giffen good since the demand curve has positive slope.
(price \uparrow buy more \uparrow)