

#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.
- 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?

#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.

2

② (a) d = meals that eat at dining hall

c = meals that eat Cup O' Soup

Sol Budget constraint $\Rightarrow 6d + 1.5c \leq 60$

$$4d + c \leq 40$$

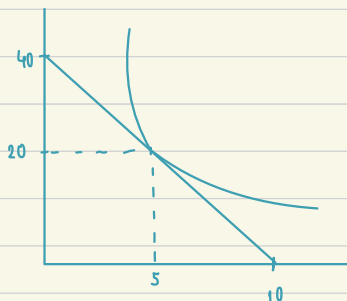
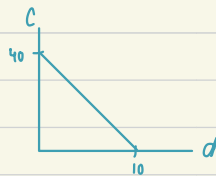
half of budget is spent on each good

$$6d = \frac{1}{2} \times 60$$

$$d = 5$$

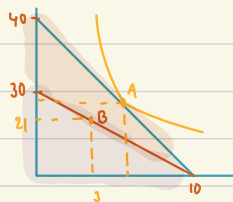
$$1.5c = \frac{1}{2} \times 60$$

$$c = 20$$



$$6d + 3.5c \leq 60$$

(b) price of c rise to 2 then, $6d + 2c \leq 60$



the intercept for c will decrease to 30

• given 30% of income is spent on dining halls

$$6d = \frac{30}{100} \times 60$$

$$d = 3$$

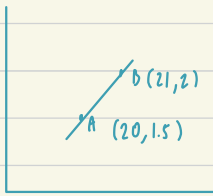
$$2c = \frac{30}{100} \times 60$$

$$c = 21$$

(c) • As a result of price change, consumption of meals at cups O'shop increase by 1

• meals at cups O'shop is inferior good, when income increase the consumption will decrease. so, as a result from substitution, the consumption will decrease

(d)



As the demand curve is positive, meals at cups o'shop is giffen good

③ If consumer don't buy less of commodity when the income rises, then the goods are normal goods

If price of normal goods increase, both substitution and income effect will decrease its consumption. when the price increase, the consumer will buy less