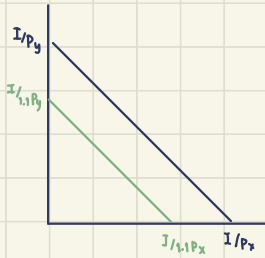
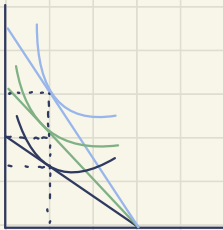


#1 If the price P_x and P_y increase 10% at the same time, with income remaining unchanged, show that this is equivalent to a reduction in income.



Due to increasing of price of x and y , the budget line will shift to the left. Both P_x and P_y are increased 10%, so, the new budget line will be parallel to the old budget line.

#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.



$$| \eta_p | = \left| \frac{\frac{\Delta X}{X}}{\frac{\Delta Y}{Y}} \right|$$

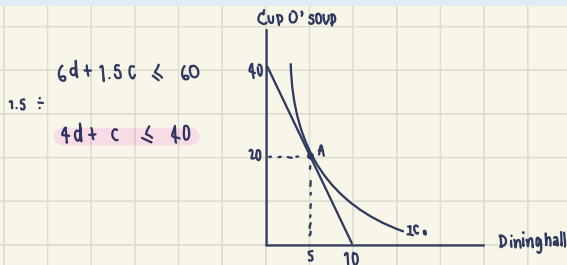
$$= \left| \frac{0}{\Delta Y} \right|$$

$$= 0$$

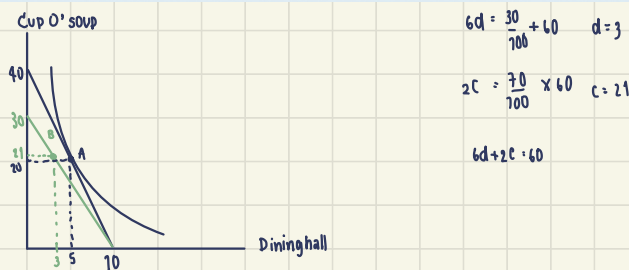
Hence, it is perfectly inelastic due to P_y change but people still consume x at the same rate.

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.



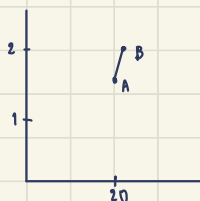
- b. Suppose the price of a Cup O' Soup now rises to \$2. Using your diagram from part (a), show the consequences of this change in price. Assume that our student now spends only 30 percent of her income on dining-hall meals. Label the new optimum as point B.



- 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.

Due substitution effect, when price of Cups O' soup increase, consumer will buy less. The income effect lead student to consume more soup and become inferior good.

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



Due to demand curve is positive, The price is increase but consumer still consume more. so, Cup O' Soup's meal is giffen goods.