



B.E. International Program

Faculty of Economics, Thammasat University



SUBJECT: EE211: PRINCIPLES OF MICROECONOMICS

HOMEWORK ON THEORY OF CONSUMER CHOICE

DUE DATE: THURSDAY, 1ST NOVEMBER 2018 (IN CLASS | BEFORE LECTURE BEGINS.)

STUDENT ID _____

Instructions

- 1) Attempt all questions. Write your solutions on space provided.
- 2) You can study in groups and write your solutions independently. Plagiarism is an academic crime. If detected, all stakeholders will receive zero point.
- 3) Any questions, please send me your message via pwrasai@econ.tu.ac.th

"Practice makes Perfect"

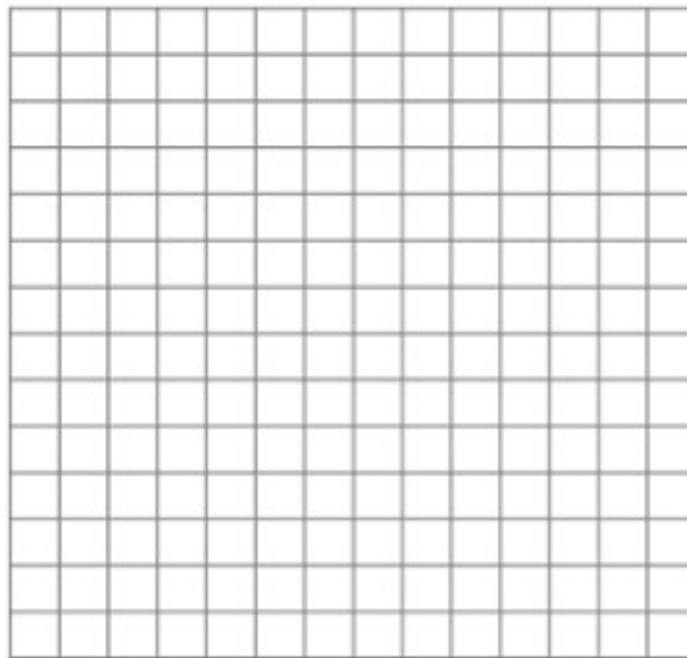
Theory of Consumer Choice

Part I: Indifference Curve and Budget Line

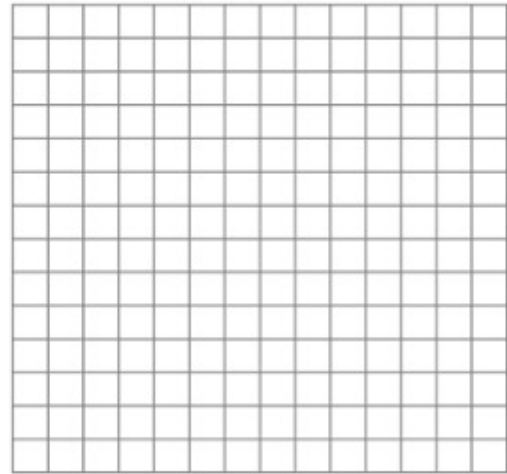
1. Draw an indifference curve and calculate marginal rate of substitution (MRS) according to the given information. **Explain how marginal rate of substitution (MRS) affects the shape of indifference curve.**

X	Y	MRS
1	8	
2	4	
3	2	
4	1	

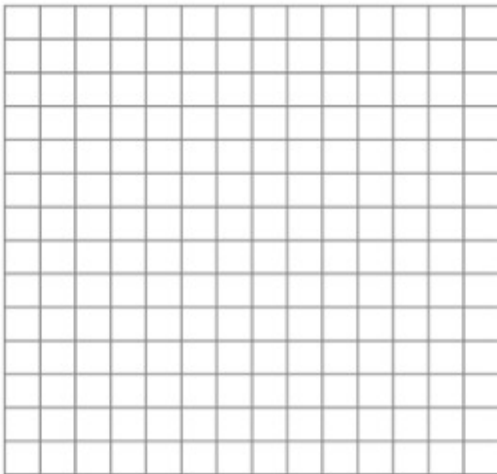
2. Draw, on the same plane, a new indifference curve showing higher utility compared to question 1, given that this consumer gains higher utility when consuming 4 units of both goods X and Y.



3. Consider 2 consumers, A and B. A will only drink 1 glass of wine after finishing 2 steaks. Opposite to A, B equally likes wine and steak, i.e., wine and steak give B the same utility. Draw indifference curves representing consumption behavior of A and B on different planes.



4*** Explain why indifference curves cannot intersect?



5. Chin-Jung has a weekly income of \$20. He needs to buy 2 goods, chocolate and milk. Suppose the price of chocolate and milk is \$4 per unit and \$5 per unit respectively.

a) Construct the equation of Chin-Jung budget line. Find the slope of this budget line and explain its significance.

b) Draw a budget line corresponded to the equation from question a).

Note that the horizontal axis represents chocolate and vertical axis represents milk.

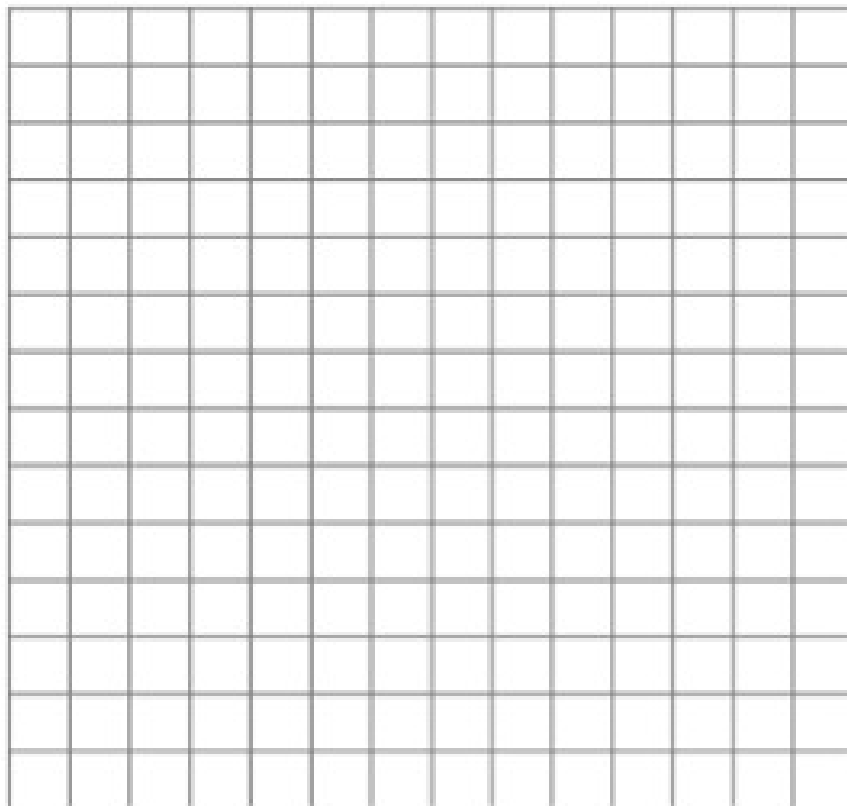
c) Draw new budget lines on the same plane according to the following situations

i) the price of chocolate reduces to \$2

ii) the price of milk increases by \$5

iii) Chin-Jung weekly income falls by half

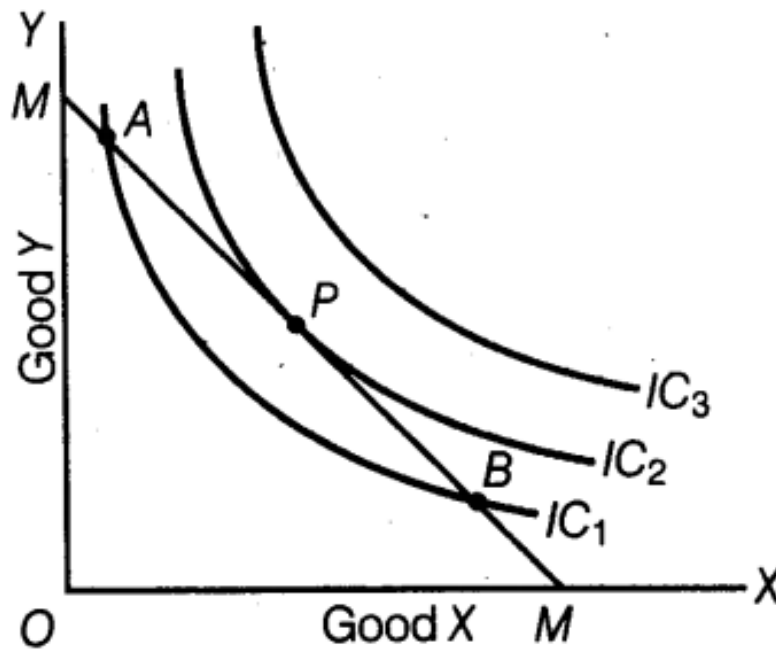
iv) Chin-Jung gain additional weekly income of \$10



Part II: Consumer's Equilibrium

1. Consider the figure below:

- Explain with logic why basket P is a utility maximizing basket.
- Explain why point A and B are not utility maximizing consumption baskets. If the consumer aims to adjust his/her consumption towards the basket P, what should be the adjustment to his/her consumption. (Explain the movement from A to P and also from B to P)



2. Somsri claims that she is a rational housewife. She is now considering between detergent and dishwashing soap within the budget of \$50 per month. Suppose the price of detergent and dishwashing soap is \$4 per unit and \$6 per unit, respectively.

- a) Construct the equation of Somsri budget line and draw the budget line corresponded to the equation.
- b) Draw an indifference curve that represents Somsri's consumption between detergent and dishwashing soap. Suppose that this indifference curve gives her highest level of utility subject to her income. Mark optimum consumption point as A.
- c) Why point A is the optimum consumption point of Somsri? State all the conditions that satisfy consumer's equilibrium.