



B.E. International Program

Faculty of Economics, Thammasat University



HOMEWORK#1: 1/2018

SUBJECT: EE211: PRINCIPLES OF MICROECONOMICS

DUE DATE: **THURSDAY, 20 SEPTEMBER 2018 BY 09.15AM**

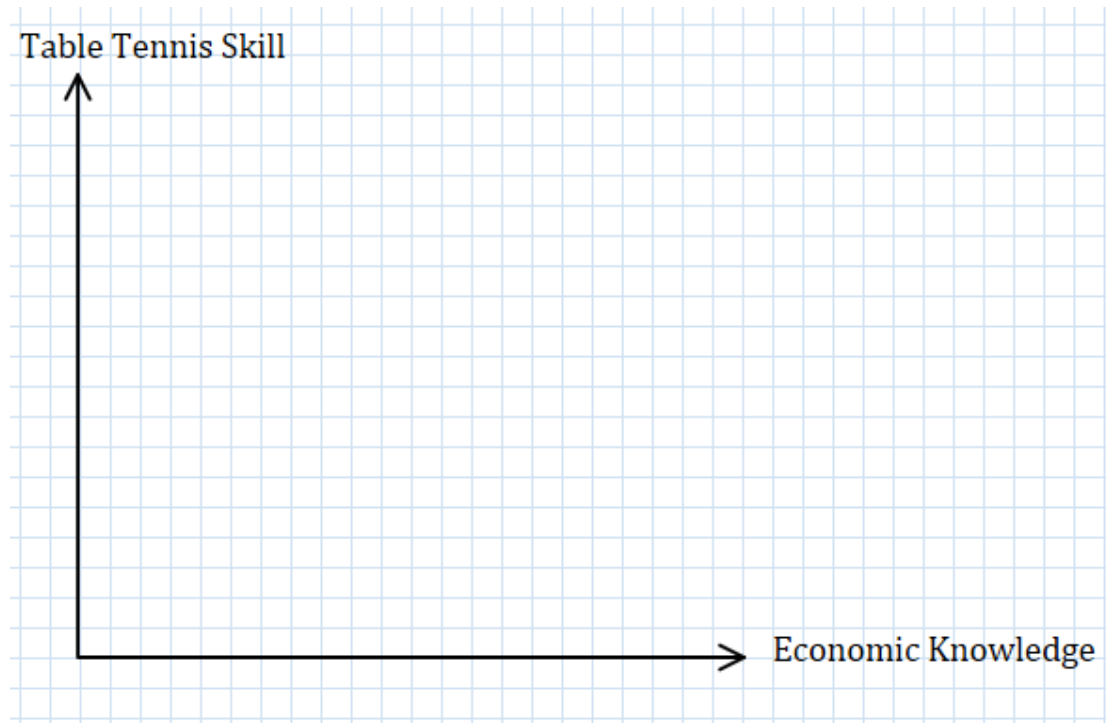
Instructions:

- 1) There are 7 pages including the cover sheet.
- 2) Attempt all three questions with the total worth of 100 points.
- 3) Print out the homework sheet and write solutions with your handwriting on the space provided.
- 4) You may discuss the homework with your classmates (Study in Group). However, you must write up solutions independently (Honesty and Integrity).
- 5) **Plagiarism is an academic crime and it will not be tolerated. If detected, all involved will receive zero.**
- 6) Submit your work before our class begin ONLY. (by 09.15am). 20 percent reduction of your score earned will be applied to those work submitted after the date and time mentioned above.
- 7) Practice makes perfect.

"Time is a great teacher, but unfortunately it kills all its pupils."

Hector Berlioz

1. **(20 points)** This question asks you to use our concepts of Production Possibility Curves to analyze the decisions of Vincent, a B.E. Freshman. Vincent wants to be a good economist and table tennis player at the same time. Because of the time constraint that he has, the possible amounts of economic knowledge and table tennis skill that he can get are limited. Out of 24 hours per day, he spends 14 hours for laundry, eating, dish washing, apartment cleaning, sleeping and etc. Therefore he has total 10 hours that he can devote to his economics studying and table tennis practice.



- a. Draw Vincent's PPC on the diagram above. Assume that the Opportunity Cost of Economics Knowledge is increasing. Explain *briefly* why this assumption makes sense?
Note: It may NOT necessary to put scales on Tennis Skill and on Accounting Knowledge.

In questions 1b to 1f, situations that may change the initial PPC occur. Draw the new PPC in each question on the same diagram above. **In each question, give a short explanation in the space provided to explain why the new PPC changes in the way that you think and draw.**

b. Suppose that Vincent could have worked out hard at Table Tennis Club *before* the semester started. In that case what would be his new PPC? Add his new PPC to the graph above and label “b”.
Answer:

c. If Vincent hires a tutor to work with him on economics every weekend, what will happen to his PPC? Label “c”. Explain *briefly* the assumptions you are making.
Answer:

d. Vincent has been given a robot housekeeper that does all his households tasks so that he does not need to spend time on laundry, dish washing or dorm cleaning. Add and label “d” his new PPC.
Answer:

e. If Vincent got the swine flu during the semester, then what would happen to his PPC? Add and label “e” his new PPC.
Answer:

f. Suppose, instead of working hard during weekdays, Vincent decides to stay in his dorm room watching YouTube video clips. Then what can we say about his choice? Locate that possible choice in the diagram above.
Answer:

2. **(40 points)** With the new oil discovery technology known as fracking, crude oil can be produced at a much greater quantity. Assuming that the crude oil world market is a perfectly competitive market,
- a) Explain how the use of fracking technology changes the market demand and/or market supply.
 - b) From question 2a, show how the change in the demand and/or supply affects the equilibrium price and quantity. Describe process of how the market adjusts itself from the old equilibrium to a new equilibrium.
 - c) Explain how the change in the crude oil price affects the demand for automobiles.
 - d) Explain how the change in the crude oil price affects the demand for palm oil that can be used as bio-diesel. Will this change the supply of palm oil?

Seat Number _____

Student ID _____

Seat Number _____

Student ID _____

3. **(40 points)** Earlier this year, the MRT Purple Line electrical train opens to the public but with unexpected low ridership, the operator of MRT decided to lower the fare from 42 to 29 baht per trip. As a result, the number of passengers increased from 20,000 to 21,000 commuters.
- a) What is the price elasticity of demand for MRT Purple Line?
 - b) The MRT operator now decides to reduce the fare even further from 29 to 15 baht per trip. Do you think this price-reduction strategy will help increasing total revenue of MRT Purple Line?

Seat Number _____

Student ID _____