Fall 2015

# Principles of Economics (II) 10410ECON100103

# Instructor: Eric Chou swchou@mx.nthu.edu.tw

## Quiz 1

Name:	Student ID#:
Instructions: Time: 9:00am~9:50am (50	minutes)
PART I. [60%]	
1. (_c_) A movement upward and to the	left along a demand curve is called a(n)
a. increase in demand.	
b. decrease in demand.	
c. decrease in quantity demanded.	
d. increase in quantity demanded.	

Table A

	Abby's	Brandi's	Carrie's	DeeDee's
Price	Quantity	Quantity	Quantity	Quantity
\$12	2	1	3	4
\$10	4	4	4	5
\$8	6	7	5	6
\$6	8	8	4	7
\$4	10	9	3	8
\$2	12	10	2	9

- 2. (\_c\_) Refer to Table A. Whose demand does not obey the law of demand?
  - a. Abby's
  - b. Brandi's
  - c. Carrie's
  - d. DeeDee's
- 3. (\_c\_) Refer to Table A. Suppose Abby, Brandi, Carrie, and DeeDee are the only four buyers in the market. If the price is \$8, then the market quantity demanded is
  - a. 4 units.
  - b. 6 units.
  - c. 24 units.
  - d. 32 units.

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Table B

	Plan A	Plan B	Plan C	Plan D
Anakin Skywalker	\$10	\$1000	\$0	\$1000
Darth Vader	\$10	\$20	\$2000	\$30

- 4. (<u>d</u>) Refer to Table B. Which plan should be chosen according to Rawls' difference principle?
  - a. Plan A
  - b. Plan B
  - c. Plan C
  - d. Plan D

- 5. (a) Mike and Sandy are two woodworkers who both make tables and chairs. In one month, Mike can make 4 tables or 20 chairs, where Sandy can make 6 tables or 18 chairs. Given this, we know that the opportunity cost of 1 chair is
  - a. 1/5 table for Mike and 1/3 table for Sandy.
  - b. 1/5 table for Mike and 3 tables for Sandy.
  - c. 5 tables for Mike and 1/3 table for Sandy.
  - d. 5 tables for Mike and 3 tables for Sandy.
- 6. (<u>d</u>) According to a recent study of Chilean bus drivers, drivers who are paid by the number of passengers they transport have higher productivity than drivers who are paid by the hour. This result is an example of which principle of economics?
  - a. People face tradeoffs.
  - b. The cost of something is what you give up to get it.
  - c. Rational people think at the margin.
  - d. People respond to incentives.

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#### PART II. Short-Answer Question:

1. [10%] One tradeoff society faces is between efficiency and equality. Define each term. If the U.S. government redistributes income from the rich to the poor, explain how this action affects equality as well as efficiency in the economy. (Please give the shortest answer possible)

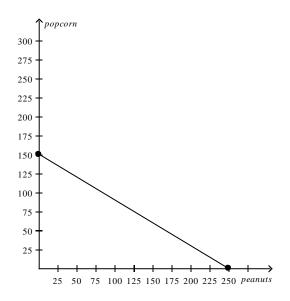
#### ANS:

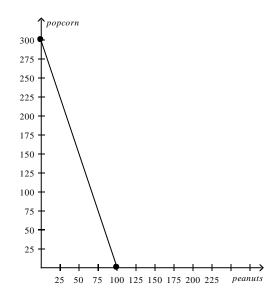
Efficiency is the property of society getting the most it can from its scarce resources. Equality is defined as the property of distributing economic prosperity evenly among the members of society. Often, these two goals conflict. When the government redistributes income from the rich to the poor, it reduces the reward for working hard. Fewer goods and services are produced and the economic pie gets smaller. When the government tries to cut the economic pie into more equal slices, the pie gets smaller. Policies aimed at achieving a more equal distribution of economic well-being, such as the welfare system, try to help those members of society who are most in need. The individual income tax asks the financially successful to contribute more than others to support the government.

2. [10%] The only two countries in the world, Alpha and Omega, face the following production possibilities frontiers.

Alpha's Production Possibilities Frontier





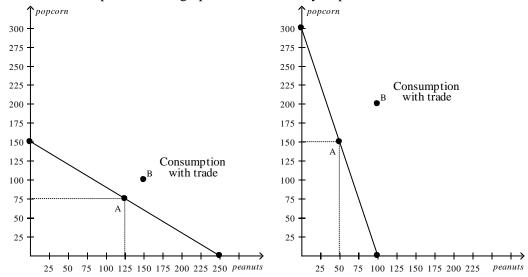


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a. Assume that each country decides to use half of its resources in the production of each good. Show these points on the graphs for each country as point A.



Alpha would be producing 125 units of peanuts and 75 units of popcorn (point A on its production possibilities frontier) and Omega would be producing 50 units of peanuts and 150 units of popcorn (point A on its production possibilities frontier).

b. If these countries choose not to trade, what would be the total world production of popcorn and peanuts?

ANS: The total world production of peanuts would be 175 units and the total world production of popcorn would be 225 units.

c. Now suppose that each country decides to specialize in the good in which each has a comparative advantage. By specializing, what is the total world production of each product now?

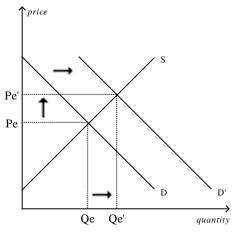
ANS: The total world production of peanuts would now be 250 units and the total world production of popcorn would now be 300 units.

d. If each country decides to trade 100 units of popcorn for 100 units of peanuts, show on the graphs the gain each country would receive from trade. Label these points B.

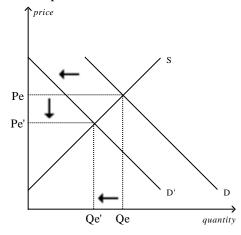
ANS: See Plot in a.

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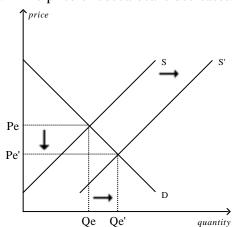
- 3. [20%] Suppose we are analyzing the market for hot chocolate. Graphically illustrate the impact each of the following would have on demand or supply. Also show how equilibrium price and equilibrium quantity would change.
  - a. Winter starts, and the weather turns sharply colder.



b. The price of tea, a substitute for hot chocolate, falls.



c. The price of cocoa beans decreases.



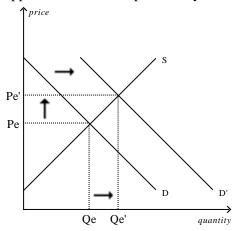
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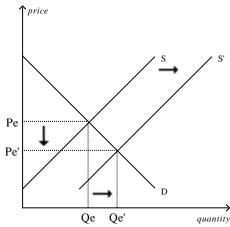
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d. The price of whipped cream falls.

Whipped cream as a complementary



Whipped cream as a material of "Hot Chocolate"



The combination of both figures also ok in case of the assumptions you made are reasonable.