

EC201: Principles of Macroeconomics

In-class worksheet 3

Working in a group of two to three, please come up with the answers to the following questions.

Exercise 1

Suppose you are stranded on an island. Luckily, this island is rich in clams and mangos. If you devote all of your time to harvesting clams, you can get 100 clams in a week. If you use all of your time to collect mangoes, you can find 200 mangoes in a week. Assume it is possible to collect fractional amounts of both goods.

- draw a sketch of your production possibility frontier for a week. (Place mangos on the x-axis and clams on the y-axis.)

- Calculate the opportunity cost of each good.

Exercise 2

Consider the following table of Production possibilities for Sweden and Finland.

Table: Comparative Advantage I		
Sweden and Finland produce only two goods, herring and cell phones, and this table shows the maximum amount that each nation can produce of the two goods.		
	Sweden	Finland
Herring	100,000 boxes	50,000 boxes
Cell Phones	10,000	10,000

- Who has absolute advantage in producing Herring? Who has the comparative advantage?
- Who has absolute advantage in producing cell phones? Who has the comparative advantage?

Exercise 3

If Texia specializes in food, it can produce 1,000 units of food and 0 units of clothing this year. If it specializes in clothing, it can produce 500 units of clothing and 0 units of food. This year Urbania can produce either 500 units of food and 0 units of clothing or 200 units of clothing and 0 units of food. (Assume linear production possibility frontiers.)

..... has the absolute advantage in the production of clothing, and has the absolute advantage in the production of food.

- Texia; Texia
- Texia; Urbania
- Urbania; Texia
- Urbania; Urbania

Exercise 4

If Texia specializes in food, it can produce 1,000 units of food and 0 units of clothing this year. If it specializes in clothing, it can produce 500 units of clothing and 0 units of food. This year Urbania can produce either 500 units of food and 0 units of clothing or 200 units of clothing and 0 units of food. (Assume linear production possibility frontiers.)

..... has the comparative advantage in the production of clothing, and has the comparative advantage in the production of food. [Hint: compare opportunity costs]

- Texia; Texia
- Texia; Urbania
- Urbania; Texia
- Urbania; Urbania

Exercise 5

If a country specializes according to its own comparative advantage and then trades with other nations:

- it will operate at a point inside its production possibilities frontier.
- it can consume at a higher level than the domestic production possibilities frontier.
- its production possibilities frontier will shift or rotate inward.
- it can consume at the same level as the domestic production possibilities frontier.

Exercise 6

Suppose that in Australia, it takes 2 hours to harvest 10 bushels of apples and 4 hours to harvest 10 bushels of tomatoes. Suppose a worker in Brazil can harvest 10 bushels of apples in 4 hours or 10 bushels of tomatoes in 5 hours.

- Who has absolute advantage in producing apples? Who has the comparative advantage?

- Who has absolute advantage in producing tomatoes? Who has the comparative advantage?