

NAME \_\_\_\_\_ SECTION \_\_\_\_\_

## Homework for Experiment 11

### Problem 11.1

**Part a)** From the information in Tables 11.1 and 11.2, you will be able to calculate the average payoffs that Richlanders and Poorlanders received in Session 2 with free trade. Record this information in Table 11.3. Then calculate and record the largest payoffs that Richlanders and Poorlanders could receive if they did not trade.

**Table 11.3: Payoffs with and without Trade**

	Average Payoff with Free Trade	Maximum Payoff with No Trade
Richlanders	10	8
Poorlanders	5	4

**Part b)** Is free trade better or worse than no trade for citizens of Richland?

Better

**Part c)** Is free trade better or worse than no trade for citizens of Poorland?

Better

**Problem 11.2** From the information in Tables 11.1 and 11.2, you will be able to calculate the total amounts of bread and fish produced and consumed in Richland and in Poorland. (The amount consumed is the amount that people have at the end of trading.) Record this information in Table 11.4.

Table 11.4: Production and Consumption

	Bread Produced	Bread Consumed	Fish Produced	Fish Consumed
Richland	0	130	260	130
Poorland	260	130	0	130

**Problem 11.3**

**Part a)** If a country consumes more of a good than it produces, then the difference between the quantity that it consumes and the quantity that it produces is its **imports**. If a country produces more of a good than it consumes, then the difference between its production and its consumption is its **exports**. Record the amount of goods exported or imported from each country in Table 11.5.

Table 11.5: Exports and Imports

	Bread Imported	Bread Exported	Fish Imported	Fish Exported
Richland	130	0	0	130
Poorland	0	130	130	0

**Part b)** If the bread-exporting country exported twice as much bread as the amount of fish it imported, we would say that the average price of a fish was 2 loaves of bread. More generally, the average price of fish relative to bread is given by the ratio of the number of loaves of bread exported to the number of fish imported by the country that exports bread and imports fish.

In this experiment, the average price of fish relative to bread was 1

**Problem 11.4** In Session 2 of this experiment:

which country exports bread and imports fish?

which country imports bread and exports fish?

Poorland  
Richland

which country has a comparative advantage in fish?

Richland

which country has a comparative advantage in bread?

Poorland

**Problem 11.5** In Session 2 of this experiment: who can produce more bread per hour, a Richlander or a Poorlander?

Richlander

which country exported bread and imported fish?

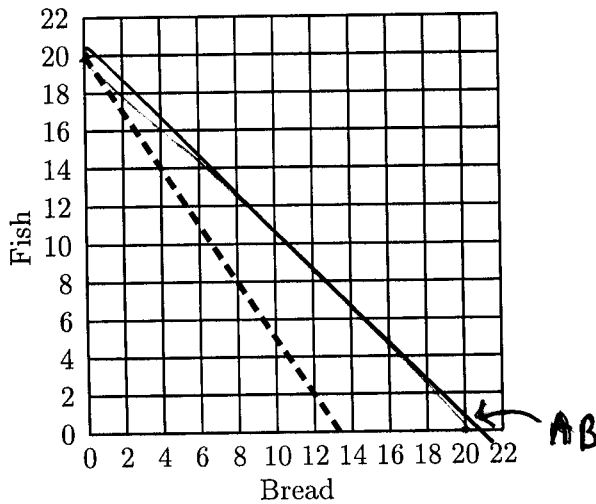
Poorland

Does this mean that free international trade is inefficient?

No

**Problem 11.6** In the Tale of the Mad Inventor, Richlanders were able to exchange as many fish as they liked for an equal number of loaves of bread at the factory. When this option is available, Richlanders can attain many consumption bundles that would be unavailable to them if they were not able to make such exchanges. For example, we observed that they could obtain 10 fish and 10 loaves of bread by producing 20 fish and trading 10 of them for 10 loaves of bread.

Figure 11.7: Trading with the Madman



**Part a)** On Figure 11.7, we have drawn a dashed line to show the production possibility frontier for Richlanders when they make no trades. Now draw a solid line to show all of the combinations of fish and bread that

320 Homework for Experiment 11. Comparative Advantage

Richlanders could obtain by producing only fish and making trades with the mad inventor. Label this line  $AB$ .

Part b) Write an equation that describes all of the points on the line  $AB$  that you have drawn.

$$\underline{F = 20 - B}$$

Part c) Suppose that instead of making their sandwiches with one fish and one loaf, Richlanders always make their sandwiches with one fish and two loaves of bread. What is the largest number of this kind of sandwich that a

Richlander could produce without making any trades?

5

What is the largest number of this kind of sandwich that a Richlander could

make after trading with the mad inventor?

6