The Digital Economist

Principles of Macroeconomics
Worksheet #1: **Comparative Advantage**   Name:_____
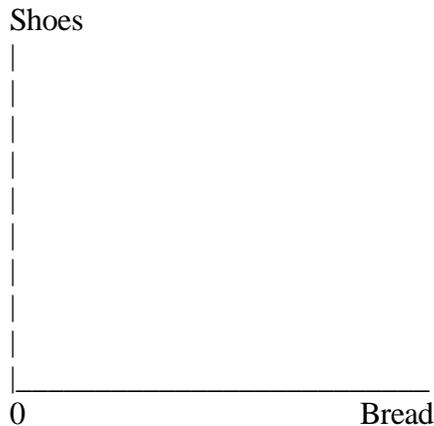
_____
1. Given the following production data for John and Mary:

Mary can produce 3 loaves of Bread per hour of work *or* she can produce 6 pairs of shoes per hour of work.

John can produce 5 loaves of bread per hour of work *or* he can produce 3 pairs of shoes per hour of work.

a. Who has the *Absolute Advantage* in Bread production?_____

b. Who has the *Absolute Advantage* in Shoe production?_____

c. Who has the *Comparative Advantage* in Bread Production?_____

d. What is the *opportunity cost* of producing bread for this individual?_____

e. Who has the *Comparative Advantage* in Shoe production?_____

f. What is the *opportunity cost* of producing shoes for this individual?_____

g. Who should specialize in Bread production?_____

h. On the diagrams below, draw a production possibilities curve based on each person (Mary and John) working a single 8-hour day. On the left diagram assume that these two individuals produce the good where they lack a comparative advantage. On the right diagram assume that these two individuals take advantage of their respective comparative advantages.

```
Shoes                               Shoes
|                                   |
|                                   |
|                                   |
|                                   |
|                                   |
|                                   |
|                                   |
|                                   |
|                                   |
|_____        |_____
0                      Bread        0                      Bread
```

2. Given the following production data for two countries, **Indonesia** and **Canada**:

	Indonesia	**Canada**
Production of:		
one unit of **wheat** requires:	10 labor hours	3 labor hours
one unit of **tea** requires:	4 labor hours	9 labor hours

a. Calculate the opportunity costs of wheat and tea production in both countries and define which country has the *Comparative Advantage* in Wheat production and which country has the *Comparative Advantage* in Tea production.

b. Plot a production possibilities curve for each country assuming that **Indonesia** has 200 labor hours available and **Canada** has 150 labor hours available:

Indonesia

Tea
|
|
|
|
|
|
|
|
|
|_____
0   Wheat

Canada

Tea
|
|
|
|
|
|
|
|
|
|_____
0   Wheat
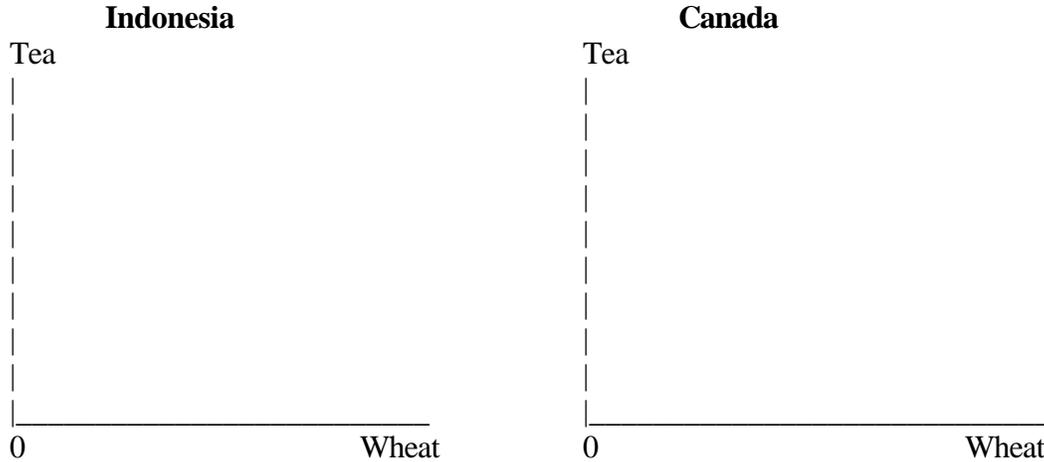
c. On each diagram, plot a **Terms of Trade** line corresponding to 1 unit of Wheat for 1 unit of Tea assuming that each country specializes in that product where they have a Comparative Advantage.