

### Comparative Advantage Practice

**Directions:** Answer each of the following in the space provided.

1. Below are hypothetical production possibilities tables for the US and Canada.

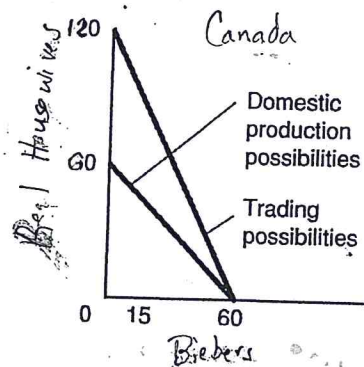
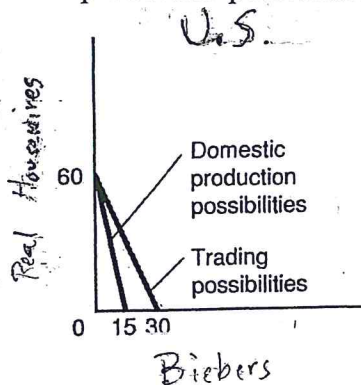
US

Product	Production Points			
	A	B	C	D
<b>Real Housewives</b>	0	20	40	60
<b>Biebers</b>	15	10	5	0

Canada

Product	Production Points			
	R	S	T	U
<b>Real Housewives</b>	0	20	40	60
<b>Biebers</b>	60	40	20	0

Plot the production possibilities for each of the two countries separately.



Referring to your graphs answer the following:

a) What is each country's cost ratio of producing Housewives and Biebers?

US

1H : 1/4 B  
1B : 4H

Canada

1H : 1B  
1B : 1H

b) Which nation should specialize in which product? Why?

US: Housewives      Canada: Biebers      The opportunity cost is lower (price is cheaper to make it)

c) What are the limits of the terms of trade for each product?

1H : 1/4 B — 1B      1B : 1H — 4H

d) On your graph, show the trading possibilities lines for each nation if the actual terms of trade are 1 Bieber for 2 Housewives.

e) Suppose the optimum product mixes before specialization and trade were alternative B in the US and S in Canada. What would be the gains from specialization and trade?

Total production before trade	After Specialization	Gains
$20H + 20H = 40H$	$60H$	$+ 20H$
$10B + 40B = 50B$	$60B$	$+ 10B$

2. Suppose nation A can produce 80 units of X by using all of its resources to produce X or 60 units of Y by devoting all of its resources to Y. Comparative figures for nation B are 60 of X and 60 of Y.

a) What is each country's cost ratio of producing X and Y?

$$\begin{array}{c} \text{A} \\ 1x : 3/4 y \\ 1y : 4/3 x \end{array}$$

$$\begin{array}{c} \text{B} \\ 1x : 1y \\ 1y : 1x \end{array}$$

b) Assuming constant costs, in which product should each nation specialize? Why?

A should make X, B should make Y. Lower opportunity costs.

c) What are the limits of the terms of trade for both good X and good Y?

$$1x : 3/4 y - 1y$$

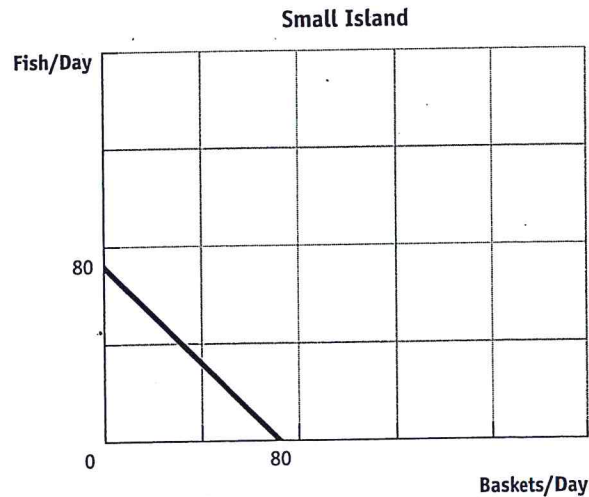
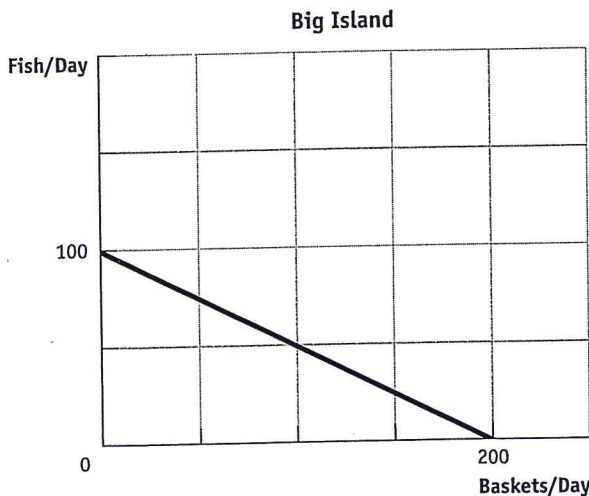
$$1y : 1x - 4/3 x$$

d) Propose an acceptable price for good X in terms of Y for the nation's to agree to trade.

Any price between  $3/4 y - 1y$

3. There are 2 islands in the middle of the ocean, and these 2 islands produce fish and baskets. Big Island can produce either 100 fish per day and 0 baskets per day or 0 fish and 200 baskets per day. Big Island can also produce any combination of fish and baskets that lies on its linear PPC. Small Island can produce either 80 fish per day and 0 baskets per day or 0 fish per day and 80 baskets per day. Small Island has a linear PPC.

a) Draw the PPCs for each island on a separate graph using fish on the y-axis and baskets on the x.



b) What is each country's opportunity cost for producing fish and baskets?

Big Island  
 $1F : 2B$   
 $1B : 1/2 F$

Small Island  
 $1F : 1B$   
 $1B : 1F$

c) What should each country specialize in? Why?

BI : Baskets      SI : Fish - lower opportunity costs

d) What are the limits of the terms of trade?

$$1F : 1B - 2B$$

$$1B : 1/2 F - 1F$$

### Exercise

1. 1 wine, 1/3 wine
2. 1 textiles, 3 textiles
3. wine and textiles, neither
4. wine, textiles

	Without Trade		With Trade (Production)		With Trade (Consumption)	
	Wine	Textiles	Wine	Textiles	Wine	Textiles
Portugal	20	30	0	90	50	45
United States	50	50	100	0	50	45
Total	70	80	100	90	100	90

5. it increases
6. comparative advantage
7. no, total consumption of textiles is lower for the United States