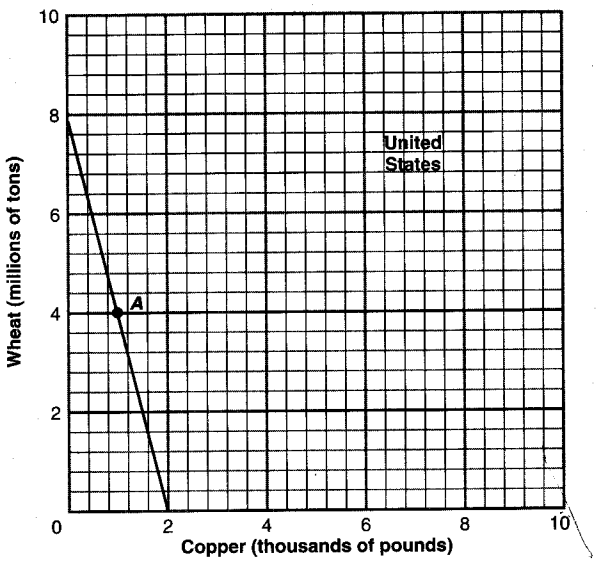
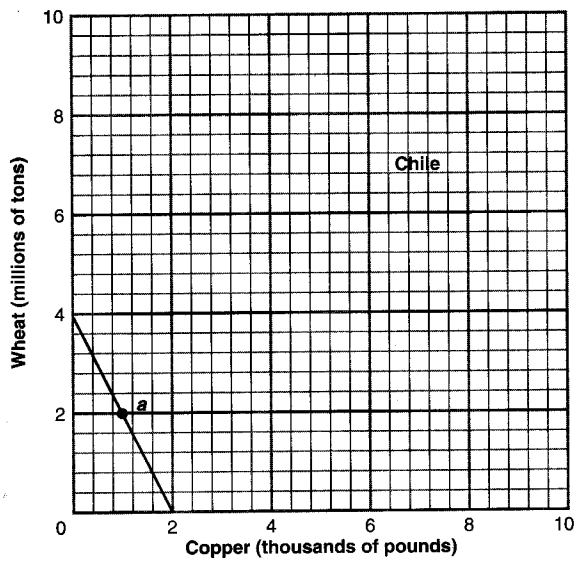
Chapter 37

■ PROBLEMS

1. Shown below are the production possibilities curves for two nations: the United States and Chile. Suppose these two nations do not currently engage in international trade or specialization, and suppose that points ***A*** and ***a*** show the combinations of wheat and copper they now produce and consume.





a. The straightness of the two curves indicates that the cost ratios in the two nations are (changing, constant) _____.

b. Examination of the two curves reveals that the cost ratio in

(1) the United States is _____ million tons of wheat for _____ thousand pounds of copper.

(2) Chile is _____ million tons of wheat for _____ thousand pounds of copper.

c. If these two nations were to specialize and trade wheat for copper,

(1) The United States would specialize in the production of wheat because _____.

(2) Chile would specialize in the production of copper because _____.

d. The terms of trade, if specialization and trade occur, will be greater than 2 and less than 4 million tons of wheat for 1000 pounds of copper because _____.

e. Assume the terms of trade turn out to be 3 million tons of wheat for 1000 pounds of copper. Draw in the trading possibilities curve for the United States and Chile.

f. With these trading possibilities curves, suppose the United States decides to consume 5 million tons of wheat and 1000 pounds of copper while Chile decides to consume 3 million tons of wheat and 1000 pounds of copper. The gains from trade to

(1) the United States are _____ million tons of wheat and _____ thousand pounds of copper.

(2) Chile are _____ million tons of wheat and _____ thousand pounds of copper.

2. Following are tables showing the domestic supply and demand schedules and the export supply and import demand schedules for two nations (**A** and **B**).

NATION A

Price	Q_{dd}	Q_{sd}	Q_{di}	Q_{se}
$3.00	100	300	0	200
2.50	150	250	0	100
2.00	200	200	0	0
1.50	250	150	100	0
1.00	300	100	200	0

a. For nation **A,** the first column of the table is the price of a product. The second column is the quantity demanded domestically (Q_{dd}). The third column is the quantity supplied domestically (Q_{sd}). The fourth

column is the quantity demanded for imports (Q_{di}). The fifth column is the quantity of exports supplied (Q_{se}).

(1) At a price of $2.00, there (will, will not) _____ be a surplus or shortage and there _____ be exports or imports.

(2) At a price of $3.00, there will be a domestic (shortage, surplus) _____ of _____ units. This domestic _____ will be eliminated by (exports, imports) _____ of _____ units.

(3) At a price of $1.00, there will be a domestic (shortage, surplus) _____ of _____ units. This domestic _____ will be eliminated by (exports, imports) _____ of _____ units.

NATION B

Price	Q_{dd}	Q_{sd}	Q_{dI}	Q_{se}
$2.50	100	300	0	200
2.00	150	250	0	100
1.50	200	200	0	0
1.00	250	150	100	0

b. For nation **B,** the first column is the price of a product. The second column is the quantity demanded domestically (Q_{dd}). The third column is the quantity supplied domestically (Q_{sd}). The fourth column is the quantity demanded for imports (Q_{di}). The fifth column is the quantity of exports supplied (Q_{se}).

(1) At a price of $1.50, there (will, will not) _____ be a surplus or shortage and there _____ be exports or imports.

(2) At a price of $2.50, there will be a domestic (shortage, surplus) _____ of _____ units. This domestic _____ will be eliminated by (exports, imports) _____ of _____ units.

(3) At a price of $1.00, there will be a domestic (shortage, surplus) _____ of _____ units. This domestic _____ will be eliminated by (exports, imports) _____ of _____ units.

c. The following table shows a schedule of the import demand in Nation **A** and the export supply in Nation **B** at various prices. The first column is the price of the product. The second column is the quantity demanded for imports (Q_{diA}) in Nation **A.** The third column is the quantity of exports supplied (Q_{seB}) in Nation **B.**

Price	Q_{diA}	Q_{seB}
$2.00	0	100
1.75	50	50
1.50	100	0

(1) If the world price is $2.00, then Nation (**A, B**) _____ will want to import _____ units and Nation _____ will want to export _____ units of the product.

(2) If the world price is $1.75, then Nation (**A, B**) _____ will want to import _____ units and Nation _____ will want to export _____ units of the product.

(3) If the world price is $1.50, then Nation (**A, B**) _____ will want to import _____ units and Nation _____ will want to export _____ units of the product.

3. The following table shows the quantities of woolen gloves demanded (D) in the United States at several different prices (P). Also shown in the table are the quantities of woolen gloves that would be supplied by U.S. producers (S_a) and the quantities that would be supplied by foreign producers (S_f) at the nine different prices.

P	D	S_a	S_f	S_t	S'_f	S'_t
$2.60	450	275	475	_____	_____	_____
2.40	500	250	450	_____	_____	_____
2.20	550	225	425	_____	_____	_____
2.00	600	200	400	_____	_____	_____
1.80	650	175	375	_____	_____	_____
1.60	700	150	350	_____	_____	_____
1.40	750	125	325	_____	_____	_____
1.20	800	0	300	_____	_____	_____
1.00	850	0	0	_____	_____	_____

a. Compute and enter in the table the total quantities that would be supplied (S_t) by U.S. and foreign producers at each of the prices.

b. If the market for woolen gloves in the United States is a competitive one the equilibrium price for woolen gloves is $_____ and the equilibrium quantity is _____.

c. Suppose now that the United States government imposes an 80 cent ($.80) tariff per pair of gloves on all gloves imported into the United States from abroad. Compute and enter into the table the quantities that would be supplied (S'_f) by foreign producers at the nine different prices. [*Hint:* If foreign producers were willing to supply 300 pairs at a price of $1.20 when there was no tariff, they are now willing to supply 300 pairs at

$2.00 (the $.80 per pair tariff plus the $1.20 they will receive for themselves). The quantities supplied at each of the other prices may be found in a similar fashion.]

d. Compute and enter into the table the total quantities that would be supplied (S'_t) by U.S. and foreign producers at each of the nine prices.

e. As a result of the imposition of the tariff the equilibrium price has risen to $_____ and the equilibrium quantity has fallen to _____.

f. The number of pairs sold by

(1) U.S. producers has (increased, decreased) _____ by _____.

(2) foreign producers has (increased, decreased) _____ by _____.

g. The total revenues (after the payment of the tariff) of

(1) U.S. producers—who do not pay the tariff—have (increased, decreased) _____ by $_____.

(2) foreign producers—who do pay the tariff—have (increased, decreased) _____ by $_____.

h. The total amount spent by U.S. buyers of woolen gloves has _____ by $_____.

i. The total number of dollars earned by foreigners has _____ by $_____, and, as a result, the total foreign demand for goods and services produced in the United States has _____ by $_____.

j. The tariff revenue of the United States government has _____ by $ _____.

k. If an import quota were imposed that had the same effect as the tariff on price and output, the amount of the tariff revenue, $_____, would now be received as revenue by _____ producers.