I) Why do nations trade?

A) Exports make up about 10% of our economy.
II) Some Key Concepts

A) **Trade surplus** – occurs when exports of a country exceeds its imports.

B) **Trade deficit** – when a country’s imports are greater than exports.

C) **Protectionism** – the use of economic trade barriers to protect domestic companies and jobs.

D) **Trade barrier** – any government law or action intended to reduce imports.
D) **Trade barrier** – any government law or action intended to reduce imports.

- **Examples:**
  - Tariffs
  - Quotas
  - Voluntary trade restrictions
  - Health regulations
  - Trade license
International Trade Policy: Chapter 6

- **BUT**, using trade barriers→increases the prices of products made in the U.S., too.

- **SO**, economists do not like trade barriers.

- **BUT**, economists prefer tariffs (rather than quotas) if a country chooses to use trade barriers.
The History of the U.S. Tariff

III) The figure shows the average tariff rate—total tariffs as a percentage of total imports.

The United States is a member of the WTO and GATT, and party to many trade agreements with individual countries or regions.

U.S. tariffs today are modest in comparison with their historical levels.
IV) The Trade advantages:

a) **Absolute advantage** – a country produces goods more efficiently than other countries.

b) **Comparative advantage** – a country specializes in producing & exporting goods at a lower cost than any other goods it could produce.

- *(ie, produce only what you are the best at!)*
- *Always consider your opportunity cost!*
International Trade: Chapter 3

U.S. areas of comparative advantage:

1. Consulting services
2. Airplanes and parts
3. Entertainment
4. Computer chips
5. Computer software
6. Agriculture
7. Tourism
Areas of U.S. Comparative Advantage (2009):

- Private services
- Royalties and license fees
- Civilian aircraft and parts
- Business, professional, and technical services
- Financial services
- Chemicals and plastics
- Agricultural products
- Travel
- Semiconductors
- Education services

(a) The 10 largest U.S. exports
Areas of comparative disadvantage (2009):

- Crude oil
- Automobiles and parts
- Clothing
- Furniture and household goods
- Computers and computer accessories
- Pharmaceuticals
- TVs and DVD players
- Insurance services
- Toys, games, and sporting goods
- Freight services

(b) The 10 largest U.S. imports
Using the Production Possibilities Curve to illustrate gains from trade.
International Trade: Chapter 3

1) Specialization and international trade allows a country to improve its well-being by moving beyond its existing PPC.

2) Current PPC of U.S.:

\[ \text{U.S. currently produces:} \]
\[ 2,000 \text{ champagne cases,} \]
\[ 4,000 \text{ computer software} \]
3) **Current PPC of France:**

*France currently produces:*
- 5,000 champagne cases,
- 750 computer software
4) Both U.S. and France agree to trade.

rate of exchange = 3,000 champagne cases for 1,000 computer software

**Key Q:** How will this affect each country’s PPC?
5) With trade:

U.S. specializes in producing only computer software:

- produce 5,000 computers and 0 champagne.
- trade off 1,000 computer software for 3,000 champagne cases.
5) With trade:

France specializes in producing only champagne:

- produce 8,000 champagne cases.
- trade 3,000 champagne cases for 1,000 computers.
6) The effects of international trade:

a) U.S. now has an additional 1,000 cases of champagne than it could produce on its own while still producing the needed 4,000 computer software.
6) The effects of international trade:

b) France now has an additional 250 computer software that it could not produce on its own while still consuming the much desired 5,000 champagne cases.

Both countries are better off!
7) So who has the absolute advantage? Who has the comparative advantage?

<table>
<thead>
<tr>
<th></th>
<th>Champagne</th>
<th>Computer Software</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>10,000</td>
<td>5,000</td>
</tr>
<tr>
<td>France</td>
<td>8,000</td>
<td>2,000</td>
</tr>
</tbody>
</table>

U.S. has the *absolute advantage* in both computer software and champagne.

**BUT,** we must consider *opportunity cost* to calculate comparative advantage.
8) Consider *opportunity cost* to calculate *comparative advantage*.

<table>
<thead>
<tr>
<th></th>
<th><strong>Champagne</strong></th>
<th><strong>Computer Software</strong></th>
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<td>8,000</td>
<td>2,000</td>
</tr>
</tbody>
</table>

U.S. has 2 to 1 ratio producing champagne to computer software.

France has 4 to 1 ratio producing champagne to computer software.

⇒ For the U.S. to produce 1 computer software, it must give up 2 champagne cases.

⇒ For France to produce 1 computer software, it must give up 4 champagne cases.
8) Consider *opportunity cost* to calculate *comparative advantage*.

**Therefore:**

- U.S. has *comparative advantage* in computer software (i.e., it has a lower opportunity cost to produce computers software.)

- France has a *comparative advantage* in champagne (i.e., it has a higher opportunity cost to produce computer software.)
Sally can write 2 novels or 6 songs in one year.

Allan can write 1 novel or 4 songs in a year’s time.

Which of the following is true?

a. Allan has an absolute advantage in the production of songs.

b. Sally has an absolute advantage in the production of both novels and songs, and a comparative advantage in the production of songs.

c. Allan has a comparative advantage in the production of novels.

d. Sally has a comparative advantage in the production of novels.
International Trade: Chapter 3

Review Q

Sally can write 2 novels or 6 songs in one year.

Allan can write 1 novel or 4 songs in a year's time.

Which of the following is true?

d. Sally has a comparative advantage in the production of novels.

<table>
<thead>
<tr>
<th></th>
<th>novel</th>
<th>song</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sally:</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>(a 1:3 ratio, her opportunity cost is only 3 songs. Sally gives up less to write one 1 book.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allen:</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>(a 1:4 ratio, his opportunity cost is 4 songs to create 1 novel. A higher opportunity cost!)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Practice Problem 1

Suppose that the world price of sugar is 10 cents a pound, the United States does not trade internationally, and in the United States is the price is 20 cents a pound.

The United States then begins to trade internationally.

- How does the price of sugar in the United States change?
- Do U.S. consumers buy more or less sugar?
- Do U.S. sugar growers produce more or less sugar?
- Does the United States export or import sugar.
Suppose that the world price of sugar is 10 cents a pound, the United States does not trade internationally, and the price of sugar in the United States is 20 cents a pound.

The United States then begins to trade internationally. The price of sugar in the United States ______. U.S. Consumers buy _____ sugar. U.S. sugar growers produce _____ sugar. The United States _____ sugar.

• A. rises; less; more; exports
• B. falls; less; more; imports
• C. falls; more; less; imports
• D. rises; more; less; exports
Suppose that the world price of sugar is 10 cents a pound, the United States does *not* trade internationally, and the price of sugar in the United States is 20 cents a pound.

The United States then begins to trade internationally. The price of sugar in the United States _____. U.S. Consumers buy _____. U.S. sugar growers produce _____. The United States _____.

- C. **falls; more; less; imports**
International Trade: Chapter 3

**Group Review Q directions:**

1) Work in groups of 3 to 4.

2) Answer the Practice Problem Q’s on the handout:

“International Trade and Trade Policy”

**Be prepared to discuss your answers in about 20 - 25 minutes.**
Practice Problem 2

Before 1995, the United States imposed tariffs on goods imported from Mexico and Mexico imposed tariffs on goods imported from the United States.

In 1995, Mexico joined NAFTA. U.S. tariffs on imports from Mexico and Mexican tariffs on imports from the United States are gradually being removed.

Explain how the quantity of U.S. exports to Mexico and the U.S. government’s tariff revenue from trade with Mexico have changed.
Solution to Practice Problem 2

- The quantity of U.S. exports to Mexico has increased.
- The U.S. government’s tariff revenue from trade with Mexico has fallen to zero.
Practice Problem 3

Japan sets an import quota on rice. California rice growers would like to export more rice to Japan.

- What are Japan’s arguments for restricting imports of California rice?
- Are these arguments correct?
- Who loses from this restriction in trade?
Solution to Practice Problem 3

- The main arguments are that Japanese rice is a better quality rice and that the quota limits competition faced by Japanese farmers. The arguments are not correct.
- If Japanese consumers do not like the quality of Californian rice, they will not buy it.
- The import quota limits competition, which allows Japanese farmers to use their land less efficiently.
- The big losers are the Japanese consumers who pay about three times the U.S. price for rice.
Practice Problem 4
The United States maintains a quota on imports of sugar.

• What is the argument for this quota?
• Is this argument flawed? If so, explain why.
Solution to Practice Problem 4

- The argument is that the quota protects the jobs of U.S. workers.
- The argument is flawed because the United States does not have a comparative advantage in producing sugar and so a quota allows the U.S. sugar industry to be inefficient.
- With free international trade in sugar, the U.S. sugar industry would exist but it would be much smaller and more efficient.
Solution to Practice Problem 5 (Handout)

a. Spain has the absolute advantage in both beef and eggs. Spain can produce more of both.

b. England has comparative advantage in eggs. Spain has comparative advantage in beef.

<table>
<thead>
<tr>
<th></th>
<th>Beef (kilos)</th>
<th>Eggs (kilos)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spain</td>
<td>20,000</td>
<td>40,000</td>
</tr>
<tr>
<td>England</td>
<td>8,000</td>
<td>32,000</td>
</tr>
</tbody>
</table>

Spain has lower opportunity cost to raise cattle.

England has lower opportunity cost to raise chickens.
1- Spain and Germany without trade:
(Exchange rate = 12,000 kilos of eggs for 4,000 kilos of beef)
Solution to Practice Problem 5

2- Spain and Germany with trade (Exchange rate = 12,000 kilos of eggs for 4,000 kilos of beef)

Spain: comparative advantage in beef, produce 200,000 kilos of beef, trade 4,000 kilos of beef for 12,000 kilos of eggs. Get 4,000 k more eggs!

England: comp. adv. In eggs, produce 32,000 kilos of eggs, trade 12,000 kilos of eggs for 4,000 kilos of beef. Get 1,000 k more beef!
The End!

Woohoo!