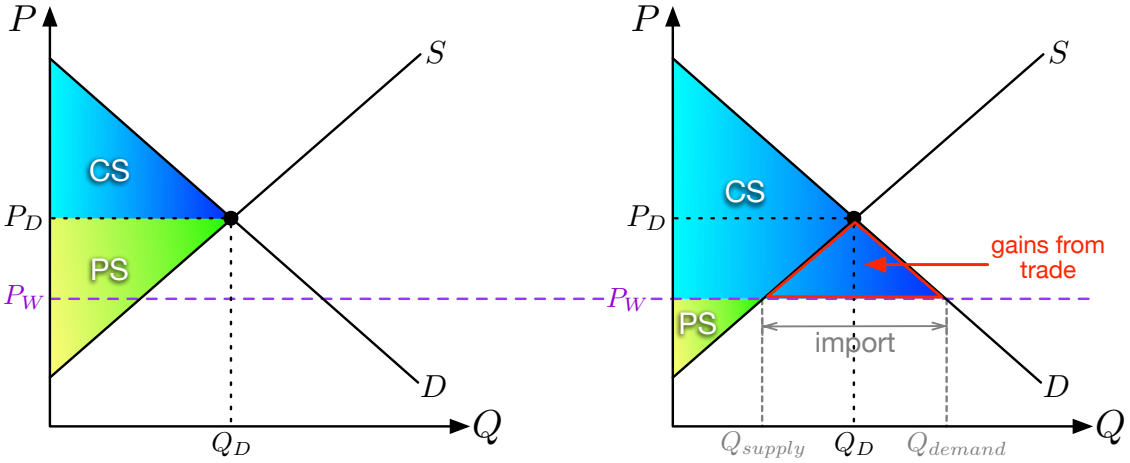
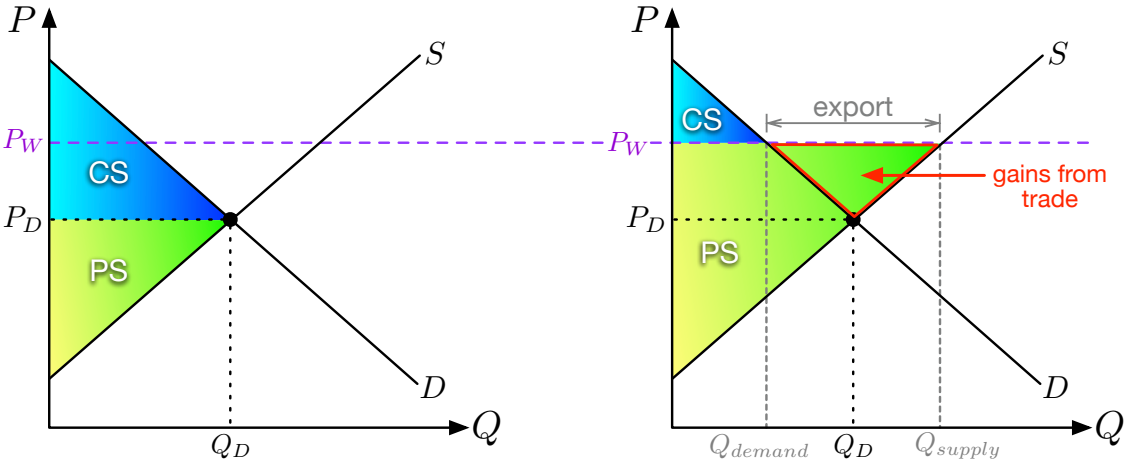
Handout 5

Reviews

- **Absolute** Advantage: A country has an absolute advantage in those products in which it has a productivity edge over other countries.
  - it takes fewer resources to produce a product.
- **Comparative** Advantage: A country has a comparative advantage when a good can be produced at a lower cost in terms of other goods
  - based on who has the lower opportunity cost
  - countries that specialize based on comparative advantage gain from trade
- **World Trade** (everyone is a price taker, both buyers and sellers only accept world price):
  - P_W: world price, the price prevails in the world market
  - P_D: domestic price without trade
  - **Import** ($P_W < P_D$):



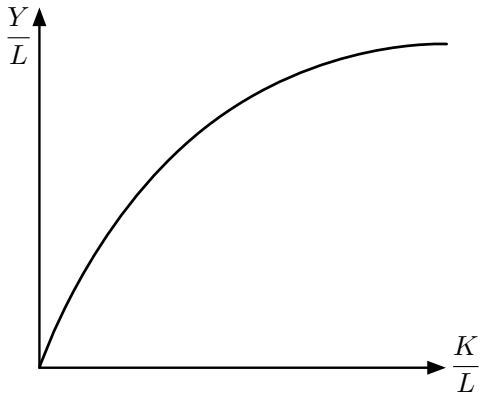
  - **Export** ($P_W > P_D$):



- Welfare:
  - The summation of every buyers':
    - **Willingness to buy - Price = Consumer's surplus** (CS)
      - i.e. the triangular area between the demand curve and equilibrium price
    - **Willingness to buy = Consumer's value** (valuation to the good)
      - i.e. "entire" trapezoid area below the demand curve
  - The summation of every sellers':
    - **Price - Willingness to sell = Producer's surplus** (PS)
      - i.e. the triangular area between equilibrium price and supply curve
    - **Willingness to sell = Cost** (area under the supply curve)
      - i.e. "entire" trapezoid area below the supply curve
  - **Total Surplus = CS + PS = Consumer's valuation - Cost**

Exercises

1. In one day Alpha Cabinet Company made 40 cabinets with 320 hours of labor. What was their productivity?
   (a) 40 cabinets
   (b) 8 hours per cabinet
   (c) $\frac{1}{8}$ cabinet per hour
   (d) None of the above is correct.
2. Which of the following is considered human capital?
   (a) the comfortable chair in your dorm room where you read economics texts
   (b) the amount you get paid each week to work at the library
   (c) any capital goods that require a human to be present to operate
   (d) the knowledge you have learned this semester
3. Refer to the following graph



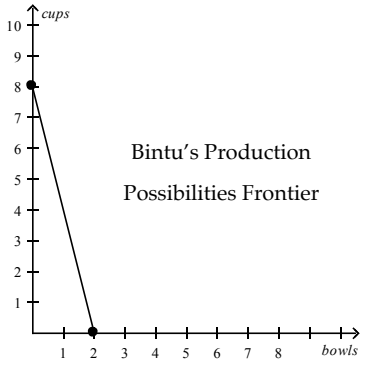
   The curve becomes flatter as the amount of capital per worker increases because of
   (a) increasing returns to capital.
   (b) diminishing returns to capital.
   (c) increasing returns to labor.
   (d) diminishing returns to labor.

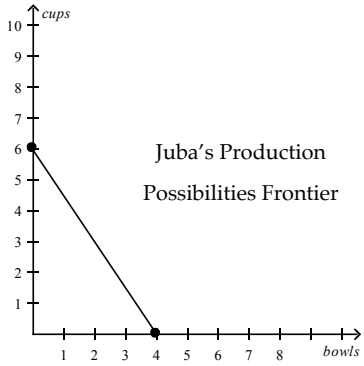
4. The chart below lists the output per worker of computers and of corn in the US and in Japan:

	United States	Japan
Computers	120	120
Corn	480	360

Write down the absolute advantages and comparative advantages in this economy.

5. The following is the production possible frontier for Bintu and Juba:



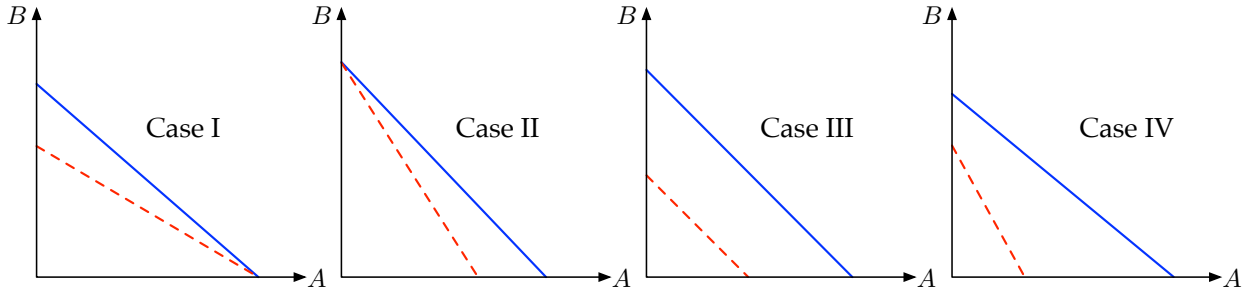


Refer to Figure, Bintu has a comparative advantage in the production of

(a) bowls and Juba has a comparative advantage in the production of cups.
(b) cups and Juba has a comparative advantage in the production of bowls.
(c) both goods and Juba has a comparative advantage in the production of neither good.
(d) neither good and Juba has a comparative advantage in the production of both goods.

6. Tariff (T) is a tax on imports. Let the world price be P_W and the price facing by domestic buyers and sellers be $(P_W + T)$. Use a graph to analyze the *change in welfare* when tariff is imposed and quantify the *deadweight loss* (D.W.L).

7. Consider the following 4 cases with the *Line country* and the *Dash country* producing proudct A and B:



In which cases, do country **Dash** has a comparative advantage in producing B?

In which cases, do country **Line** has an absolute advantage in producing B?

Is there *gains from trade* between these two countries if **Line** produces A and **Dash** produces B in Case IV?

List four possible factors that will stimulate economic growth for **Dash** country in Case III.

8. Suppose *Atlantis* changes its laws to allow international trade in software. Consider the case that the world price is lower than Atlantis' domestic price, then it must be that
   (a) both CS and PS increase
   (b) both CS and PS decrease
   (c) CS decreases and PS increases
   (d) CS increases and PS decreases
9. The price of sugar that prevails in international markets is called the
   (a) world price of sugar.
   (b) export price of sugar.
   (c) import price of sugar.
   (d) comparative-advantage price of sugar.
10. Assume, for Canada, that the domestic price of tomatoes without international trade is higher than the world price of tomatoes. This suggests that, in the production of tomatoes,
   (a) Canada has a comparative advantage over other countries and Canada will export tomatoes.
   (b) Canada has a comparative advantage over other countries and Canada will import tomatoes.
   (c) other countries have a comparative advantage over Canada and Canada will import tomatoes.
   (d) other countries have a comparative advantage over Canada and Canada will export tomatoes.
11. When a country that imported a particular good abandons a free-trade policy and adopts a no-trade policy,
   (a) producer surplus decreases and total surplus decreases in the market for that good.
   (b) producer surplus increases and total surplus increases in the market for that good.
   (c) producer surplus decreases and total surplus increases in the market for that good.
   (d) producer surplus increases and total surplus decreases in the market for that good.
12. A tariff
   (a) lowers the domestic price of the exported good below the world price.
   (b) keeps the domestic price of the exported good the same as the world price.
   (c) lowers the domestic price of the imported good below the world price.
   (d) raises the domestic price of the imported good above the world price.
13. A tariff on a product makes
   (a) domestic sellers worse off and domestic buyers worse off.
   (b) domestic sellers better off and domestic buyers worse off.
   (c) domestic sellers better off and domestic buyers better off.
   (d) domestic sellers worse off and domestic buyers better off.
14. Consider the following production function

$$F(L, K, H, N) = L^{\alpha} K^{\beta} H^{\gamma} N^{1-\alpha-\beta-\gamma}$$

   this function illustrates
   (a) Quantity of input demanded
   (b) Nomial GDP
   (c) Real GDP
   (d) Output per worker