Liberty High School

AP Macroeconomics

Mr. Lopez

Chapter Three

Gains from Trade

Study Guide

(57 Points)

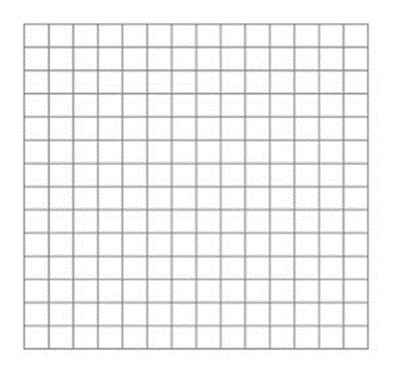
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Part 1 – Key Terms

1. Absolute Advantage:
2. Opportunity Cost:
3. Comparative Advantage:
4. Gains from trade:
5. Imports:
6. Exports:
7. Specialization:

Part 2 – Problems and Short Answers:

1. Carlos is a college student. He takes a full load of classes and has only 5 hours per week for his hobby. Carlos can make two clay pots per hour or 4 coffee mugs per hour.
   1. On the graph below, draw Carlos’s production possibilities frontier for pots and mugs.

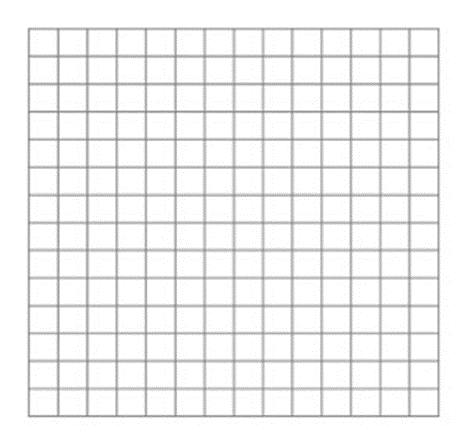


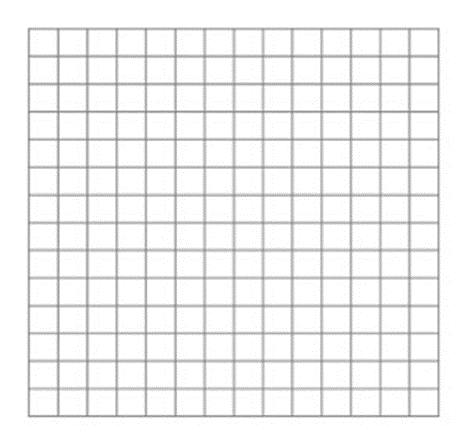
* 1. What is Carlos’s opportunity cost of 1 pot? 10 pots?
  2. What is Carlos’s opportunity cost of 1 mug? 10 mugs?
  3. Why is Carlos’s production possibility frontier a straight line instead of bowed out like some of the one we have graphed to date?

1. Suppose a worker in Germany can produce 15 computers or 5 tons of grain per month. Suppose a worker in Poland can produce 4 computers or 4 tons of grain perm month. Assuming each country has only this one worker.
   1. Complete the following table:

|  |  |  |
| --- | --- | --- |
|  | **Computers** | **Grain** |
| **Germany** |  |  |
| **Poland** |  |  |

* 1. On the graphs below graph the production possibilities frontier for each country. Be sure to label your graphs properly identifying the country, its two options, and its x and y numbers.





* 1. What is the opportunity cost of 1 computer in Germany? What is the opportunity cost of 1 ton of grain in Germany?
  2. What is the opportunity cost of 1 computer in Poland? What is the opportunity cost of 1 ton of grain in Poland?
  3. Which of these countries has an absolute advantage in producing computers? Grain?
  4. Which country has the comparative advantage in producing computers? Grain?
  5. What should each of these nations specialize in and why?
  6. What is the range of prices for computers and grain for which both nations would benefit?
  7. Suppose the nations agree on a price of 2 computers for 1 ton of grain or ½ ton of grain per computer. Suppose each country specializes in production and they grade 4 computers for 2 tons of grain. Plot the final consumption on the graphs that you made above. Are these countries consuming inside or outside their production possibilities frontier?
  8. Suppose the productivity of a worker in Poland doubles so that a worker can produce 8 computers or 8 tons of grain per month. Which country has the absolute advantage in producing computers? Grain?
  9. After the doubling of productivity in Poland, which country has a comparative advantage in producing computers? Grain? Has the comparative advantage changed? Has the material welfare of either country changed?
  10. How would your analysis change if you assumed that each country had 10 million workers?

1. Suppose a worker in The United States can produce 4 cars or 20 computers per month whereas a worker in Russia can produce 1 car or 5 computers per month. Again, assume each country only has one worker.
   1. Complete the following table:

|  |  |  |
| --- | --- | --- |
|  | **Cars** | **Computers** |
| **The United States** |  |  |
| **Russia** |  |  |

* 1. Which country has the absolute advantage in the production of cars? Computers?
  2. Which country has the comparative advantage in the production of cars? Computers?
  3. Are there any gains to be made from trade? Why or why not?
  4. Does you answer in d above help you identify a source of the potential grain from trade?
  5. Why might be the reason why two countries have different opportunity cost of production?

1. Why do people choose to become inter-dependent as opposed to self-sufficient?
2. Why is comparative advantage important in determining trade instead of absolute advantage?
3. What are the gains from trade?
4. Why is a restriction on trade likely to reduce general welfare?
5. Suppose a lawyer who earns $200 per hours can also type 200 words per minute. Should the lawyer hire a secretary who can type 50 words per minute? Why or why not?
6. Evaluate this statement: “A technologically advanced nation, which is better than its neighbor at producing everything, would be better off if it closed its borders to trade because the less productive nation is a burden to the advanced nation”.

Part 3 – True or False

1. \_\_\_\_\_\_\_ If Japan has an absolute advantage in the production of an item, it must also have a competitive advantage on the production of that item.
2. \_\_\_\_\_\_\_ Comparative advantage, not absolute advantage, determines the decision to specialize in production.
3. \_\_\_\_\_\_\_ Absolute advantage is a comparison among producers based upon productivity.
4. \_\_\_\_\_\_\_ Self-sufficiency is the best way to increase one’s material wellbeing.
5. \_\_\_\_\_\_\_ Comparative advantage is a comparison among producers based upon opportunity cost.
6. \_\_\_\_\_\_\_ If a producer is self-sufficient, the production possibilities frontier is also the consumption possibilities frontier.
7. \_\_\_\_\_\_\_If a country’s workers can produce 5 hamburgers per hour or 10 bags of French fries per hour, absent trade, the price of 1 bag of French fries is 2 hamburgers.
8. \_\_\_\_\_\_\_ If producers have different opportunity costs of production, trade will allow them to consume outside their production possibilities frontiers.
9. \_\_\_\_\_\_\_ If trade benefits one country, its trading partner must be worst off due to trading.
10. \_\_\_\_\_\_\_ Talented people who are best at everything have a comparative advantage in the production of everything.
11. \_\_\_\_\_\_\_The gains from trade can be measured by the increase in total production that comes from specialization.
12. \_\_\_\_\_\_\_When a country removes a specific import restriction, it always benefits every worker in that country.
13. \_\_\_\_\_\_\_ If Spain’s productivity doubles for everything it produces, this will not alter its prior pattern of specialization because it has not altered its comparative advantage.
14. \_\_\_\_\_\_\_ If an advanced country has an absolute advantage in the production of everything, it will benefit if it eliminates trade with less developed countries and becomes completely self-sufficient.
15. \_\_\_\_\_\_\_If gains from trade are based solely on comparative advantage, and if all countries have the same opportunity cost of production, then there are no gains from trade.

Part 4 – Additional Critical Thinking

1. You are watching an election debate on TV. AS candidate says “We need to stop the flow of foreign cars into our country. If we limit the importation of cars, our domestic auto production will increase and The United States will be better off.
   1. Why or why not is it probable that the United States would be better off if we limited auto imports?
   2. Would anyone in The United States bet better off if we limited auto imports? Explain.
   3. In the real world, does every person in the country gain when restrictions on trade are reduced? Explain.

Part 5 – Still More to Consider.

1. Why or why not is the statement “Time is Money” true?
2. Why is a higher income person more likely to misplace and never utilize a gift certificate?
3. Why is a rebate a more effective incentive for a lower income person?
4. Why or why not would it be rational for someone to forego earning an additional $50,00 by working overtime in order to avoid $15.00 in additional childcare costs?
5. In a recent study a majority of individuals placed a value on their time that exceeded the amount or value than their current pay rate. What can we say regarding how these individuals value their free time?
6. Why is the concept of opportunity cost important I both Macro and Micoeconomics?