

Concordia University Department of Economics

ECON 319 Fall 2016

Assignment 1: Chapters 2 - 5

The due date for this assignment is Friday, October 7 at 3:00 pm.

Complete the following questions. Follow the instructions for presenting your work included on the course outline. Make your answers as concise as possible, but, show all your work.

1. Equation 2.2 in the text says that trade between any two countries is proportional to the product of their GDPs. Consider the following example with only 2 countries in the world.

Country	GDP	Share of World Spending
A	\$6 trillion	60%
B	\$4 trillion	40%

Show that if the GDP of both countries doubled, world trade would not quadruple.

[5 marks]

2. Use the information in the table on labour productivities in France and Germany to answer questions a through f.

[15 marks]

	Output per Hour Worked	
	France	Germany
Cheese	1 kilogram	2 kilograms
Cars	0.25 car	2 cars

- (a) Which country has an absolute advantage in cheese? In cars?
- (b) What is the relative price of cheese in France if there is no trade? In Germany?
- (c) What is the opportunity cost of cheese in France? In Germany?
- (d) Which country has a comparative advantage in cheese? In cars? Explain your answer.
- (e) What are the upper and lower bounds for the trade price of cheese?
- (f) Suppose France has 8 hours of labour available. Draw a hypothetical PPF for France and label its slope. Suppose that France follows its comparative advantage in deciding where to produce on its PPF. Label its production point. If the trade price of cars is 5 kilograms of cheese per car, draw a trade line (consumption possibilities curve) showing how France can gain from trade.
3. Explain how a nation can gain from trade even though not everyone is made better off. Is this a contradiction?

[5 marks]

4. Economic nationalists in developed countries worry that international trade is destroying the national economy. A common complaint is that trade agreements open the economy to increased trade with countries where workers are paid a fraction of what they earn at home. Explain the faulty logic of this argument. [5 marks]

5. The following table shows kilograms of wheat and metres of cloth that Canada and the United Kingdom can produce with one hour of labour time. [10 marks]

	Canada	U.K.
Wheat (kilograms/hour)	4	1
Cloth (metres/hour)	3	2

- a. Suppose that Canada exchanges 4W for 4C with the United Kingdom
- How much does Canada gain in terms of cloth?
  - How much does the U.K. gain in terms of cloth?
  - Give a range of exchange rates of cloth for 4W in order to have mutually beneficial trade.
  - How much would each nation gain if they exchanged 4W for 6C instead?
- b. Assume that labour is the only factor of production and is homogeneous.
- Calculate the unit labour requirement of wheat and cloth production in Canada and the United Kingdom.
  - What is the dollar price of wheat and cloth in Canada if the wage rate is \$6?
  - What is the pound (£) price of wheat and cloth in the U.K. if the wage rate is £1?

6. The following table shows the amount of wheat and cloth that can be produced in Canada and the United Kingdom. [6 marks]

	Canada	U.K.
Wheat (millions of kilograms)	4	1
Cloth (millions of metres)	3	2

- Plot the production possibilities frontiers of Canada and the U.K.
- What is the relative price of wheat (i.e.,  $P_W/P_C$ ) in Canada and in the U.K. in autarky?

- c. What is the relative price of cloth (i.e.,  $P_C/P_W$ ) in Canada and in the U.K. in autarky?
7. Using the production possibilities frontiers from problem 6, assume that the autarkic point is  $3W$  and  $3/4C$  (in million units) in Canada and  $1/2W$  and  $1C$  in the U.K. Also assume that with the opening of trade Canada exchanges  $1W$  for  $1C$  with the United Kingdom. Show graphically for Canada and the U.K. the autarky point of production and consumption, the point of production and consumption with trade and the gains from trade. [5 marks]
8. How would you counter the argument that Canada needs to restrict dairy imports in order to save Canadian jobs?
9. Suppose that there are three factors of production: capital, labour, and land. Bread requires inputs of land and labour and steel requires capital and labour. [10 marks]
- Which factors are variable and which are specific?
  - Suppose Canada's endowments of land and capital are 10 capital and 100 land and the United States' are 50 capital and 100 land. Which good does each country export?
  - How does trade affect the returns to land, labour and capital in the United States and Canada?
10. Problem 1 from Chapter 3.
11. Problem 2 from Chapter 3.
12. Problem 3 from Chapter 3.
13. Problem 2 from Chapter 4.
14. Problem 3 from Chapter 4.
15. Problem 1 from Chapter 5.

\*\*Questions 10, 11 and 13 are worth 5 marks each; question 12 is worth 6 marks; questions 14 and 15 are each worth 10 marks.