

Exam 2: Version A Fall 2016

Do not open this exam until instructed to do so.

- You have 75 minutes to complete this exam
- You may use a calculator; you may **not** use any other device (cell phone, etc.)
- You may consult one page of notes (both sides); you may not use books, notebooks, etc.
- Show your work

I understand that the honor code applies: I will not lie, cheat, or steal to gain an academic advantage, nor tolerate those who do.

Signature

Printed Name

For each question below, **write the letter of the most correct answer to the left of the question.**

1. (3 pts.) An explanation for anti-trade sentiment is that
 - A. economists cannot persuade the general public that free trade is beneficial.
 - B. the losses from opening to trade are concentrated, where as the gains from trade are diffuse.
 - C. there is systematic political corruption.
 - D. economists do not understand how the real world works.

2. (3 pts.) The linear demand curve for the monopolistic competition model implies that if a firms price is _____ the industry average, its quantity sold will be _____ the industry average.
 - A. below; below
 - B. below; above
 - C. above; above
 - D. the same as; above

3. (3 pts.) Chile is blessed with rich copper deposits. The cost of producing copper (relative to the cost of manufactures) is therefore very low. From this information we know that
 - A. Chile has a comparative advantage in copper.
 - B. Chile should export both manufactures and copper.
 - C. Chile should import copper and export manufactures.
 - D. Depending upon the world relative price of copper, Chile may or may not have a comparative advantage in copper.

4. (3 pts.) In a small open economy, if exports equal 20 billion, imports equal 30 billion, and domestic national saving equals 25 billion, then investment equals
 - A. 10 billion
 - B. 35 billion
 - C. 25 billion
 - D. -10 billion

5. (3 pts.) In a small open economy, if the world interest rate is lower than the interest rate if the economy were closed, then the economy has
 - A. positive capital outflows.
 - B. a trade surplus.
 - C. balanced trade.
 - D. a trade deficit.

6. (3 pts.) In the model of monopolistic competition, if firms differ in productivity, then **closing** to trade will cause _____ firms to _____ the industry.
- A. more efficient; exit
 - B. less efficient; enter
 - C. less efficient; exit
 - D. more efficient; enter
7. (3 pts.) The adoption of an investment tax credit in a small open economy is likely to lead to:
- A. a decrease in investment and an increase in net exports.
 - B. a increase in investment and a increase in net exports.
 - C. a increase in investment and a decrease in net exports.
 - D. an increase in both investment and saving.
8. (3 pts.) The gains from trade in the Ricardian model arise from
- A. differences in productivity
 - B. differences in country size and increasing returns to scale technologies
 - C. differences in preferences/tastes
 - D. differences in product variety
9. (3 pts.) In a small open economy, if exports equal 5 billion and import equal 7 billion, then there is a trade _____ and _____ net capital outflow.
- A. deficit; positive
 - B. deficit; negative
 - C. surplus; negative
 - D. surplus; positive
10. (3 pts.) If one country's wage level is very low relative to the other's
- A. the low wage country has a comparative advantage as it is more competitive with lower costs.
 - B. the low wage country has an absolute advantage as it is more competitive with lower costs.
 - C. the high wage country has a comparative advantage.
 - D. the low wage country has an absolute disadvantage relative to the high wage country.

11. (35 pts.) **Trade Dispute.** You are a research associate covering the gizmo industry for Morgan Stanley. After the 2016 election, the US becomes engaged with China in a trade dispute. Upset with behavior of China, the Trump administration is threatening to close the US gizmo market to Chinese firms. You are asked to write a research report on the implications of this scenario.

Some information about the gizmo industry in the US and China:

- Firms in both countries share the same technological characteristics. Consultants from Bain report that the fixed cost associated with producing a gizmo are \$5,000, the variable costs associated with producing a gizmo are \$10. The demand elasticity parameter “b” was estimated to be $1/50$.
 - Your analyst reports industry characteristics of the US and China market: Currently there are 10 firms in the combined market. Three of these firms are located in US. The other seven firms are from China.
 - Total gizmo demand (and units sold) in the combined market is 10,000 units. Out of the total, 2,500 units were sold in US and 7,500 units were sold in China.
- a. (7 pts.) In a preliminary draft of the report, your research analysts writes, “our team at Morgan Stanley expects, in long-run, that the US market (when closed to foreign competition) to be entirely comprised of the current three firms located in US” Is this correct? Why or why not?

- b. (7 pts.) Building on your answer to (a), compute for your research analyst: (i) the price and (ii) market share (units sold per firm) of each firm in the US market when it closes to foreign competition **in the long-run**.

- c. (7 pts.) A colleague argues that closing the US market to foreign competition is good for the firms currently operating in US because it will lead to higher profits. Is your colleague correct? **Please carefully explain why or why not with particular attention to short-run and long-run distinctions.**

- d. (7 pts.) A colleague suggests that closing the US market to foreign competition will “create more jobs” for Americans. To evaluate this claim, assume that to produce one gizmo it takes one worker. **Please carefully explain why or why not closing to China creates more jobs in the gizmo industry.**

- e. (7 pts.) Over coffee, a colleague suggests that the this policy will not hurt the American consumer that much. Specifically, he argues the following: “because Chinese and US gizmo varieties are essentially identical, there is no loss to consumers from not having access to Chinese varieties.”

Within the context of our class, discuss (i) how this claim may be correct and (ii) how it may not give a complete picture of the losses to closing to China.

12. (35 pts.) **Comparative Advantage and NAFTA.** As an aid to Senator Kirsten Gillibrand (D, NY) in the US Congress you are tasked to reevaluate the benefits from trade between the United States and Canada. A summer intern compiled the following data describing productivity per labor hour in Canada and the United States.

	Cars/hr	Tons of Wheat/hr	Total Labor Hours
Canada	12	6	200
USA	24	18	200

- a. (7 pts.) If countries specialize according to their comparative advantage, which country imports cars and which country imports wheat? **Please carefully explain how you came to that conclusion.**

- b. (7 pts.) At what set of prices will **both** countries be willing to trade according to their comparative advantage?

- c. (7 pts.) Pick a price in the set at which each country is willing to trade at, show that US **gains** (i.e. either in real wages, consumption opportunities, etc) from opening up to trade by specializing in the way described in **part a**.

- d. (7 pts.) Suppose that because of “Global Warming”, Canada’s productivity in wheat increases from 6 tons of wheat per hour to 8 tons of wheat per hour. Does this change your analysis? How does it affect the gains from trade that the US will realize? If yes, why? Please carefully explain.

- e. (7 pts.) If you are a young auto worker in the United States who recently inherited a wheat farm from your Grandparents, would you support free trade with Canada? Please explain why or why not?

Extra Space

Clearly label the question number, and leave a reference to this page near the question.