NAME: ____________________________________

Student ID No.: ____________________________

Economics 340
International Economics
Prof. Alan Deardorff
Final Exam

Form (KEY) 0

Answers

December 20, 2018

INSTRUCTIONS: READ CAREFULLY!!!

1. Please do not open the exam until you are told to do so.

2. **PLACE YOUR NAME AND STUDENT ID NO. (THE <u>EIGHT</u> DIGIT NUMBER FROM YOUR M-CARD) ON THE EXAM <u>AND</u> ON THE SCANTRON SHEET.**

3. Find the **FORM NUMBER** above and enter it where it asks for "KEY" on the scantron sheet. Be sure to fill in the bubbles.

4. This exam has 100 points and you have approximately 120 minutes to complete the test. Check that you have all 22 pages of the exam, including this cover sheet.

5. **Part 1** consists of 35 multiple choice questions worth 1 point each. Answers to these should be marked on the scantron sheet using a #2 pencil. There are no penalties for guessing.

6. **Part 2** consists of 63 points worth of short-answer questions for which you must provide written answers on these sheets. Point values for questions in Part 2 are indicated in parentheses.

7. That leaves 2 points unaccounted for. You will get these if (and only if) you put your name and ID number on both this exam booklet and the scantron sheet, **and** if you enter the form number (see above) on the scantron. Note that you must fill in circles on the scantron for the computer to read your name, ID, and form number, as well as your answers.

8. Good luck!

FORM (KEY) 0

Economics 340
Final Exam

Part 1: Multiple Choice (1 point each)

Select the **best** answer of those given. Answers to this part should be marked on the scantron sheet using a #2 pencil. There is only one correct answer per question, and there is no penalty for guessing.

1. According to a chart in an article assigned in *The Economist*, how does the share of world GDP in the Emerging Markets compare to the share of Developed Countries?

   a. The Emerging Market share is less than half that of the Developed Countries, and always will be.
   b. The Emerging Market share is less than that of Developed Countries and will surpass it only in about 50 years.
   c. The Emerging Market share is currently approaching that of the Developed Countries and will surpass it before 2020.
   d. The Emerging Market share surpassed that of the Developed Countries in 2008, when the world fell into recession.
   e. The Emerging Market share has been larger than that of the Developed Countries ever since World War II, not because they are rich but because their population is so much larger.

   Ans: *c*

2. If the UK and EU do not reach a deal on Brexit, then on March 29, 2019,
   a. The EU will levy tariffs on UK exports.
   b. UK citizens resident in the EU may have to leave.
   c. Canada will levy tariffs on UK exports.
   d. Ireland will levy tariffs on goods from Northern Ireland.
   e. All of the above.

   Ans: *e*

3. The United States, under President Trump, is levying 25% tariffs on imports of steel from which of the following countries?
   a. Canada
   b. China
   c. The European Union
   d. Mexico
   e. All of the above

   Ans: *e*

4. Suppose the world has two countries, Alpha and Beta, producing two goods, odds and ends. If Alpha has a comparative advantage in producing odds compared to Beta, then

   a. In autarky the relative price of ends must be higher in Alpha than in Beta.
   b. In autarky Beta must produce more ends than Alpha.
   c. In free trade, the wage in Alpha must be higher than in Beta.
   d. In free trade, Beta must import ends.
   e. In free trade, neither country will produce ends.

   Ans: *a*

5. According to the theory of comparative advantage, with free trade a country will export a good only if

   a. It can produce it using fewer hours of labor than other countries.
   b. Its productivity is higher in producing the good than the productivity of other countries in producing it.
   c. Its wage rate in producing the good is lower than in other countries.
   d. Its cost of producing the good, relative to other goods, is at least as low as in other countries.
   e. All of the above.

   Ans: *d*

6. An implication of the Heckscher-Ohlin (Factor Proportions) Model of international trade is that free international trade causes

   a. Consumers to have access to a greater variety of goods.
   b. Countries to expand production of goods in which they have absolute advantage.
   c. Owners of scarce factors of production to increase their real incomes.
   d. The real wages of labor in different countries to become more nearly alike.
   e. Each country to export the good that uses less intensively its abundant factor.

   Ans: *d*

7. A tariff on imports benefits domestic producers of the imported good because

   a. They get the tariff revenue.
   b. It raises the price at which they can sell their product on the domestic market.
   c. It prevents imports from rising above a stated quantity.
   d. It reduces their producer surplus, making them more efficient.
   e. All of the above.

   Ans: *b*

8. When a large country levies a tariff on imports, this causes the world price of the imported good to __________, which is __________ to the importing country and __________ to the foreign exporting country

    a. Fall; beneficial; harmful.
    b. Fall; harmful; beneficial.
    c. Rise; beneficial; harmful.
    d. Rise; harmful; beneficial.
    e. Rise; irrelevant; beneficial.

    Ans: *a*

9. With free trade, Albania, a small country, imports 70 tons of steel at a world price of $4 per ton. It then imposes an import quota permitting only 30 tons of steel to be imported. In response, the price of steel inside Albania rises by $2 to $6 per ton. The total quota rent is

    a. $2
    b. $60
    c. $80
    d. $120
    e. $180

    Ans: *b*

10. The political-economy explanation of why countries have positive tariffs, summarized in the phrase "protection for sale," says that

    a. Importers pay bribes to customs officers to let them pay tariffs that are lower than legally required.
    b. Protection is provided by import quotas that are auctioned off to the highest bidder.
    c. Industries seeking protection from imports pay bribes to customs officers to get them to charge tariffs higher than legally required.
    d. Insurance companies sell policies that promise to pay any tariff charges on traded goods when requested.
    e. Legislators provide tariff protection to industries in response to political campaign contributions.

    Ans: *e*

11. Trade Adjustment Assistance

   a. Is money given by the WTO to developing countries to help them implement their obligations as members.
   b. Is assistance provided by the World Bank to countries seeking to subsidize their exports.
   c. Includes extended unemployment compensation for workers laid off due to increased imports.
   d. Is a permanent subsidy given by the U.S. government to firms so that they can avoid closing down in the face of import competition.
   e. Is a popular form of industrial policy, designed to help strong firms become even more competitive on world markets.

   Ans.: *c*

12. Had we seen in the news that President Trump decided to levy an anti-dumping duty on exports of washing machines from China, what would that tell you?

   a. That the news is incorrect.
   b. China must be subsidizing exports of washing machines.
   c. Chinese washing machines are using technology stolen from the US.
   d. President Trump is trying to reduce the bilateral US trade deficit with China.
   e. A US washing machine maker has contributed to the Republican Party.

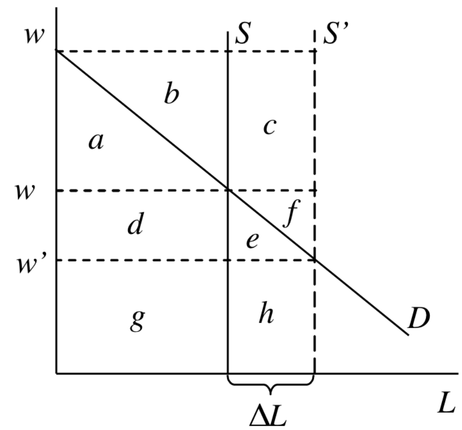
   Ans.: *a*

13. If a member country of the WTO uses a policy against which another country files a complaint, and if the policy is ruled illegal by the WTO but the offending country does not remove it, what is the ultimate remedy?

   a. The offending country must pay a fine to the WTO.
   b. The offending country must pay a fine to the complaining country.
   c. The offending country is required to levy tariffs against all countries except the one that complained.
   d. The complaining country is permitted to levy tariffs against the offending country's exports.
   e. Nothing. The WTO has no "teeth."

Ans.: *d*

14. The figure at the right shows the labor market for a country that experiences immigration of labor in the amount ΔL. The effect of this immigration on the welfare of people in the country *other than labor* is



  a. They gain area $a+d+e$.
  b. They gain area $d+e$.
  c. They lose area $e+h$.
  d. They lose area $d+e$.
  e. They are not affected.

  Ans: *b*

15. Which of the following countries or groups of countries is the source for a significant portion of the world's FDI, yet is the host to hardly any?

  a. The United States
  b. Europe
  c. Japan
  d. Other Asia
  e. Latin America

  Ans: *c*

16. Tariff Jumping occurs when

  a. A firm that otherwise would have exported to a country invests there instead in order to avoid paying the country's tariff.
  b. A country raises a tariff against a foreign exporter who sells to it below cost.
  c. Countries raise (and lower) their tariffs in an effort to stabilize the price of a product on the domestic market.
  d. A firm buys inputs from domestic firms rather than importing them from abroad over a tariff.
  e. A government levies a tariff on the price of a good that already has been increased by another tariff.

Ans: b

17. Which of the following transactions would appear as a debit in the current account of the United States balance of payments?

    a. A Detroit auto parts manufacturer buys rubber from Malaysia.
    b. A Detroit rock musician makes a contribution to the British nongovernmental organization, Oxfam.
    c. A Detroit professor pays interest on a loan he had previously borrowed from a Dutch bank.
    d. All of the above.
    e. None of the above.

    Ans: d

18. In class we saw graphs of the trade-weighted value of the US dollar from January 1973 to the present, both in nominal terms and in real terms. Which of the following correctly describes how these two measures of the exchange rate behaved?

    a. Both the nominal and the real values of the dollar have risen over that period, ending higher than they started.
    b. The nominal value of the dollar is much higher now than it was in 1973, but the real value is about the same.
    c. Both nominal and real values of the dollar are lower today than they were in 1973.
    d. The nominal value of the dollar rose every year since 1973, but the real value of the dollar has sometimes risen, sometimes fallen.
    e. The real value of the dollar fell every year since 1973, but the nominal value of the dollar has sometimes risen, sometimes fallen.

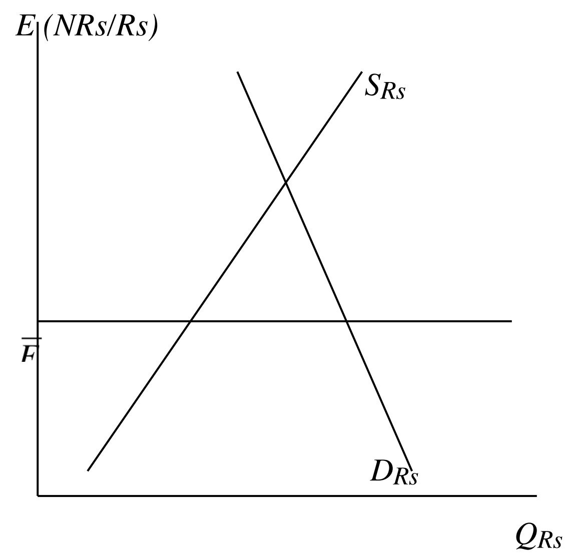
    Ans: b

19. In which case below does the euro, €, appreciate most relative to the dollar, $, *in real terms*? In each case, E is the nominal exchange rate in $/€, P_U is the U.S. price level, and P_E is the price level in the eurozone.

a. E rises 3%; P_U rises 4%; P_E rises 1%. *[0=3+1–4]*
b. E rises 2%; P_U rises 0%; P_E rises 4%. *[6=2+4–0]*
c. E rises 1%; P_U rises 2%; P_E rises 3%. *[2=1+3–2]*
d. E rises 0%; P_U rises 3%; P_E rises 1%. *[–2=0+1–3]*
e. E rises –1%; P_U rises 1%; P_E rises 5%. *[3=–1+5–1]*

Ans: b (see calculations above)

20. The diagram at the right shows the foreign exchange market for Nepal, which is pegging its currency, Nepalese rupees (*NRs*), to Indian rupees (*Rs*) at the rate $\bar{E}$. The central bank of Nepal, Nepal Rastra Bank (NRB) is *not* sterilizing the effects of its intervention. In the situation shown



a. NRB is buying Indian rupees.
b. NRB is buying bonds.
c. The Nepalese rupee is undervalued.
d. The money supply of Nepal is contracting.
e. All of the above.

Ans: d

21. With a floating exchange rate, a monetary contraction by a country causes

a. The country's currency to depreciate.
b. The country's interest rate to fall.
c. The country's national income to increase
d. The country's price level to rise.
e. A capital inflow into the country.

Ans: e

22. In class we saw that a decline in aggregate demand in the United States (perhaps because businesses see fewer opportunities for investment) can be expected to cause a decline in GDP in Canada. Which of the following is *not* part of the transmission mechanism that brings this about?

    a. US imports fall.
    b. The US interest rate rises.
    c. The US dollar depreciates.
    d. Canadian exports fall.
    e. Canadian aggregate demand falls.

    Ans: *b*

23. Dealing with asymmetric shocks is harder among the countries of the Eurozone than among the states of the United States because

    a. Labor is less mobile across countries than across states.
    b. Exchange rates may change within the Eurozone.
    c. Wages are more flexible in Europe than in the U.S.
    d. Europe has a mechanism for fiscal transfers among countries
    e. Countries, unlike states, have no separate monetary policies

    Ans: *a*

24. Which of the following explains why **trade diversion** is undesirable for an importing country that lowers its tariff against a partner in a free trade area?

    a. Workers are laid off as their employers shift production into the partner country.
    b. Consumers pay a higher price for the good imported from the partner country.
    c. The country imports from the partner at higher cost than it previously imported from outside.
    d. Domestic producers suffer a loss of income as demand is diverted toward producers in the partner country.
    e. All of the above.

    Ans: *c*

25. Once the USMCA is fully in place, how much of a car imported into the US from Mexico can be made in China and still qualify for a zero tariff?

    a. None.
    b. 10%
    c. 25%
    d. 37.5%
    e. 50%

    Ans: *c*

26. Developing countries often worry that free trade will cause them to specialize in production of primary products. Why do they think this is bad for them?

    a. Because primary products require high technology in their production, and they lack access to that technology.
    b. Because primary products cannot be exported.
    c. Because they expect the relative prices of primary products to fall over time.
    d. Because they do not have a comparative advantage in primary products.
    e. Because they do not have an absolute advantage in primary products.

    Ans: *c*

27. Which of the following did **not** contribute to the debt problems that many developing countries encountered in the early 1980s?

    a. The rise in oil prices
    b. Recession in the United States
    c. Appreciation of the U.S. dollar
    d. The drop in developed country tariffs negotiated in the Tokyo Round
    e. Developing country inflation

    Ans: *d*

28. Which of the following is **not** an argument against the use of controls on international capital flows by developing countries?

    a. They limit the ability of financial firms to profit from an anticipated devaluation.
    b. They make it more costly for firms in the developing countries to borrow.
    c. They are difficult and costly to enforce.
    d. Like tariffs protecting producers of goods, they protect inefficient firms in the financial services industry.
    e. They induce market-distorting behaviors to avoid the costs of the controls or to evade them.

    Ans: *a*

29. Official development assistance by the US government to developing countries

    a. Exceeds the United Nations target of 0.7 percent of GDP.
    b. Is less than that of most other developed countries in dollars, but is higher than most as a fraction of GDP.
    c. Is more than that of any other developed country, both in dollars and as a fraction of GDP.
    d. Is less than most other developed countries, both in dollars and as a fraction of GDP.
    e. Is more than that of any other developed country in dollars, but less than most as a fraction of GDP.

    Ans: *e*

30. Offshoring of economic activity

    a. Accounts for more than a third of new unemployment in the United States today.
    b. Increases the productivity of firms by allowing them to concentrate on what they do best.
    c. Threatens the jobs only of blue-collar workers.
    d. Increases the bargaining power of workers relative to employers, resulting in higher wages.
    e. Creates jobs in the US only if it is done by foreign companies, offshoring into our economy.

    Ans: *b*

31. Those who fear a "race to the bottom" in environmental or labor standards believe that

    a. Firms will demand weaker standards so that they can compete more effectively with imports.
    b. Tariffs will be driven to zero by multinational corporations.
    c. Nongovernmental organizations will push for standards that ultimately eliminate international trade.
    d. Competing exporters will insist on speed in shipping in order to be first to market, and ever faster ships will pollute the seas and squander energy.
    e. Weaker environmental standards will worsen working conditions, which will in turn pollute the environment.

    Ans: *a*

32. Which of the following best characterizes the extent to which countries have ratified the fundamental conventions of the International Labour Organization?

    a. The United States and other developed countries have ratified all of them, while most developing countries have ratified only a few, if any.
    b. The United States has ratified more of them than any other country and is putting pressure on others, both developed and developing, to do the same.
    c. The ILO is a very new organization, and only a handful of countries have yet ratified any of its conventions.
    d. Most countries of the world have ratified most of the fundamental conventions, but the United States has not.
    e. All but two of the fundamental conventions have been ratified by well over 100 countries, including the United States.

    Ans: *d*

33. In the news this fall, two developing countries were reported to be increasing tariffs or otherwise trying to reduce imports because of increasing deficits in their government budgets and/or their current accounts? Which countries were they?

    a. Zimbabwe and Rhodesia
    b. Brazil and Argentina
    c. India and Pakistan
    d. Kyrgyzstan and Kazakhstan
    e. Egypt and Somalia

    Ans: *c*

34. In its annual report on currency manipulation, the US Treasury Department named which country as a currency manipulator?

    a. Switzerland
    b. Japan
    c. Russia
    d. China
    e. None

    Ans: *e*

35. Which country announced recently that it will be allowing an increase in immigration?

    a. Switzerland
    b. Japan
    c. Russia
    d. China
    e. None

    Ans: *b*

Part II: Short Answer

Answer on these sheets in the spaces provided.

1. (6 points) What do the following acronyms stand for and/or mean in international economics? (You'll get full credit for <u>either</u> the correct words <u>or</u> for briefly describing what they represent.)

   a. ASEAN *Ans.:* *Association of South East Asian Nations*

   b. GATT *Ans.:* *General Agreement on Tariffs and Trade*

   c. USMCA *Ans.:* *U.S.-Mexico-Canada Agreement*

   d. FDI *Ans.:* *Foreign direct investment*

   e. CVD *Ans.:* *Countervailing duty*

   f. PTA *Ans.:* *Preferential trading arrangement (or area, or agreement)*

2. (8 points) Each of the tables below shows ***either*** the amounts of labor required to produce one unit of each of two goods in two countries, ***or*** the outputs per unit of labor in each industry and country. In each case, assume that there are only two goods and only two countries in the world. Fill in the blanks with the name of a **good** or **country**, or with one of the words "**both**" or "**neither**," as appropriate.

a. ______*Germany*______ (country) has an absolute advantage in producing wine.

______*Germany*______ (country) has a comparative advantage in producing beer.

Labor needed per unit of output

Good	Country: Germany	France
Wine	200	300
Beer	50	100

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b. ______*Iran*______ (country) has an absolute advantage in producing nails.

______*Iraq*______ (country) has a comparative advantage in producing screws.

Output per unit of labor

Good	Country: Iran	Iraq
Nails	42	38
Screws	38	42

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c. S. Korea has a comparative advantage in producing (good) ______*DVDs*______

Japan has an absolute advantage in producing (good) ______*neither*______

Labor needed per unit of output

Good	Country: S. Korea	Japan
VCRs	0.77	0.78
DVDs	0.77	1.32

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d. Paraguay will import (good) ______*beans*______

Uruguay will import (good) ______*corn*______

Output per unit of labor

Good	Country: Paraguay	Uruguay
Beans	600	800
Corn	800	1000

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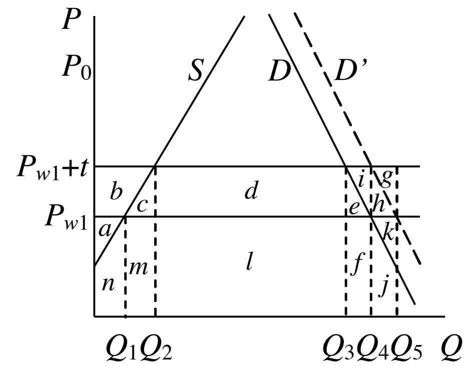
3. (12 points) The figure shows hypothetical supply and demand curves for wine in Belgium, which is assumed here to be a small country. In the initial situation (ignore the dashed line *D'* until the next page), the world price of wine is P_{w1}, the Belgian demand curve is the solid line labeled *D*, and Belgium has free trade in wine. Use the labels in the figure, or your choice of the highlighted words as appropriate, to answer the questions below:



a. At the initial world price P_{w1}:

How much wine does Belgium export? *0*

How much does it import? $Q_4 – Q_1$

Does Belgium as a whole **gain** or **lose** from trading wine (compared to autarky), or **can't** you **tell**? *gain*

b. Suppose now that Belgium uses a tariff of size *t* that raises the price in Belgium to the level $P_{w1}+t$ shown. (Indicate + or – along with the amount, where appropriate.)

Is *t* **ad valorem** or **specific**? *specific*

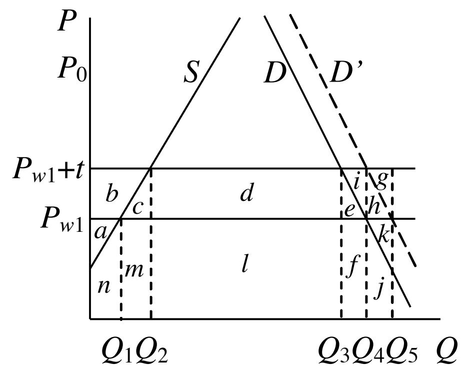
How much wine does Belgium now import? $Q_3 – Q_2$

How much do Belgian wine suppliers gain or lose from this tariff? $+b$

How much revenue does the Belgian government collect? $+d$

How much does Belgium as a whole gain or lose? $-(c+e)$

c. Suppose now that the Belgian taste for wine improves, shifting the demand curve to the right to position *D'* as shown (parallel to *D*). In the continued presence of the tariff, *t*, record below the ***change*** due to this shift in each of the following. (Indicate + or – along with the amount, where appropriate.)



Change in Belgian imports of wine	+ Q_4–Q_3(=Q_5–Q_4)
Change in welfare of Belgian wine suppliers	*0*
Change in the budget of the Belgian government (the tariff revenue)	+(*e*+*i*)

d. How has the shift in demand in part (c) changed the dead weight loss due to the tariff? Has it caused the dead weight loss to **increase**, **decrease**, or remain **unchanged**?

unchanged

4. (11 points) The table at the right shows hypothetical values for the consumer price indexes (CPI) of the U.K., The Euro Zone (E.Z.), and Denmark for 2000 and 2003. Their currencies are also indicated as the pound (£), euro (€), and Danish krone (Dkr) respectively. Suppose that exchange rates in 2000 were:

	U.K.	E.Z.	Denmark
Currency:	£	€	Dkr
2000 CPI:	110.0	180.0	240.0
2003 CPI:	112.2	187.2	252.0

2000: £/€ = 0.500
€/Dkr = 0.100
Dkr/£ = 20.0

a. Calculate the following exchange rates for 2000:

2000:

£/Dkr = *0.050* Dkr/€ = *10.0* €/£ = *2.00*

b. By what percentage did prices change from 2000 to 2003 in each of the three countries?

Price increases:

U.K. = *2.0* % E.Z.. = *4.0* % Denmark = *5.0* %

c. Calculate the following exchange rates for 2003, assuming that the Purchasing Power Parity Theory holds:

2003:

£/€ = *0.490* €/Dkr = *0.099* Dkr/£ = *20.6*

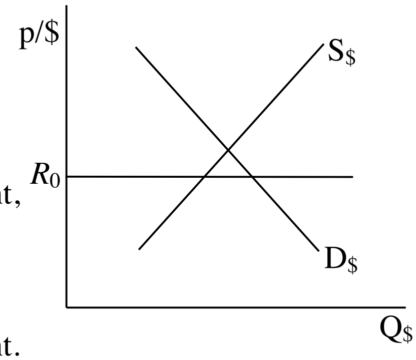
d. Suppose that in 2000, the U.S. dollar had an exchange rate of $/€ = 0.90. Calculate the dollar values of the other two currencies in 2000:

2000:

$/£ = *1.80* $/Dkr = *0.09*

5. (6 points) The diagram below shows the foreign exchange market for Argentina vis a vis the U.S. dollar (which is therefore the foreign currency). Aside from exchange-market intervention, the central bank is not pursuing active monetary policy. You are to answer the questions asked, and also draw into the diagram the new positions for the curve or curves that shift in response to the indicated change in part (b).

Argentina has a pegged exchange rate for its currency, the peso, p, at the rate shown as R_0, and it is *not* sterilizing.



a. In the initial situation,

Argentina's reserves are
______ expanding,
__✓__ contracting,
______ holding constant,

and its money supply is
______ expanding.
__✓__ contracting.
______ holding constant.

b. Fear of an Argentine devaluation now causes capital to flow out of Argentina. Show in the figure how this will alter the supply and/or demand curves. *Ans: The supply curve shifts left and/or the demand curve shifts right.*

c. Assuming that Argentina is able to continue the pegged exchange rate, what will happen after the change in part (b)?

Argentina's currency will
______ appreciate,
______ depreciate,
__✓__ remain unchanged,

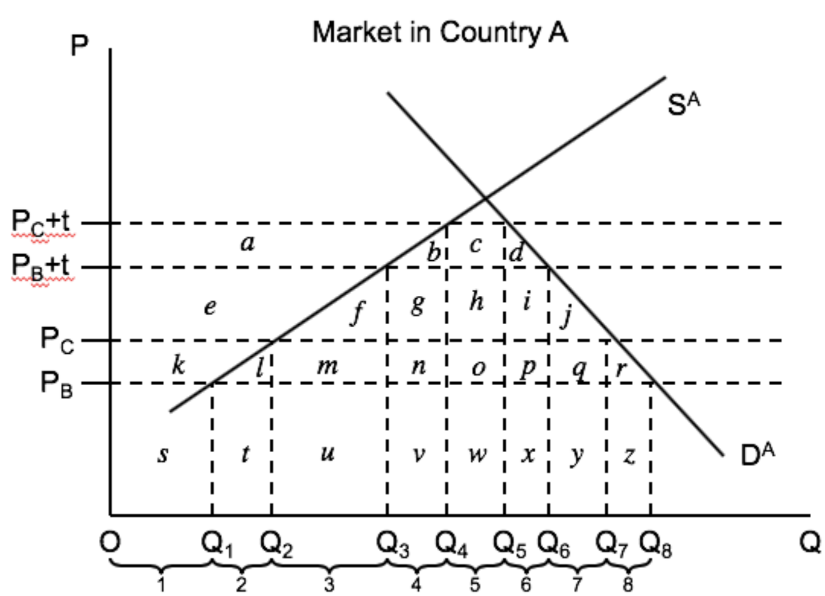
its reserves will
______ rise faster / fall slower,
__✓__ rise slower / fall faster,
______ remain unchanged,

and its aggregate demand will
______ expand faster / contract slower,
__✓__ expand slower / contract faster,
______ remain unchanged,

6. (16 points) The graph below (repeated on the next page) shows the domestic market for a good in Country A, together with markers on the vertical axis for the price of the good in Countries B and C. Also shown are the values of each of these prices if a common tariff, t, is added to them.

   a. Using the quantities labeled in the figure, record below what will be the quantities supplied and demanded in the domestic market if there is: i) free trade with both B and C; ii) tariff t levied on both B and C; iii) a free trade agreement between Countries A and B (with C still subject to tariff t); and iv) a FTA of Countries A and C (with B subject to tariff t):

	Domestic Supply	Domestic Demand
i) Free trade:	Q_1	Q_8
ii) MFN tariff	Q_3	Q_6
iii) FTA with B	Q_1	Q_8
iv) FTA with C	Q_2	Q_7

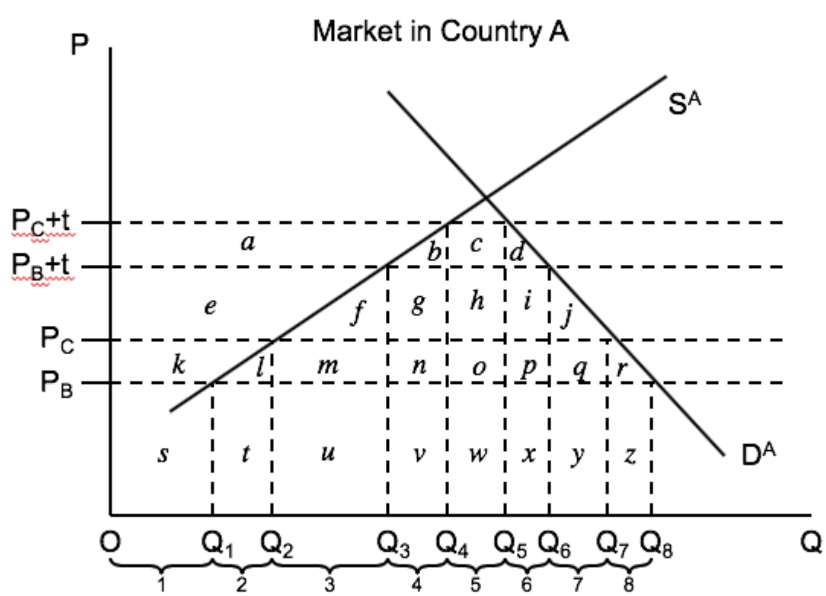


b. At the bottom of the figure (repeated below) are eight numbered distances, 1, …, 8. Use these (e.g., "1", or "2+3", or "4+5+6", etc.) to record the amounts of trade creation and trade diversion in each of the FTAs:

	Trade Creation	Trade Diversion
iii) FTA with B	$2+3+7+8$	0
iv) FTA with C	$3+7$	$4+5+6$

c. Now record using the letters labeling areas in the diagram (a, b, etc.), only for the FTA with Country C, the following welfare effects of moving from the tariff on both countries to the tariff on only country B. For each, be sure to include plus and/or minus signs to show gain or loss.

	Welfare Effects of FTA with Country C
On Country A suppliers	$-e$
On Country A demanders	$+(e+f+g+h+i+j)$
On Country A Government	$-(g+h+i+n+o+p)$
On Country A as a whole	$+(f+j)-(n+o+p)$



7. (4 points) Define:

a. Autarky

Ans.. The situation in which a country does not engage in international trade; self-sufficiency.
Ans.: A country that competes internationally by offering foreign firms a reduced set of environmental compliance requirements (environmental regulations).

b. Import substitution

Ans.: The development strategy of using high import tariffs and other policies to foster the production of goods that will replace imports.

c. Appellate Body

Ans.: The group within the World Trade Organization to which countries can appeal decisions of the dispute settlement panels. (It is in danger of not having sufficient members to decide cases by late 2019, as current members' terms expire and the United States blocks new appointments.)

d. Countervailing duty

Ans.: A tariff levied against imports that have been subsidized by the government of the exporting country.