A QUESTION BANK FOR ECONOMICS 342

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Overview:

The questions below have been compiled from past midterms and finals consequently there is occasional duplication. Some of the questions have answers, some only have hints which were remarks to the TAs grading the exams, while some have no answers. Some of you can find better answers than those that are listed. Naturally topics are different from year to year, so you will have to find the questions that are most relevant this term.

I have not included diagrams (except in a couple of cases) as they will be developed during the course and will provide some incentive to integrate the questions with the text and lecture notes.

Generally I expect that the questions will take roughly one point a minute so that it may help you judge how much weight I am placing on a particular question and consequently how much time you should allocate to it. *Just because a question appears in the question bank does not mean it will or will not appear on the exam.*

SAMPLE MIDTERMS and MIDTERM QUESTIONS

Answer the following 10 questions, True, False or Uncertain and briefly explain your answer. If it True, *explain why*. If it is False, *explain why*. If it is sometimes true or sometimes false depending on the value of a parameter or some other reasoning, *explain the circumstance when it is true and then when it is false*. Each question is worth 10 points except for questions 9 and 10 that are worth 5 points each.

1. Compared to autarky, countries can't gain from trade unless prices fall.
Draw the picture. Draw the indifference curve and show that relative price of either good can rise or fall since you will export the good whose price has risen and import the good whose price has fallen. No change in welfare if prices stay the same.

2. Canada has better technology and higher wages than Mexico. Therefore Mexico can't trade with Canada.
Comparative advantage determines the pattern of trade. They need to show it. Wages are a red herring since they depend on absolute advantage.

3. In a trading world, if both countries are on their production possibilities frontiers they will maximize their income and world income.
No. You also have to be specialized in the right goods. Otherwise you will end up in the interior of the world possibilities locus.

4. In the Specific Factor model, an increase in the stock of labour lowers real wages and raises the return to the specific factor that uses labour intensively, and lowers the return to the specific factor in the other industry.
No. It lowers the real wage since prices are constant (so true) and raises the return to both specific factors (so second part of the statement is false). Many ways to show.

5. In the Specific Factor model, an increase in the price of good 2 will raise the return to land, lower the real wage and raise the return to capital.
Have to be clear which good uses which specific factor. Assuming good 2 uses land and labour (but must make the assumption explicit.) Real wage is ambiguous depending on your consumption of good 2 and good 1. If you consume mostly good 1 then you gain. If you consume mostly good 2 then you lose. The return to land will rise...the usual story and diagram is best. Will lower the return to capital. The move down the MPK schedule as labour leaves so the K/L ratio rises.

6. If immigrants decrease per capita GDP in a country, then domestic residents will lose.
No. As we showed, a fall in overall per capita GDP does not cause a loss to domestic residents. If domestic residents own all the capital initially, then they must gain whether immigrants bring capital with them or not (no change in domestic residents' incomes if the immigrants have exactly the same capital labor ratio as the original inhabitants.). They can show with MPL diagram or with the more intense one I developed in class: a U shaped income curve with the K/L ratio along the x-axis. Starting at the bottom (the current K/L before immigration), local residents gain whether the K/L ratio goes up or down,

7. Economists like factor price equalization only because it sounds good so there is no good reason to want to see the return to, say, capital equalized across countries.
No. FPE shows that you are using resources efficiently. If capital is not allocated so that it receives the same reward everywhere, then there are gains to be had for both borrowers and lenders of capital for production.

8. According to Heckscher-Ohlin, an increase in the relative price of good 1 will raise output and the return to labour and capital in industry 1.
No. An increase in the price of good 1, as output rises in industry 1, will raise the demand for labour - if industry 1 is *labour intensive*. Since there is a fall in the relative price of good 2 which uses capital relatively intensively, as output of good 2 falls, the demand for capital is decreased causing its overall factor reward to fall.

9. State the HO Theorem.
A country will tend to export the good that uses its relatively abundant factor intensively. Relative factor abundance is measured relative to the other country.

10. State the Rybczynski Theorem.

(In the context of the Heckscher-Ohlin 2x2 model) At constant commodity prices which fix factor prices and consequently factor proportions, an increase in a factor more than proportionally increases the output in the industry that uses that factor intensively and reduces output in the industry that uses the other factor intensively.

1. Free trade is best because we cannot be worse off than we were in autarky.
This is true for a small country, but for a country with monopoly power, some rate of tariff will provide maximum income. That is since dy=-Mdp*+(tp*)dM, income is higher if dp*<0 initially. It is certainly true that free trade makes us better off than autarky, but we may be better off with an optimal tariff in the large country case. If students are really subtle, they may say that free trade is better for all countries together than it is for one country to have a tariff, even an optimal tariff while others have no tariff or free trade. In other words they notice that the question is purposely ambiguous about who the "we" is who are better or worse off.

2. For the home country, a fall in the price of imports will increase the quantity of imports and reduce the quantity of exports.
Our old friend: pM=X which means that (l-η)(dp/p)=(dX/X) where p is *import price.* If import prices fall we will unambiguously increase our demand for imports. Higher export prices may lower the quantity of exports -the backward bending part of the offer curve.

3. An increase in the quantity of a factor will lower the reward to that factor and raise the reward to other factors of production.
True in the specific factor model but not true in Heckscher-Ohlin.

4. If an increase in the rate of tariff will raise revenue, it will also raise income.
Uncertain. It is true over a region of the rising portion of the optimal tariff. But the revenue maximizing tariff is greater than the optimal tariff. Consequently tariff revenue must be rising when real income is falling: dy=0=-Mdp+d(tp*M) tells us that tariff revenue is rising at the optimal tariff.

5. A transfer can never benefit the transferor.
This is true albeit only for the 2 country case which is the only case we discussed. Assume that the transferor's import prices fall far enough to make income no different from the original level of income. This is unstable since demand will be greater than supply and therefore it cannot be an equilibrium. Demand will be greater because the demand for imports will be a pure substitution effect with lower prices for the import good. The supply of import goods will be reduced as their price has fallen. This yields an excess demand at the (low) import price necessary to equalize income at the pre-transfer level.

6. A country should always enter into a common market with another country because they will have freer trade with that country.
This is just to see if they know that trade creation must outweigh trade diversion and they should show the picture and name the areas.

7. Having the Marshall-Lerner conditions hold means that prices never rise more than incomes.
No. The ML conditions being met (the sum of the import demand elasticities >1)means that a market is stable so that a small increase in price will tend to return to its equilibrium value rather than sending it off to an equilibrium far away!

1. *When a very rich, large country opens free trade with a very poor, small country, the small, poor country will lose.* Since a small country has a change in the terms of trade while a large country does not, the small country will gain.
2. According to Ricardo, the country with the lower labour input in both goods will export both goods. *Comparative advantage assures you this is not so. You need to show it. A counter example will do if you can't show it generally*.
3. According to the specific factors model an increase in the price of shoes will raise the real wage and the real return to the factor specific to the shoe industry. *What is the real wage? Remember the Neoclassical ambiguity! How about the real return to the specific factor? Yup, but show it*.

4. According to the Heckscher-Ohlin model, an increase in the labour force will increase output and lower wages in both industries. *Think about prices. Are they being held constant? Yes. This is the Rybczynski theorem for output, so **no**, and **no** to the effect on wages in either industry*.
5. According to the Heckscher-Ohlin framework, an increase in the price of the shoes will raise the wage and lower the return to capital. *Only if there is the right factor intensity….*
6. The Rybczynski line tells us that increases in labour raises output in both industries. *Nope.*
7. The Stolper-Samuelson theorem ensures that all parties gain from trade. *No such guarantee. It ensures that one factor emerges as a winner and one as a loser!*
8. When countries trade they do so by contracting their production of at least some goods. *They certainly do if they specialize.*
9. We locals like immigration even if per capita income falls? *Too easy for a hint!*

I. Answer 5 of the following 6 questions *True, False or Uncertain* and briefly explain your answer. Each question is worth 5 points.

1. Suppose a very rich large country opens free trade with a very poor small country. After trade, if the world free trade price ratio is very close to the large country's pre-trade price ratio, then the large country will have taken all the gains from trade at the expense of the small country.
2. Free trade is a bad idea since someone will be hurt when prices change.
3. Since a dollar is a dollar, if country A gives country B a gift of $1, this makes country B exactly $1 dollar richer and country A $1 poorer.
4. If the world is composed of a large country and several small countries, and each country imposes an optimal tariff, then world income will be maximized.
6. The optimal tariff balances the rise in import prices with the fall in tax revenue.
7. If the tariff on final goods is 20% and the share of imported inputs in domestic production is 20%, then the effective rate of protection is also 20%.

II. Write an essay worth 15 points on:
Suppose a tariff is imposed by the home country. Discuss winners and losers.
III. For 2.5 points each, **define two of the following terms**: the Marshall-Lerner conditions, secondary benefit or burden, the optimal tariff, the gains from trade, the offer curve.

I. Answer 5 of the following 7 questions *True, False or Uncertain* and briefly explain your answer. Each question is worth 6 points.

1. *Suppose a very rich, large country opens free trade with a very poor, small country. Both countries benefit from trade with the large country gaining more than the small country.*

We expect that both countries will gain from trade.

2. *Increases in output will lead to higher income.*

Output usually results in higher income unless price changes are sufficiently powerful so that the price of domestic exports falls sufficiently to reduce income. Alternatively, the price of imports rises enough to reduce income. The foreign elasticity of import demand must be sufficiently inelastic to make this possible. An increase in output when there is a tariff in place may also reduce income if the higher output occurs in the import competing industry. (In our case, food or good 2.)

3. *The country that makes a transfer can never be better off after the transfer than it was before the transfer.*

This is true unless the market is unstable -- but they only have to say that it is true. The reason is that if the market is stable, if the transferor's import price were to fall far enough to keep income constant, there would be an excess demand for that good since income remains unchanged in both countries and the lower price means a greater quantity demanded and a less quantity supplied. Be careful that they don't confuse the secondary benefit or burden with the loss to the transferor. Give points to those who talk about real transfers -- goods or factors of production.

4. For both large and small countries, the optimal tariff is always less than the revenue maximizing tariff.

True. For the large country, we know that the slope of the revenue schedule is positive at the optimal tariff rate since dy=0=-Mdp+d(tp*M). Thus Mdp=d(tp*M). Since the optimal tariff is zero for the small country, and revenue rises to some maximum between t=0 and t=t* that prohibits trade, it is also true for the small country.

5. If the price of imports rises, we expect to decrease our imports and our exports.

Since $\hat{p}(1-\varepsilon) = \hat{X}$, then exports should increase if import demand is less than unity (1), and fall if it is greater than 1. We expect to decrease our imports -- since demand schedules slope downward!

6. If foreign import demand is inelastic, then the optimal tariff is negative. In other words, it pays for the home country to pay a per unit subsidy the foreigner..

No. If the foreign import demand is inelastic the home country will raise the tariff until it move to the elastic portion of the offer curve. They can see this by drawing the offer curve at the optimal tariff. The foreign offer curve is in the elastic portion. This is a very hard question and worth a bonus for any sensible effort.

7. If the tariff on final goods is 10% and domestic value added is 10% of the final price of the good, then the rate of effective protection is 1%.

The REP=$\frac{t_j}{1-\theta} = \frac{0.1}{1-0.9} = 100\%$

II. Answer one of the following for 20 points:

1. What is the Marshall-Lerner condition? Explain the intuition that describes where instability arises. Illustrate a stable and unstable equilibrium. Why is the ML important?

The Marshall-Lerner conditions for stability tell us the sum of the import demand elasticities is greater than unity. They are important insofar as they guarantee market stability in response to a price change. An increase in price creates excess supply. This leads to a stable system. A higher price reduces the quantities demanded in both countries (substitution effect), and leads to a decrease in demand in the importing country (income effect) but an increase in demand from the income effect in the exporting country. The latter is the only source of instability. If ML did not hold, then an increase in demand leads to a fall in price; I can transfer to you and make myself better off; etc.

2. We talked about many kinds of trade restrictions including tariffs quotas, subsidies, and VERs. Choose <u>one</u> of these restrictions and discuss the effects on domestic prices and economic welfare within the home country when it imposes such a restriction.

I expect everyone to do tariffs. This is the standard diagram. Home consumers lose. Home producers gain; deadweight losses occur; and tariff revenue is transferred to the government from consumers. Hope that they point out small versus large country.

1. Free trade is better than no trade.

True/Uncertain. They should draw the indifference curves and show different prices: for either a rise or a fall in the relative price. They do need to show why it is true although they don't have to draw the picture if they have another story. If prices are not different among trading partners, then there are no gains from trade – this, however is not the main point and worth perhaps one point. They might try to use $dy=-Mdp_m$ or $dy=Xdp_x$ That is OK, too. Anything that shows they understand.

2. According to Ricardo, comparative advantage determines your wage and absolute advantage the pattern of trade.

These are reversed. They can show the pattern of trade in several ways but the most obvious is the price that goes up and home and down abroad and generates specialization in both in different commodities. The relative wages are determined by absolute advantage insofar as they are the ratio of the $(w/w^*)=p.(a^*/a)$ depending on comparative advantage to give you which good is being produced.

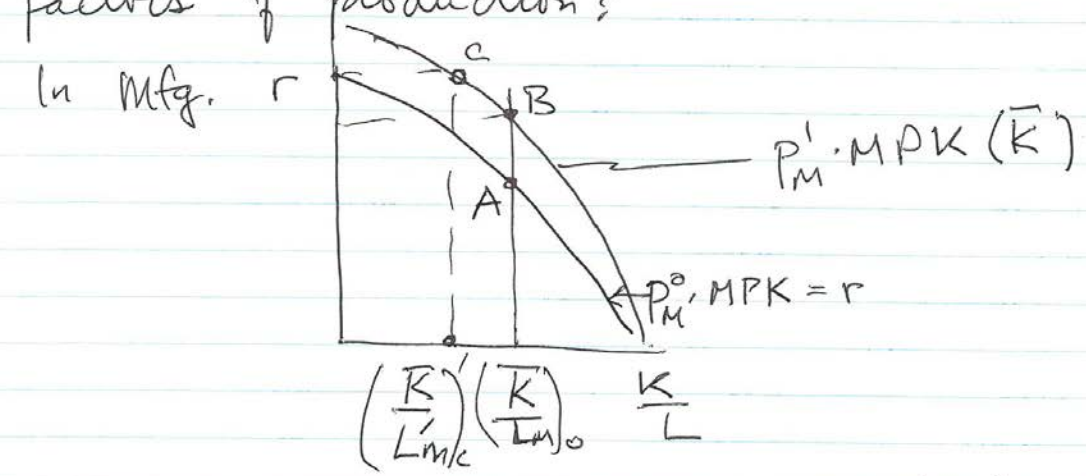
3. According to Ricardo, so long as a trading country is producing along its production possibilities frontier it is maximizing its income.

False. You have to be producing according to comparative advantage. Otherwise you might end up with an inefficient allocation even though you are on your ppf. They can show it in a number of ways. I don't care how, but they do have to explain it.

4. According to the specific factors model a decrease in the price of shoes will raise the real wage but decrease the real return to the factor specific to the shoe industry.

A fall in the price of shoes will cause the nominal wage to fall. *However, the neoclassical ambiguity tells us we need to know the consumption shares before we can say that the real wage falls.* The return to the specific factor in shoes must fall. They should draw the MP of the fixed factor and show the fall in price will cause it to shift down; and then show that the flow of labour out of the industry will cause the real return to fall below the decrease in price. The lecture notes in reverse:

Now what happens to the returns to the other factors of production?



Notice B is 10% above A (at initial L_0)

Now as we move to point C (recall labour is entering manufacturing), the Capital/labour ratio will fall. This raises the MPK because there is less labour to work with the fixed amount of capital.

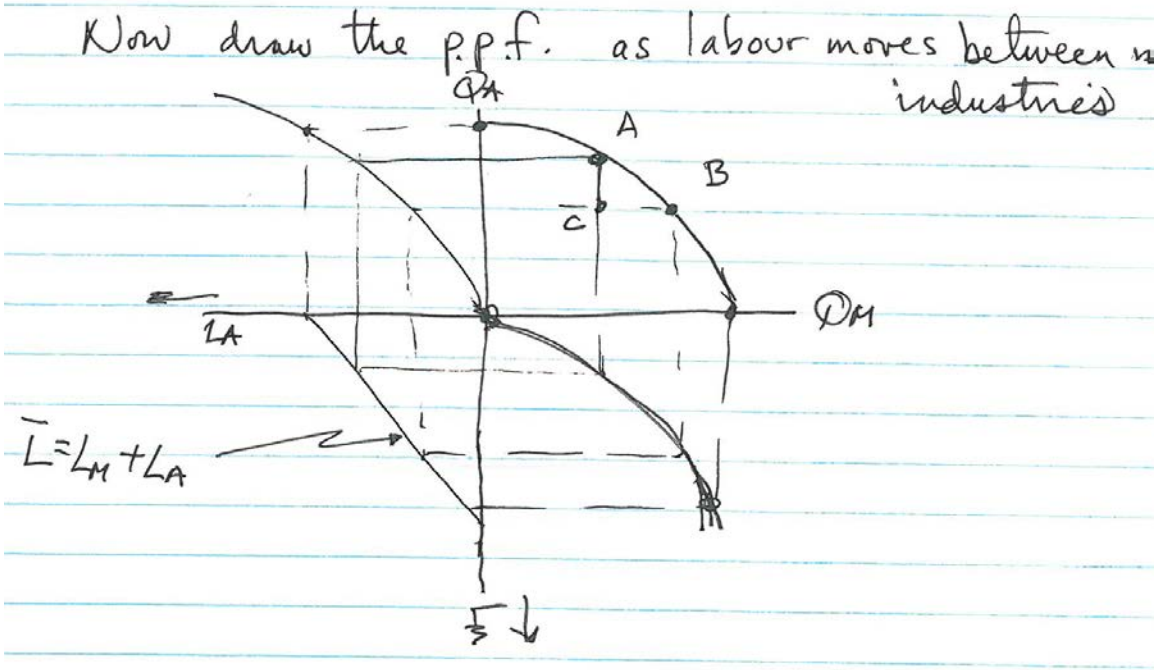
∴ We have shown that the return to capital, r will increase more than 10%!

$$\hat{r} > \hat{P}_M > \hat{w} > 0$$

Of course if they use equations, they can also show the fall in wages and then argue that since the price falls farther than the wage, since the price is a weighted average of the wage and the return to the specific factor, the specific factor must fall more than the price.

5. According to the specific factors model, at constant prices an increase in the labour force will increase output in one industry and lower output in the other industry and consequently lower wages in both industries.

False: They can use the figure from the class showing the derivation of the PPF to show the expansion of both outputs.



All they have to do is shift the L-bar curve out and then redraw. They can use the usual MP diagram to show that the wage rate falls.

FINALS

Answer the following questions True, False or Uncertain. Each question is worth 10 points. If a question is true, *explain why it is true*. If a question is *false, explain in detail why it is false*. If it is uncertain, *explain under what circumstances it will be true or false*.

1. A country benefits from free trade only because they consume at lower prices.
False. Yes, they gain in consumption because of lower prices. They gain by specializing in production and selling at a higher relative price, they may gain by having access to more varieties, and they may gain by producing more at lower cost through increasing returns.

2. Canada should join in a free trade agreement the EU (European Union).
This is just trade creation and trade diversion. They should identify the regions in a diagram hopefully, but they may just describe it so long as they see the tension between

lower cost world prices and buying from a higher cost co-member. There is a loss of tariff revenue and a gain in lower prices as per the diagram.

3. Import demand elasticities are typically smaller than the elasticities of the underlying good that is being demanded.
False. Since M=D-S the import demand elasticity is higher than the demand elasticity for the final product since it is an excess demand and as price rises, supply increases as demand falls which is greater than simply the fall in the quantity demanded.

4. The gains to producers and consumers outweigh the losses when a small country imposes a tariff. (Be sure to explain your answer.)
False. Higher costs to (i) producers and (ii) consumers as per the diagram as well as (iii) losses from rent seeking from producers.

5. In the specific factor model at constant commodity prices, a decrease in the quantity of labour will decrease the returns to both specific factors and lower output only in the industry that uses labour relatively intensively.
Yes/No it will lower the returns to both specific factors, but contract output in both industries. They need to show the picture or the algebra.

6. If immigrants bring capital with them, the original residents must benefit.
False. (i) Assuming home residents own the original capital, if immigrants bring in capital with them, then domestic residents will benefit so long as the K/L ratio in the home country changes. If the immigrants bring in capital exactly in proportion to that which is already in the home country then there is no gain to the original residents. (ii) If immigrant do not own their own capital, then only if the immigrants bring more capital than original inhabitants own will the original inhabitants benefit.

7. If immigrants do not bring capital, then income per capita will fall and the original residents will lose from immigration.
Yes per capita income will fall. Use the figure in the lecture to show the triangle gain under the marginal product schedule or the U-shaped real income,(y-k) diagram to show that with pure labour immigration, the income of domestic residents must rise so long as domestic residents own the stock of capital. They will lose if they do not own any of their own capital.

8. As found in Ricardo, trading according to comparative maximizes world income.
True. They can show this with the world production frontier diagram and hopefully will show what trading not according to comparative advantage will be less.

9. A fall in the stock of labour will decrease output and raise the wage.
False in general. Yes output falls in the specific factor model and Ricardo. Not in HO in which output of only one industry falls. The wage will not change in Ricardo or HO but will fall in the specific factor model.

10. A tariff will raise domestic income, not lower it.
Uncertain. It will not raise income for a small country. It may raise income for a large country. But it will also lower income for a large country if it gets too high. For example, if it goes sufficiently high to snuff out trade. I would hope for the picture putting tariff levels and income: from free trade to prohibitive tariffs.

11. A revenue maximizing tariff is less than an optimal tariff.
False. In the most basic example, for a small country, a small tariff will raise revenue but lower income. For a large country we know that dy=-Mdp+d(tp*M). Since the last term is revenue, when dy=0 (the optimal tariff) we then know that d(tp*M)>0. Therefore the revenue will be increasing at the level of the optimal tariff which means that the revenue maximizing tariff must be greater. They can use algebra or the diagram.

12. Assume "Buy Canadian" is suddenly taken seriously and Canada moves to autarky shrinking our market by 50%. This will lower the price of goods available to consumers, shrink the number of firms by half, and half the output per firm in our country.
False. They should rotate the CC curve up as per page p.189 showing n falling, and AC rising. Price will rise, not fall. The decrease in the number of firms will be less than proportional, however, since each firm decreases output and raises average cost the 50% fall of total output is spread between decreases in the number of firms and decreases in output per firm.

13. The transfer of 1 dollar from country A to Country B will lower income by more than $1 in A and raise income by more than $1 in B.
This is true if (1-m-m*)>0 and the import demand elasticities are less than infinite since the price of A's imports will rise. They should draw the diagram and label the shift in –m and (1-m*). Not true if elasticities are infinite or (1-m-m*)<0. Marshall-Lerner are assumed to be met.

14. The WTO is interested in the same issues as the GATT.
False. Earlier GATT rounds were largely concerned with tariffs and other impediments to trade in goods or administrative reforms. The WTO is also interested in services, intellectual property, and dispute settlement. (p.240)

15. Allowing capital to flow freely internationally will raise income in each country and consequently world income.
True and they can use the diagram to show all the areas relevant.

I. Define **4** of the following terms (5 points each): the Stolper-Samuelson Theorem, effective protection, a secondary benefit from a transfer, the Heckscher-Ohlin Theorem, the Leontief Paradox [20]

II. Answer **5** of the following questions True, False, or Uncertain and briefly explain your answers. Each question is worth 10 points. [50]

1. According to the Ricardian model, only comparative advantage matters.
2. According to the specific factor model, an increase in the quantity of a specific factor lowers the return to that factor and raises the real wage and the real return to the other specific factor.
3. According to the Heckscher-Ohlin model, an increase in the amount of capital raises the return to labour and drives down the return to capital.
4. When capital moves abroad there is a net increase in world income.
5. Transfers benefit both parties.
6. Since someone will always be hurt when international prices change, we should not trade internationally.

II. Answer the following questions. Each question is worth 20 points.

1. State the Rybczynski theorem. Why is it surprising?

2. If the pattern of unit labour costs are:

	Home	Foreign
Good 1:	12	5
Good 2:	4	20

i) Which country has a comparative advantage in producing good 1?
ii) What are the autarky price ratios in each country?
iii) If both goods are produced in free trade, what are the range of prices that are possible?
iv) Suppose that the world price is unity. What is the relative wage between the two countries?
v) If the price of good one rises by 10%, which country gains and by how much?

3. Canada has just "won a victory"in the NAFTA. Canadian tariffs on selected agricultural goods (milk, butter, eggs chickens among others) will remain at 273% instead of being forced to zero for trade with the US and Mexico. Who wins and who loses from such a decision?

III. Answer the following questions. Each question is worth 30 points.
1. Compare the Ricardian and Heckscher-Ohlin approaches to international trade.
2. Should Canada encourage immigration? If so, how much?

I. Answer **8** of the following questions True, False, or Uncertain and **briefly explain your answers**. Each question is worth 6 points.

1. If we do not produce according to our comparative advantage, we lower our level of income.
2. According to the specific factor model, an increase in the labour force raises the return to capital, decreases the wage and lowers the reurn to land.
3. According to the Heckscher-Ohlin model, an increase in the relative price of good one will raise the real wage.
4. According to the Heckscher-Ohlin model, labour flows internationally to equalize factor prices
5. Emigration (the opposite of immigration) increases income in the country losing residents.
6. If trade creation is less than trade diversion countries should form a free trade agreement.
7. All parties always benefit from exposure to international trade.
8. Tariffs increase income.
9. Pulp and paper prices have fallen by 20 percent over the past six months. As a consequence we expect that income in British Columbia will fall by the same amount.

II. Answer **two** of the following questions. Each question is worth 20 points.
1. State and prove the Rybczynski theorem. Why is it interesting?
2. If the pattern of unit labour costs are:

	Home	Foreign
Good 1:	5	20
Good 2:	15	2

i) Which country has a comparative advantage in producing good 1?
ii) What are the autarky price ratios in each country?
iii) If both goods are produced in free trade, what range of relative prices that are possible?
iv) Suppose that the world price is unity. What is the relative wage between the two countries?
v) If the price of good one rises by 5%, which country gains and by how much?

3. Define 5 of the following terms: the Stolper-Samuelson theorem, countervailing duties, effective protection, the Leontief paradox, factor intensity, infant industry.

III. Answer following question. (30 points)

1. Should Canada enter into agreements that make fewer impediments to investment such as the MAI? Discuss the theory, who benefits and who loses, and explain your own view (based on the economics that you know.)

I. Define *4* of the following terms (5 points each): comparative advantage, the Leontief Paradox, the Marshall-Lerner condition, the rate of effective protection, trade diversion.

II. Answer *4* of the following questions True, False, or Uncertain and *briefly explain* your answers. Each question is worth 10 points.

1. According to the Ricardian model, comparative advantage sets the wage and absolute advantage sets the pattern of trade.
2. According to the specific factor model, at constant commodity prices an increase in the quantity of the mobile factor lowers the return to that factor and the returns to the specific factors in both industries.
3. According to the Heckscher-Ohlin model, an increase in the amount of labour lowers the return to labour and raises the return to capital.
4. An increase in the home tariff rate will lower income both at home and abroad.
5. The Hechscher-Ohlin theorem tells us that trade takes place because different countries have different technologies.

II. [30] Answer the following questions. Each question is worth 15 points.

1. State and prove the Rybczynski theorem. Explain why it is true and why is it surprising?
2. If the pattern of unit labour costs are:

	Home	Foreign
Good 1:	2	50
Good 2:	8	10

i) Which country has a comparative advantage in producing good 1?
ii) If both goods are produced in free trade, what range of prices is possible?
iii) Suppose that the world price is unity (1). What is the relative wage between the two countries?
iv) If the price of good one rises by 10%, how do relative wages change?
v) Suppose there is technical progress of 10% in both countries. What happens to wages in both countries? What happens to relative wages?

III. [60] Answer *2* of the following questions. Each question is worth 30 points.

1. What is factor price equalization and why do we care? Who gains and who loses if we move from a state in which factor prices are not equalized to one in which they are equalized. Should Canada push to have a multilateral agreement on investment to

safeguard investors' returns at the cost of reduced domestic abilities to target domestic subsidies for locally owned industries?
2. Canada is part of NAFTA. The European Community is enlarging. What economic factors enter into the decision to expand an economic association? Note that both freer trade in goods and freer movements of factors may be implied by such associations. What do you think about noneconomic arguments against such agreements? Should Canada push to expand NAFTA to include Chile?
3. Pork producers in Canada are suffering from low world pork prices. Canada is about to provide a subsidy to pork producers. Who wins and who loses from such a decision? [In your answer you may assume that Canada is either an exporter of pigs or an importer, but you must decide which!]

2. Answer the following questions True, False or Uncertain and briefly explain your answer. If a question is true, explain why; if it is false, explain why; if the answer depends on the values of parameters, explain the circumstances when it is true or false. Each question is worth 6 points.

1. Do we care if we have a trade balance surplus or deficit?
Probably not since if we are in a freely trading environment, they simply reflect the demands and supply of utility maximizing individuals and firms.

2. According to Ricardo, your marginal product determines the pattern of trade.
The ratio of your marginal products relative to that in the other country is good for predicting the pattern of trade. This can be seen by drawing the ppf's in both countries and showing that the country with the higher relative marginal product in a good will tend to export the good (in which it has the comparative advantage.)

3. In the specific factor model, an increase in the quantity of one of the specific factors reduces the return to that factor and raises the return to the factor specific in the other industry.
Nope. With commodity prices constant, the increase in the quantity of the specific factor lowers the return to both specific factors.

4. In the H-O model countries will tend to specialize in the good they produce most of in autarky.
Not necessarily. The question really doesn't make much sense since we don't know the units so we can't really say they produce 'most'. This means you have to interpret the question a little. The relative amounts they produce in autarky are linked to their relative factor intensities. Demand will determine how much they produce of each good. If there are identical demand conditions, the country with the higher relative labour/capital ratio will tend to export the labour intensive good.

5. An increase in the stock of labour will increase output of both industries.
Yes in the specific factors model and Ricardo. Not in HO.

6. If capital is mobile internationally, a tax will raise the return to capital and consequently increase domestic income.
It will raise the return to capital but reduce the quantity of capital at home. Domestic income will fall.

7. An increase in immigration will raise home income.
Output will increase in the home country. If by home income we mean that the original residents will gain, then we know the answer is, "yes", so long as they own the original capital, too. Use the figure in the lecture to show the triangle gain under the marginal product schedule.

8. If good are produces in a monopolistically competitive environment, trade will take place only if autarky prices differ between the countries.
No. We can gain simply by allowing countries to specialize. You should show this.

9. If good are produces in a monopolistically competitive environment, opening to trade raises the number and output of local firms.
Nope. Reduces both as per our discussion and the text.

10. According to the gravity model, trade increases as you move away from the equator.
Joke. According to the gravity model trade increases with the incomes of the trading partners and decreases with distance from the trading partners.

11. If markets are competitive, a tariff is the same as a tax on imports and a subsidy to exports.
Yup, but you should show it in the usual tariff diagram.

12. A tariff will raise home income.
Uncertain. In a competitive environment, it will not raise income for a small country. It may raise income for a large country. But it may also lower income for a large country if it gets too high. For example, if it goes sufficiently high to snuff out trade. If the foreign producer is, say a monopoly, then a tariff may raise income by lowering the terms of trade sufficiently.

13. The GATT replaced the WTO and both do the same thing.
WTO replaced GATT which applied its tariff reducing activities only to goods. WTO is more extensive. You should explain.

14. A tariff and a quota are equivalent.
Uncertain. In perfect competition, they can generate the same outcomes although we need to know about the distribution of the tariff revenue. In an imperfectly competitive setting, the home monopolist, for example, can increase profit in a quota sheltered environment in contrast to facing a tariff in which prices are fixed by world markets.

15. Dumping by country A raises the income of country B who receives the dumped products.
This would be true.

16. An export subsidy is less damaging than a tariff of the same percentage amount.
Yes insofar as the subsidy does not distort the margin of consumption. However, it is ambiguous since revenue has to be raised to support the subsidy and that means a distortion in another market.

17. VER's are better than quotas.
It depends upon who is being asked! The foreign supplier like the VER as they benefit from the higher prices in the protected market. The home producer likes it because there are now higher prices in the home market. The home consumer does not like it because prices are higher. The home taxpayers notice that they forego the revenue they could have received from a tariff or quota auction.

18. Trade increases growth.
Trade will raise income. Sometime this is called growth. More sophisticated models distinguish the level of income from the rate of growth. Some models (as discussed in class) do allow trade it.