FRQ #1 AP ECON 1st QTR 16 points

P/U

#1 Labor productivity is output per unit of labor. An increase in labor productivity is a source of economic growth.

(a) Identify two sources of increase in labor productivity.

(b) Assume that a country's economy is at full employment. Productivity has been rising. Using a correctly labeled graph of aggregate demand and aggregate supply, show the long-run effect of the growth in productivity on each of the following.

(i) Real output

(ii) Price level

(c) Assume that the economy produces only two goods, good X and good Y. Using a correctly labeled production possibility diagram, show the effect of the increase in labor productivity.

OUTPUT PER WORKER PER DAY		
Country	Units of Cloth	Units of Food
Newland	10	2
Beeland	10	1

#2 The table above gives the production alternatives of two nations that are producing cloth and food, using equal amounts of resources.

(a) (i) Calculate the opportunity cost of producing a unit of cloth in Newland.

(ii) Calculate the opportunity cost of producing a unit of food in Beeland.

(b) (i) Which nation has the comparative advantage in cloth production?

(ii) Which nation has the comparative advantage in food production?

(c) Now assume that the productivity of Beeland's workers triples for each good.

(i) Which country has a comparative advantage in food production?

(ii) Explain how you determined your answer.

#3. The United States and South Korea are trading partners, and the United States has a zero current account balance. Assume now that the inflation rate in the United States decreases relative to the inflation rate in South Korea.

(a) Based on the decrease in the inflation rate in the United States, will United States exports to South Korea increase or decrease?

(b) Based on the change in United States exports in part (a), answer each of the following.

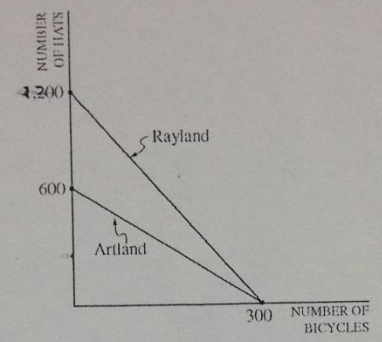
(i) Will the United States current account balance remain at zero, be in surplus, or be in deficit?

(ii) What will happen to real gross domestic product in the United States in the short run? Explain.

(c) The South Korean currency is the won. Draw a correctly labeled graph of the foreign exchange market for the United States dollar. Show the effect of the lower inflation rate in the United States on the won price per United States dollar.

FRQ #2 16 Points

#1



#1 1. The diagram above shows the production possibilities curves for two countries: Artland and Rayland. Using equal amounts of resources, Artland can produce 600 hats or 300 bicycles, whereas Rayland can produce 1,200 hats or 300 bicycles.

(a) Calculate the opportunity cost of a bicycle in Artland.

(b) If the two countries specialize and trade, which country will import bicycles? Explain.

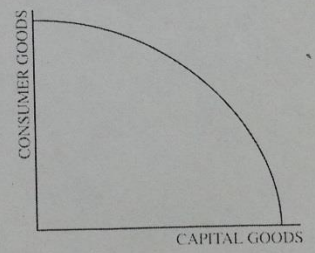
(c) If the terms of trade are 5 hats for 1 bicycle, would trade be advantageous for each of the following?

(i) Artland

(ii) Rayland

(d) If productivity in Artland triples, which country has the comparative advantage in the production of hats?

2. Assume that the country of Fischerland produces only consumer goods and capital goods.



(a) The graph above shows the production possibilities curve for Fischerland. The production of which of the following exhibits increasing opportunity costs: consumer goods only, capital goods only, both goods, or neither good?

(b) Redraw the graph given above. Show a point that represents fully employed and efficiently used resources on the redrawn graph and label it A.

(c) Assume there is a recession in Fischerland. On your graph in part (b), label as C a point representing the recession.

(d) Identify a fiscal policy action that the Fischerland government can take to address the recession.

(e) Assume instead that no discretionary policy actions are taken. Will short-run aggregate supply increase, decrease, or remain the same in the long run? Explain.

FRQ #2

	2009 Quantity	2009 Price (base year)	2010 Quantity	2010 Price
Food	6	$2.5	8	$ 2.5
Clothes	5	$6	10	$10
Entertainment	2	$4	5	$ 5

3. (a) The outputs and prices of goods and services in Country X are shown in the table above. Assuming that 2009 is the base year, calculate each of the following.

   (i) The nominal gross domestic product (GDP) in 2010

   (ii) The real GDP in 2010

   (b) If in one year the price index is 50 and in the next year the price index is 55, what is the rate of inflation from one year to the next?

   (c) Assume that next year's wage rate will be 3 percent higher than this year's because of inflationary expectations. The actual inflation rate is 4 percent. At the beginning of next year, will the real wage be higher, lower, or the same as today?

   (d) Assume that Sara gets a fixed-rate loan from a bank when the expected inflation rate is 3 percent. If the actual inflation rate turns out to be 4 percent, who benefits from the unexpected inflation: Sara, the bank, neither, or both? Explain.

FRQ # 3

28 Points

#1 3. Country Y is experiencing severe and unanticipated inflation.

(a) Explain the effect of this inflation on each of the following.

(i) A family with savings in a fixed-interest-rate time deposit account

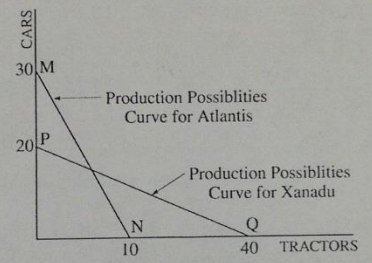
(ii) A business repaying a long-term, fixed-interest-rate loan

(b) Identify one fiscal policy action that could be implemented to reduce inflation.

(c) Identify an open-market operation that could be implemented to reduce inflation.

(d) Suppose that Country Y continues to experience high inflation in the long run. Indicate the effect of this inflation on the nominal interest rate in Country Y.

(e) If Country Y's inflation is high relative to that of other countries, explain the effect of this inflation on the international value of Country Y's currency.



#2 8. Assume that two countries, Atlantis and Xanadu, have equal amounts of resources. Atlantis can produce 30 cars or 10 tractors or any combination, as shown by the line MN in the figure above. Xanadu can produce 20 cars or 40 tractors or any combination, as shown by the line PQ in the figure above.

(a) Which country has an absolute advantage in the production of tractors? Explain how you determined your answer.

(b) Which country has a comparative advantage in the production of cars? Using the concept of opportunity cost, explain how you determined your answer.

(c) If the two countries specialize and trade with each other, which country will import cars? Explain why.

(d) If the terms of trade are such that one car can be exchanged for one tractor, explain how Atlantis will benefit from such trade.

FRQ #3

#3 2. Suppose that Mexico decreases its tariff rates on all of its imports of automobiles from abroad.

(a) Will each of the following groups benefit from the decrease in the tariff rate?

(i) Mexican consumers

(ii) Mexican automobile manufacturers. Explain.

(b) How would the decrease in the tariff rates affect each of the following in Mexico?

(i) Current account balance. Explain.

(ii) Capital account balance

(c) Given the change in Mexico's current account in part (b)(i), what will happen to the aggregate demand in Mexico?

OUTPUTS AND PRICES IN GALA LAND

This Year's Output	This Year's Price
400 loaves of bread	$6 per loaf
1,000 gallons of water	$2 per gallon
800 pieces of fruit	$2 per piece

#4 3. Gala Land produces three final goods: bread, water, and fruit. The table above shows this year's output and price for each good.

(a) Calculate this year's nominal gross domestic product (GDP).

(b) Assume that in Gala Land the GDP deflator (GDP price index) is 100 in the base year and 150 this year. Calculate each of the following.

(i) The inflation rate, expressed as a percentage, between the base year and this year

(ii) This year's real GDP

(c) Since the base year, workers have received a 20 percent increase in their nominal wages. If workers face the same inflation that you calculated in part (b)(i), what has happened to their real wages? Explain.

(d) If the GDP deflator in Gala Land increases unexpectedly, would a borrower with a fixed-interest-rate loan be better off or worse off? Explain.

FRQ #4 21 Points

1. Assume that the country of Rankinland is currently in recession.

   (a) Assume that Rankinland produces only food and clothing. Draw a correctly labeled production possibilities curve for Rankinland. Show a point that could represent the current output combination and label it A.

   (b) Assume that the Central Bank of Rankinland pursues an expansionary monetary policy.

      (i) Identify the open-market operation that the Central Bank would use. Buy bonds ⇒ i% ↓ sell bonds ⇒ i% ↑

      ~~(ii)~~ Draw a correctly labeled money market graph and show the short-run effect of the expansionary monetary policy on the nominal interest rate.

      (iii) Assuming no change to the price level, what happens to the real interest rate as a result of the expansionary monetary policy? Explain.

      (iv) Given your answer to part (b)(iii) regarding the real interest rate, what happens to the real gross domestic product (GDP) in the short run? Explain.

   (c) Suppose Rankinland has a current account deficit. Rankinland's currency is called the bera.

      (i) What will initially happen to the current account deficit in Rankinland solely due to the change in the real GDP from part (b)(iv) ? Explain.

	2009 Quantity	2009 Price (base year)	2010 Quantity	2010 Price
Food	6	$2.5	8	$ 2.5
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#2 (a) The outputs and prices of goods and services in Country X are shown in the table above. Assuming that 2009 is the base year, calculate each of the following.

      (i) The nominal gross domestic product (GDP) in 2010

      (ii) The real GDP in 2010

   (b) If in one year the price index is 50 and in the next year the price index is 55, what is the rate of inflation from one year to the next?

   (c) Assume that next year's wage rate will be 3 percent higher than this year's because of inflationary expectations. The actual inflation rate is 4 percent. At the beginning of next year, will the real wage be higher, lower, or the same as today?

   (d) Assume that Sara gets a fixed-rate loan from a bank when the expected inflation rate is 3 percent. If the actual inflation rate turns out to be 4 percent, who benefits from the unexpected inflation: Sara, the bank, neither, or both? Explain.

3. Indicate whether each of the following is counted in the United States gross domestic product for the year 2006. Explain each of your answers.

   (a) The value of a used textbook sold through an online auction in 2006

   (b) Rent paid in 2006 by residents in an apartment building built in 2000

   (c) Commissions earned in 2006 by a stockbroker

   (d) The value of automobiles produced in 2006 entirely in South Korea by a firm fully owned by United States citizens