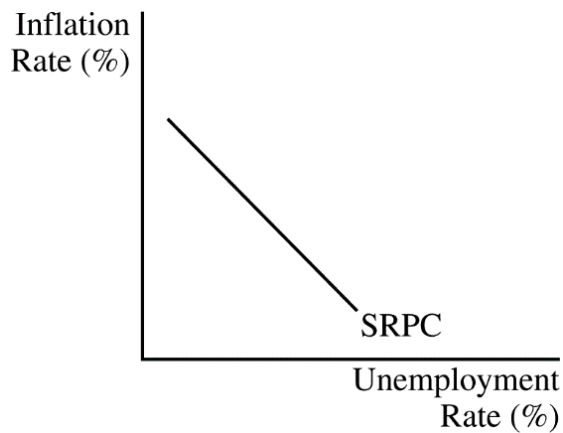
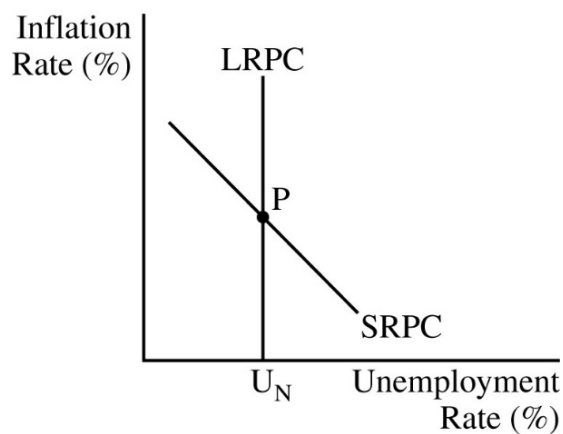


Question 1: Long**10 points****A** Draw a correctly labeled graph of the short-run Phillips curve (SRPC).**1 point**

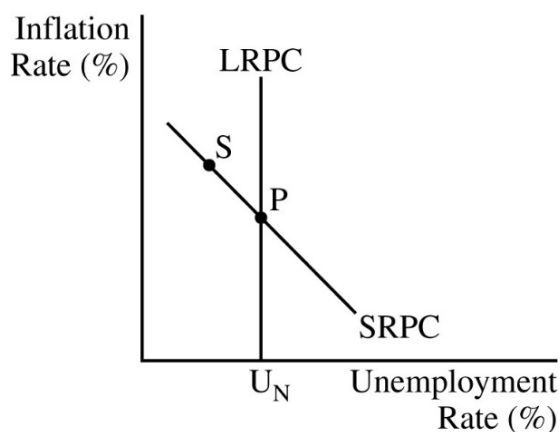
Point 1



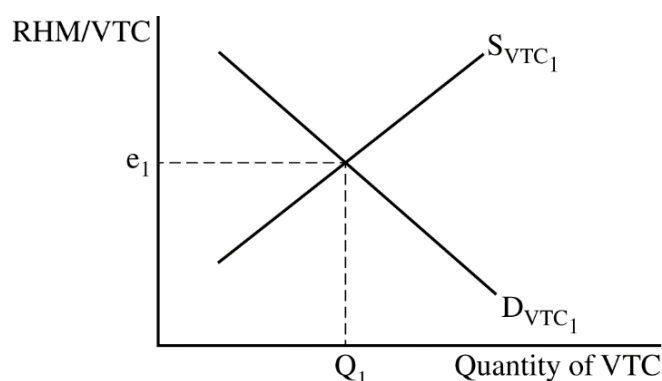
Point 2 The graph must include a correctly labeled long-run Phillips curve (LRPC) and show a point labeled P at the intersection of the short-run and long-run Phillips curves.

1 pointPoint 3 **B (i)** State that real output will increase and explain that the new residential construction projects increase investment spending, which increases aggregate demand.**1 point****(ii)** On the graph from part A, show a point labeled S on the SRPC to the left of point P.**1 point**

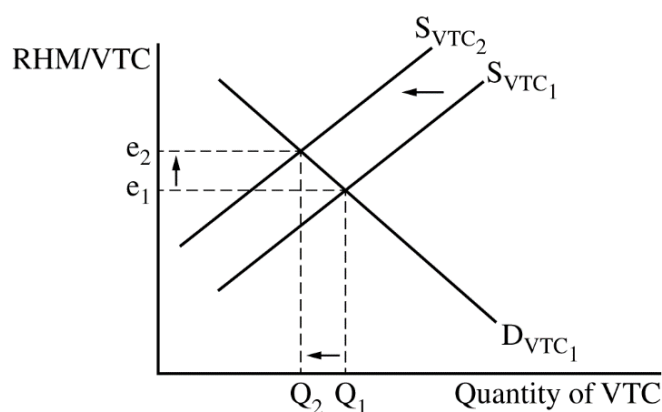
Point 4



- C** Draw a correctly labeled graph of the foreign exchange market for the Vortanian crown. **1 point**
Point 5



- Point 6 The graph must show a leftward shift in the supply curve of the Vortanian crown, resulting in an appreciation of the Vortanian crown. **1 point**



- D** State that Vortania's net exports will decrease. **1 point**

Point 7

- E (i)** State that the capital and financial account (CFA) balance in Vortania will move into surplus and explain that the current account (CA) moved into deficit and the balance of payments must balance ($CA + CFA = 0$). **1 point**
Point 8

- (ii)** State that employment in Vortania will decrease. **1 point**

Point 9

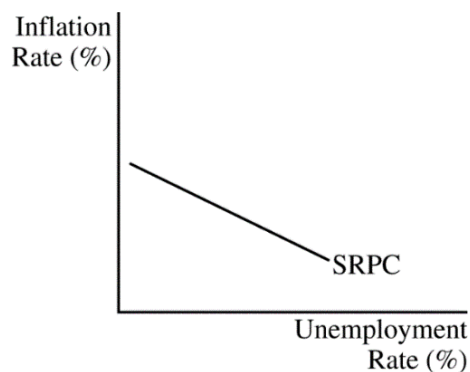
- F** State that the central bank of Vortania would sell Vortanian crowns in the foreign exchange market and explain that the increased supply of the Vortanian crown will cause it to depreciate. **1 point**
Point 10

Question 1: Long**10 points****A** State that the actual unemployment rate is 10%.**1 point**

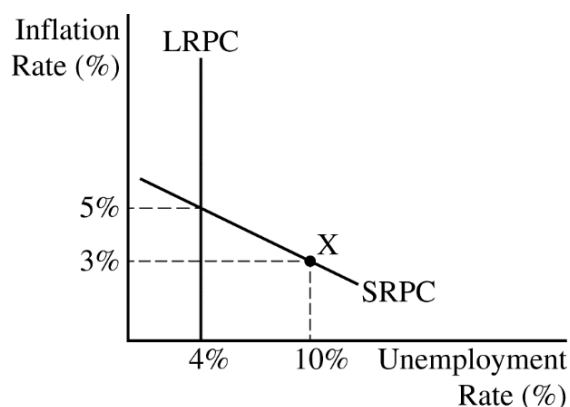
Point 1

B Draw a correctly labeled graph of the short-run Phillips curve (SRPC).**1 point**

Point 2



Point 3 The graph must include a vertical long-run Phillips curve (LRPC) at the natural rate of unemployment (4%), the expected inflation rate (5%) at the intersection of the SRPC and the LRPC, and a point labeled X on the SRPC to the right of the LRPC at the actual unemployment rate (10%) and the actual inflation rate (3%).

1 point

C State an increase in government spending, a decrease in taxes, or an increase in transfer payments.

1 point

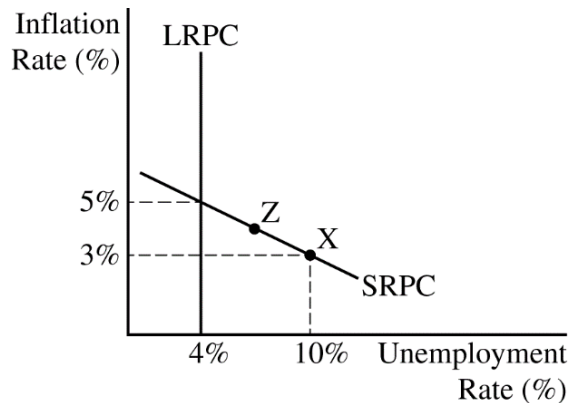
Point 4

D (i) State that the government budget will move into deficit and explain that government outlays exceed revenue. **1 point**

Point 5

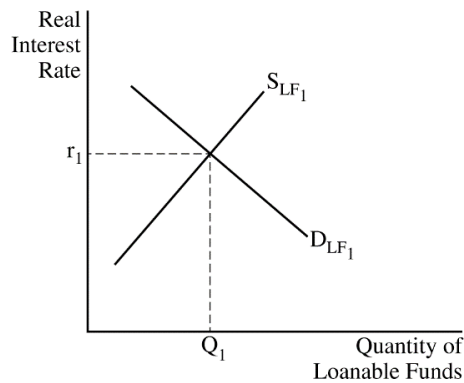
(ii) On the graph from part B, show a point labeled Z on the SRPC to the left of point X. **1 point**

Point 6

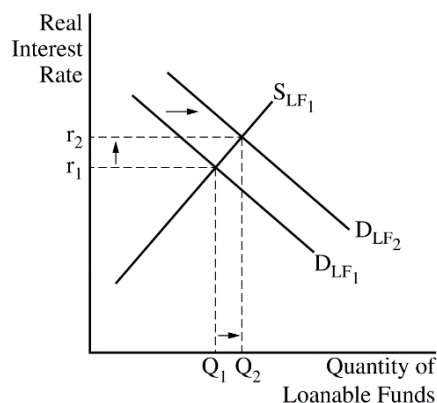


(iii) Draw a correctly labeled graph of the loanable funds market. **1 point**

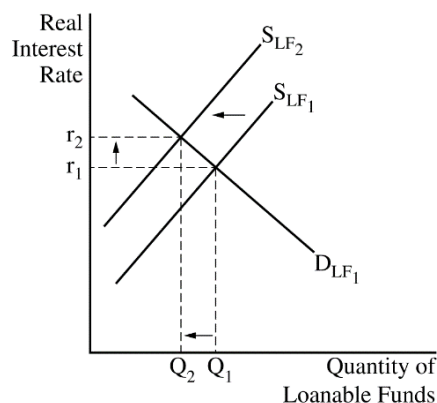
Point 7



Point 8 The graph must show an increase in the demand for loanable funds (or a decrease in the supply of loanable funds), resulting in an increase in the equilibrium real interest rate. **1 point**



OR



E State that Barrikos' capital and financial account (CFA) will move into surplus and explain that international investors will seek higher returns on financial capital in Barrikos, which will increase financial capital inflows into Barrikos. **1 point**

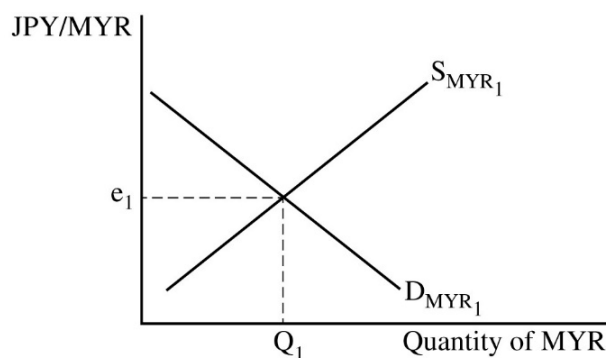
Point 9

F State that Barrikos' currency will appreciate and explain that demand for the currency will increase (or the supply of the currency will decrease). **1 point**

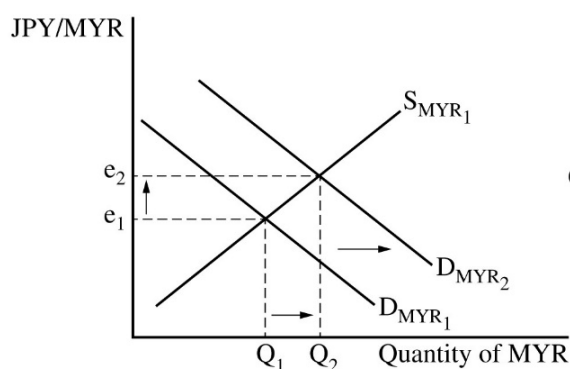
Point 10

Question 3: Short**5 points**

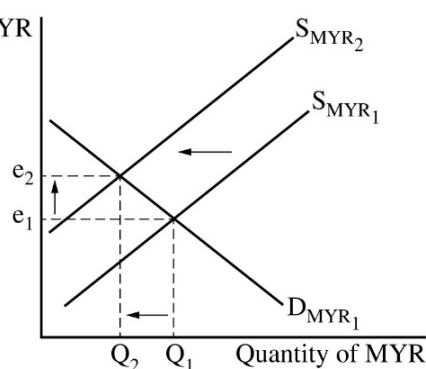
- (a) State an increase in government spending, a decrease in taxes, or an increase in transfer payments. **1 point**
- (b) State that the real interest rate will increase and explain that government borrowing will increase, which will increase the demand for loanable funds (or decrease the supply of loanable funds). **1 point**
- (c) Draw a correctly labeled graph of the foreign exchange market for the ringgit. **1 point**



For the second point, the graph must show an increase in the demand for the ringgit (or a decrease in the supply of the ringgit), resulting in an appreciation of the ringgit. **1 point**



OR

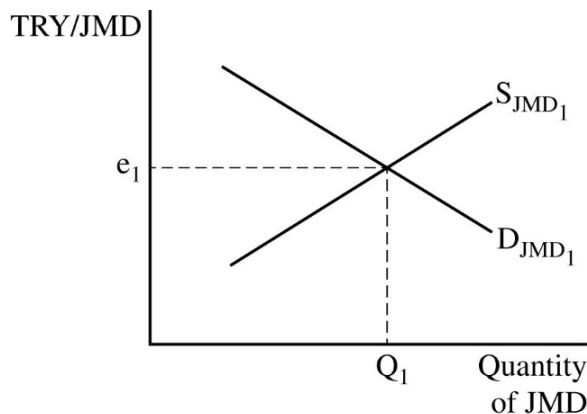
**Total for part (c) 2 points**

- (d) State that Malaysia's imports will increase and explain that the appreciation of the ringgit will make Japanese goods relatively less expensive than they were before. **1 point**

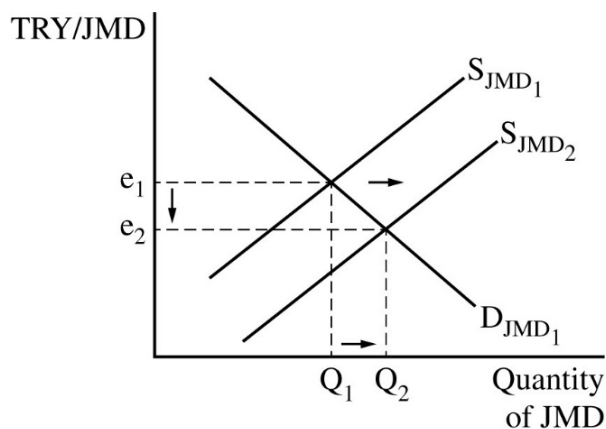
Total for question 3 5 points

Question 3: Short**5 points**

- (a) State an increase in government spending, a decrease in taxes, or an increase in transfer payments. **1 point**
- (b) State that Jamaica's net exports will decrease and explain that Jamaican demand for international goods will increase as a result of the increase in Jamaica's real income, which will increase Jamaican imports. **1 point**
- (c) Draw a correctly labeled graph of the foreign exchange market for the Jamaican dollar. **1 point**



For the second point, the graph must show an increase in the supply of the Jamaican dollar, resulting in a depreciation of the Jamaican dollar.

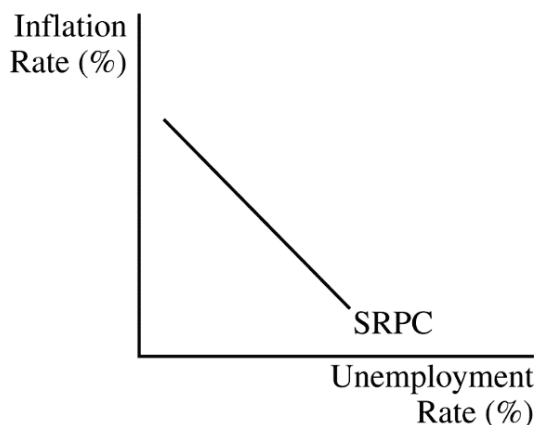
1 point**Total for part (c) 2 points**

- (d) State that Jamaica's capital and financial account (CFA) will move into surplus and explain that the current account (CA) moved into deficit and the balance of payments must balance ($CA + CFA = 0$). **1 point**

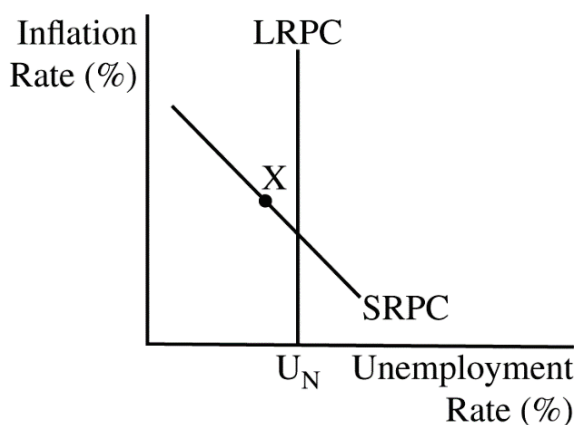
Total for question 3 5 points

Question 2: Short**5 points**

- (a) Draw a correctly labeled graph of the short-run Phillips curve (SRPC). **1 point**



- For the second point, the graph must include a correctly labeled long-run Phillips curve (LRPC) and show point X on the SRPC to the left of the LRPC. **1 point**

**Total for part (a) 2 points**

- (b) State that the central bank would increase its administered interest rates or increase interest on reserves. **1 point**
- (c) State that there will be an increase in the flow of international financial capital into Noralandia and explain that international investors will seek higher returns on financial capital in Noralandia. **1 point**
- (d) State that Noralandia's currency will appreciate and explain there will be an increase in the demand for Noralandia's currency (or a decrease in the supply of Noralandia's currency). **1 point**

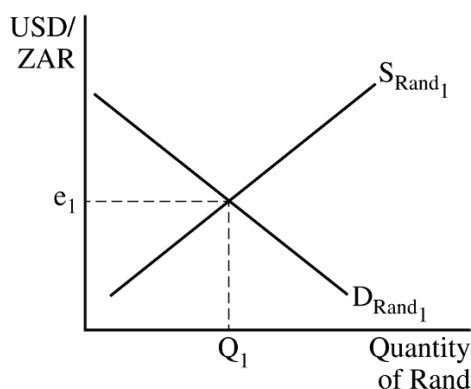
Total for question 2 5 points

Question 2: Short**5 points**

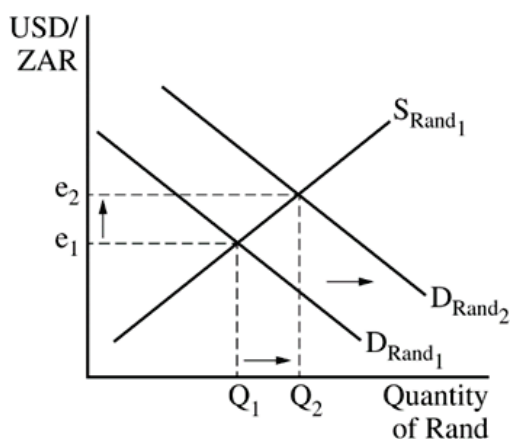
- (a) State that United States net exports will decrease and explain that the demand for goods from South Africa will increase, which increases United States imports. **1 point**
- (b) (i) State that the capital and financial account balance in the United States will move into surplus. **1 point**
- (ii) State that actual unemployment in South Africa will decrease in the short run and explain that South African exports will increase, which will increase aggregate demand and real GDP in South Africa. **1 point**

Total for part (b) 2 points

- (c) Draw a correctly labeled graph of the foreign exchange market for the rand. **1 point**

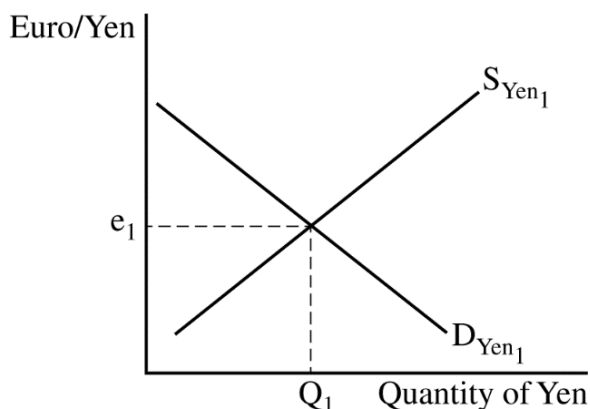


- For the second point, the graph must show a rightward shift in the demand curve for the rand, resulting in an appreciation of the rand. **1 point**

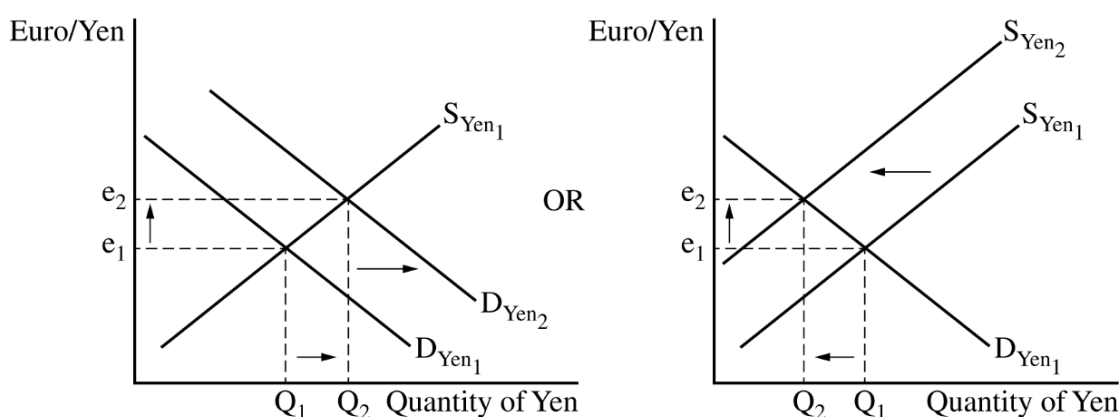
**Total for part (c) 2 points****Total for question 2 5 points**

Question 3: Short**5 points**

- (a) State that the price of the coat is 12,000 yen. **1 point**
- (b) State that net financial capital flows from Italy to Japan will increase. **1 point**
- (c) Draw a correctly labeled graph of the foreign exchange market for the Japanese yen. **1 point**



For the second point, the graph must show a rightward shift in the demand curve for yen (or a leftward shift in the supply curve of yen), resulting in an appreciation of the yen.

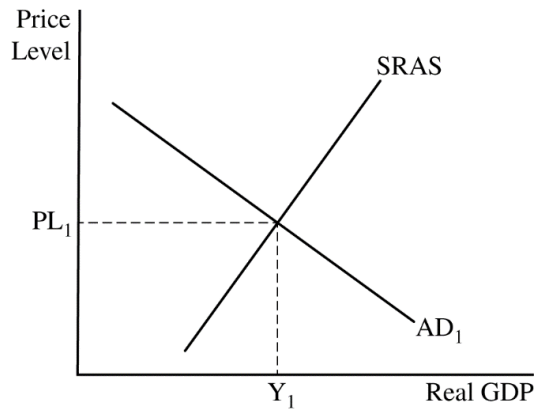
1 point**Total for part (c) 2 points**

- (d) State that Italy's exports will increase and explain that the appreciation of the yen makes Italian goods relatively less expensive than Japanese goods and/or makes Japanese goods relatively more expensive than Italian goods. **1 point**

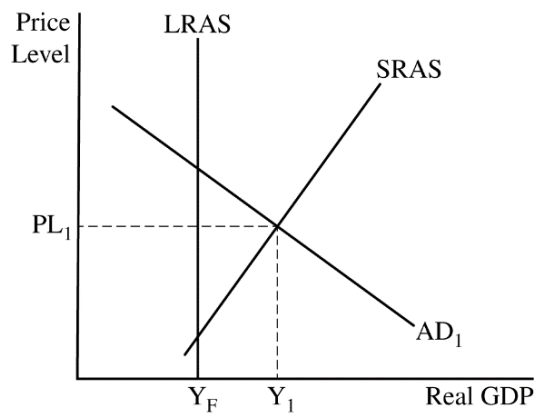
Total for question 3 5 points

Question 1: Long**10 points**

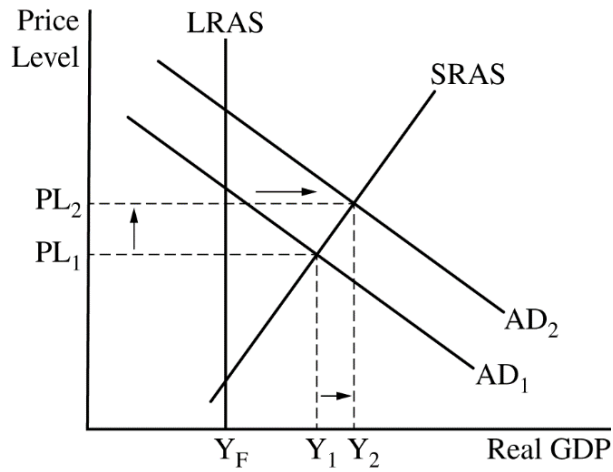
- (a) Draw a correctly labeled aggregate demand-aggregate supply graph that shows PL_1 and Y_1 at the intersection of aggregate demand and short-run aggregate supply. **1 point**



- For the second point, the graph must show a vertical long-run aggregate supply curve to the left of Y_1 and label the full-employment output Y_F . **1 point**

**Total for part (a) 2 points**

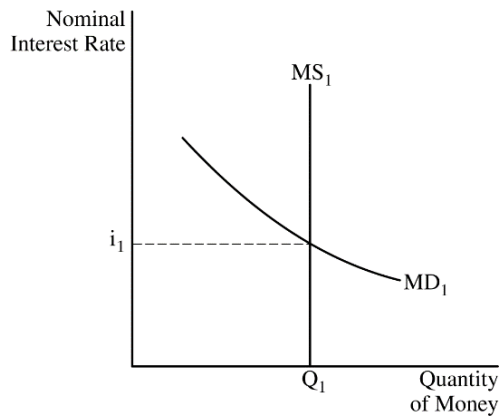
- (b) On the graph from part (a), show the short-run effect of the increase in government spending as a rightward shift of the aggregate demand curve, resulting in an increase in equilibrium real output and an increase in the equilibrium price level, labeled Y_2 and PL_2 respectively. **1 point**



- (c) State that the maximum increase in real output is \$500 billion, and the maximum increase in household savings is \$100 billion. **1 point**

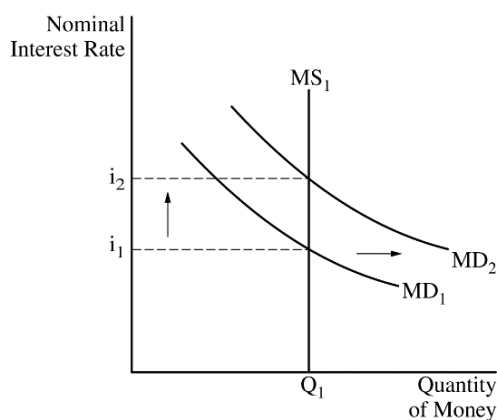
(d) Draw a correctly labeled graph of the money market.

1 point



For the second point, the graph must show a rightward shift in the money demand curve, resulting in a higher nominal interest rate.

1 point



Total for part (d) 2 points

(e) State that the price of previously issued bonds will decrease.

1 point

(f) (i) State that the demand for dollars will decrease and explain that United States goods are relatively more expensive than European goods as a result of the increase in the inflation rate in the United States.

1 point

(ii) State that the dollar will depreciate.

1 point

Total for part (f) 2 points

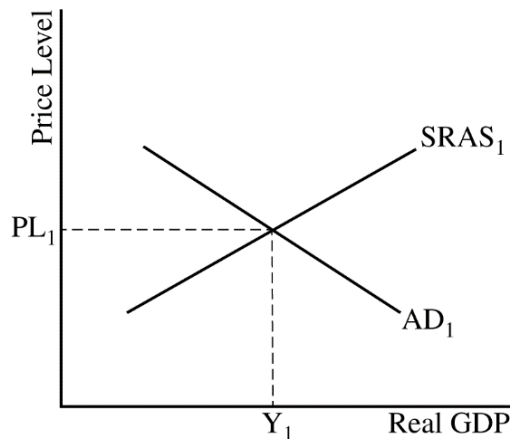
(g) State that the Federal Reserve should sell the euro and buy the dollar.

1 point

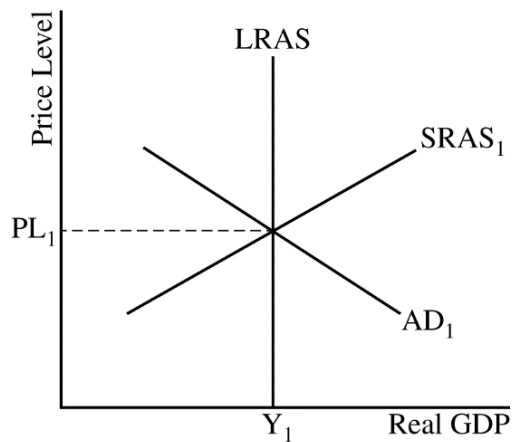
Total for question 1 10 points

Question 1: Long**10 points**

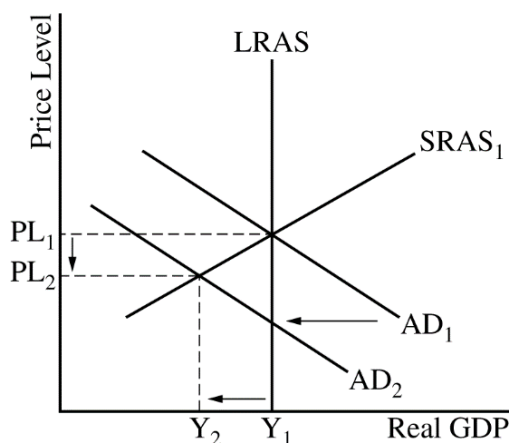
- (a) State that the Swedish capital and financial account is in deficit and explain that the current account is in surplus and the sum of the current account and the capital and financial account must equal zero ($CA + CFA = 0$). **1 point**
- (b) Draw a correctly labeled aggregate demand–aggregate supply graph that shows PL_1 and Y_1 at the intersection of AD and SRAS. **1 point**



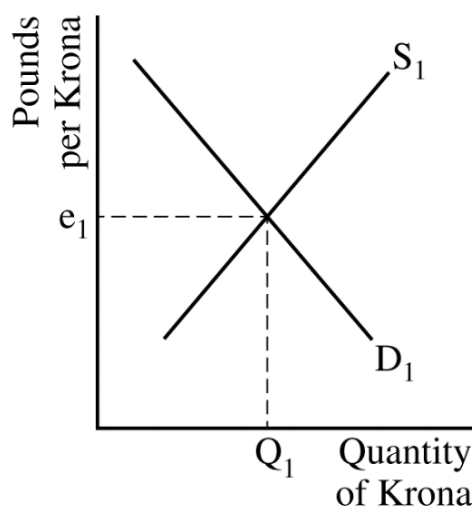
For the second point, the graph must show a vertical LRAS curve at equilibrium real output Y_1 .

1 point**Total for part (b)****2 points**

- (c) On the graph from part (b), show the impact of the decrease in imports with a leftward shift of the AD curve, a decrease in real output to Y_2 , and a decrease in the price level to PL_2 . **1 point**

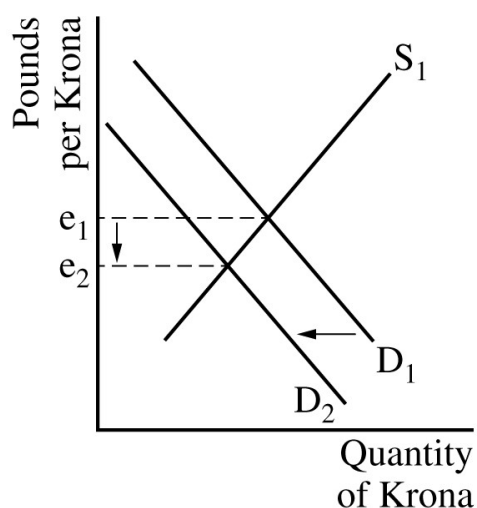


- (d) State that policymakers would be more concerned about cyclical unemployment than inflationary pressures and explain that the decline in exports to the United Kingdom lowered real output below full employment, resulting in unemployment above the natural rate of unemployment. **1 point**
- (e) State that the Swedish central bank should buy bonds. **1 point**
- (f) Draw a correctly labeled graph of the foreign exchange market for the krona. **1 point**



For the second point, the graph must show a leftward shift of the demand curve for the krona, resulting in a decrease in the value of the krona.

1 point



Total for part (f) 2 points

(g) State that Sweden's central bank should sell bonds.

1 point

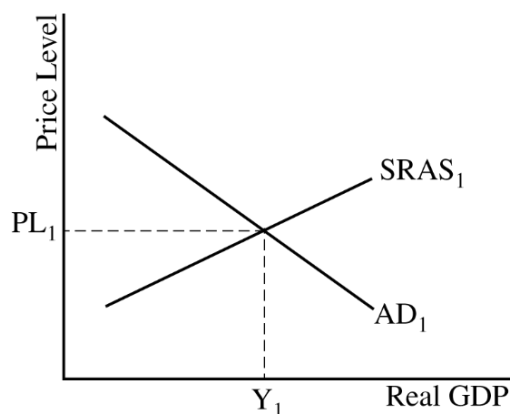
(h) Explain that selling bonds would decrease the money supply and increase interest rates in Sweden, which would increase financial capital inflows into Sweden and increase the demand for the krona, thereby leading to an appreciation of the krona.

1 point

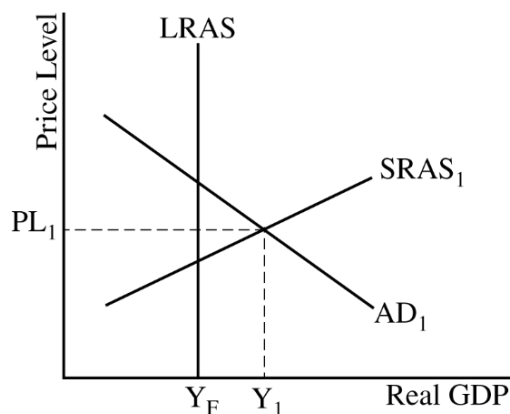
Total for question 1 10 points

Question 1: Long**10 points**

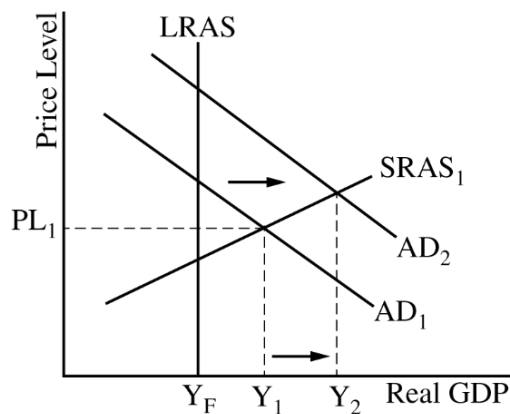
- (a) Draw a correctly labeled aggregate demand–aggregate supply graph that shows PL_1 and Y_1 at the intersection of AD and SRAS. **1 point**



- For the second point, the graph must show a vertical LRAS curve to the left of Y_1 and label the full employment output Y_F . **1 point**

**Total for part (a) 2 points**

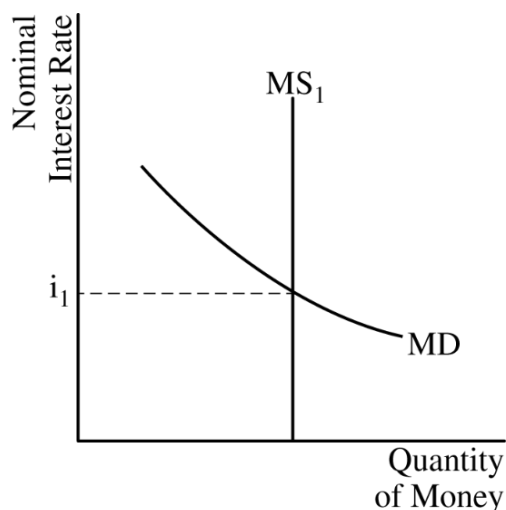
- (b) On the graph from part (a), show the impact of the government's action with a rightward shift of the AD curve and an increase in short-run equilibrium real output labeled Y_2 . **1 point**



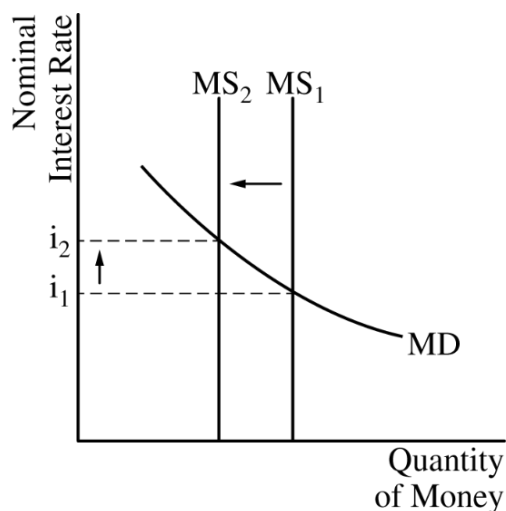
- | | | |
|--|---|---------|
| | (c) (i) State that the natural rate of unemployment will not change. | 1 point |
| | (ii) State that nominal interest rates will increase and explain that this is because the increase in real output will increase the demand for money. | 1 point |

Total for part (c)	2 points
---------------------------	-----------------

- | | | |
|--|---|---------|
| | (d) State that the central bank should sell bonds. | 1 point |
| | (e) Draw a correctly labeled graph of the money market. | 1 point |



For the second point, the graph must show a leftward shift in the money supply curve, resulting in a higher nominal interest rate.	1 point
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Total for part (e)	2 points
---------------------------	-----------------

- | | | |
|--|---|---------|
| | (f) State that Smithland's currency will appreciate and explain that this is because there will be financial capital inflows as foreign investors seek higher returns in Smithland, which will increase the demand for Smithland's currency or decrease the supply of Smithland's currency. | 1 point |
|--|---|---------|

-
- | | | |
|------------|--|----------------|
| (g) | State that Smithland's imports will increase and explain that this is because the appreciation of Smithland's currency means that foreign goods will be relatively less expensive. | 1 point |
|------------|--|----------------|
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Total for question 1 10 points

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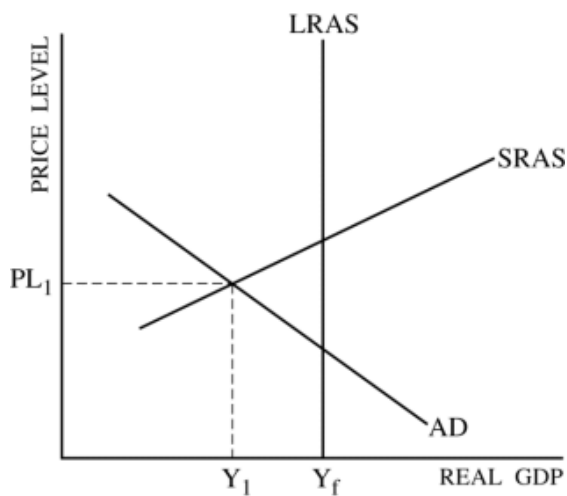
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2015 SCORING GUIDELINES

Question 1

10 points (2+1+2+3+2)

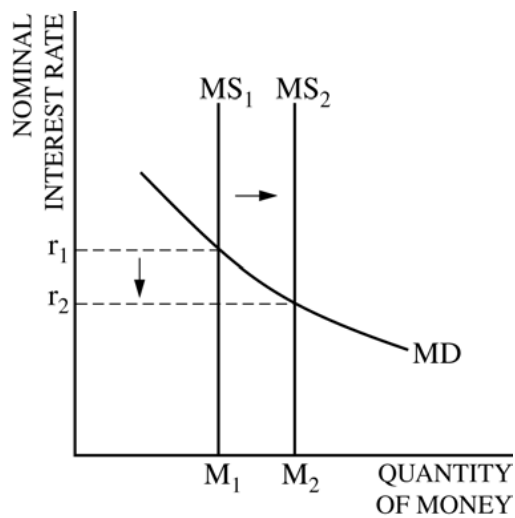


(a) 2 points:

- One point is earned for drawing a correctly labeled graph showing AD, SRAS, Y_1 and PL_1 .
- One point is earned for drawing a vertical LRAS at Y_f to the right of Y_1 .

(b) 1 point:

- One point is earned for stating that the Federal Reserve should target a lower federal funds rate.



(c) 2 points:

- One point is earned for drawing a correctly labeled money market graph.
- One point is earned for shifting the money supply curve to the right and showing a decrease in the nominal interest rate.

2015 SCORING GUIDELINES

Question 1 (continued)

(d) 3 points:

- One point is earned for calculating the minimum required change in government spending: \$60 billion ($\$300/5 = \60).
- One point is earned for stating that the minimum required change in taxes will be greater than the minimum required change in government spending.
- One point is earned for explaining that the tax multiplier ($mpc/mps = 0.8/0.2 = 4$) is smaller than the government spending multiplier ($1/mps = 1/0.2 = 5$) because part of the initial increase in disposable income caused by the decrease in income tax will be saved rather than spent.

(e) 2 points:

- One point is earned for stating that aggregate demand will increase and for explaining that lower income tax rates will increase disposable income and/or consumption and investment.
- One point is earned for stating that long-run aggregate supply will stay the same because lowering income taxes will increase consumption and/or investment, or there is no change in inputs.
OR
One point is earned for stating that long-run aggregate supply will increase in the long run because lowering taxes will increase savings and investment in physical capital, or because of increased incentives to work.
OR
One point is earned for stating that long-run aggregate supply will decrease in the long run because lowering taxes leads to a crowding out of private investment.

2015 SCORING GUIDELINES

Question 2

5 points (1+1+2+1)

(a) 1 point:

- One point is earned for stating that Country Y has an absolute advantage in producing solar panels.

(b) 1 point:

- One point is earned for calculating the opportunity cost of a furnace for Country Y: 2 solar panels per furnace.

(c) 2 points:

- One point is earned for stating that Country X has the comparative advantage in producing furnaces.
- One point is earned for explaining that Country X has a lower opportunity cost of producing furnaces than Country Y.

(d) 1 point:

- One point is earned for stating that Country X should produce solar panels domestically.

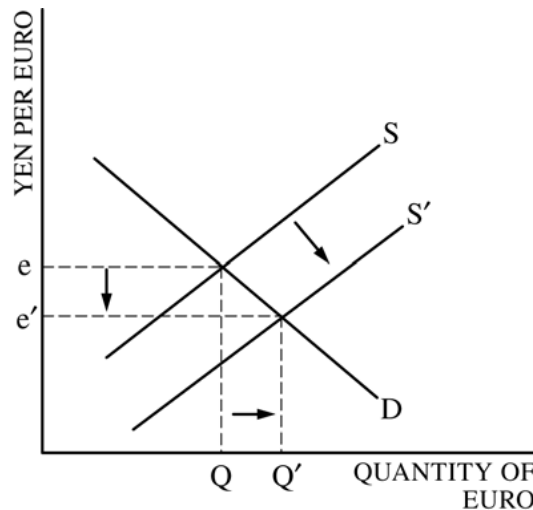
2015 SCORING GUIDELINES

Question 3

6 points (2+3+1)

(a) 2 points:

- One point is earned for stating that the real interest rate in Japan will increase in the short run because the supply of loanable funds will decrease or the demand for loanable funds will increase.
- One point is earned for stating that private domestic investment in plant and equipment in Japan will decrease.



(b) 3 points:

- One point is earned for drawing a correctly labeled graph of the foreign exchange market for the euro.
- One point is earned for showing that the supply curve for euros shifts to the right and for concluding that the yen price of the euro decreases.
- One point is earned for explaining that the European purchases of Japanese financial assets will increase due to the relatively higher rate of return in Japan.

(c) 1 point:

- One point is earned for stating that European Central Bank should buy euros.