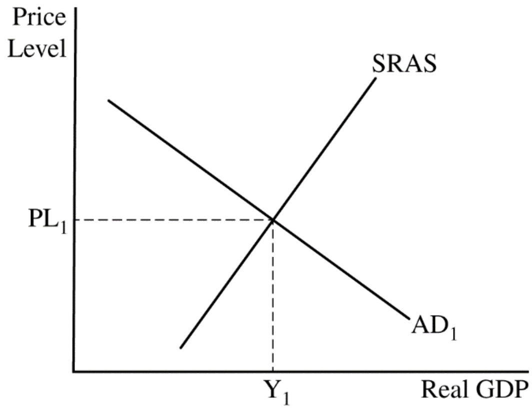
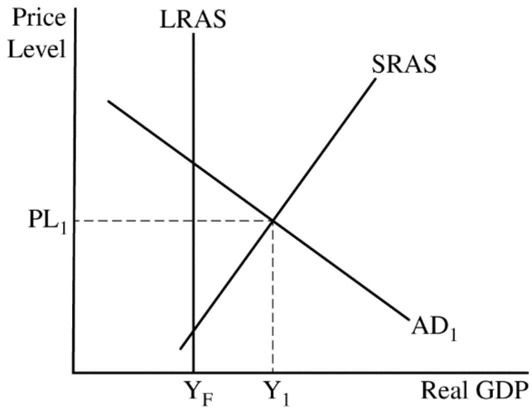
Question 1: Long — 10 points

(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**

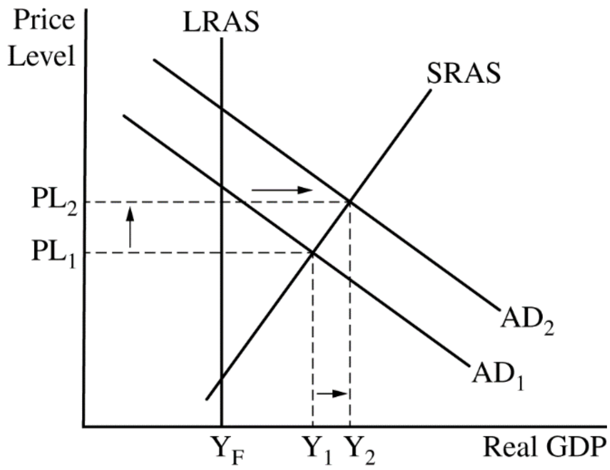


For the second point, the graph must show a vertical long-run aggregate supply curve to the left of Y_1 and label the full-employment output Y_F. **1 point**



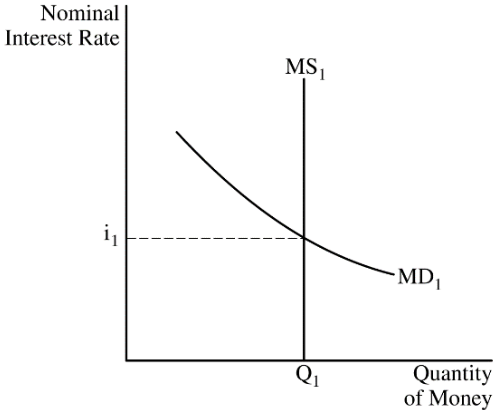
Total for part (a) — 2 points

(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**

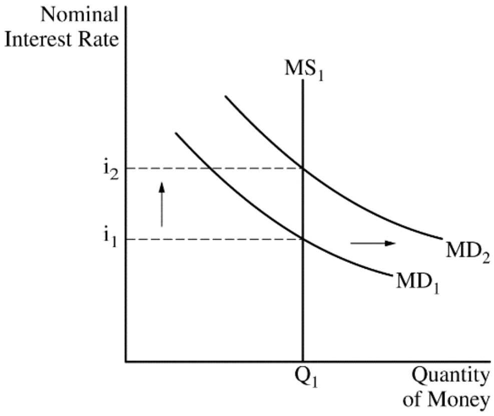


(c)	State that the maximum increase in real output is \$500 billion, and the maximum increase in household savings is \$100 billion.	**1 point**

(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**

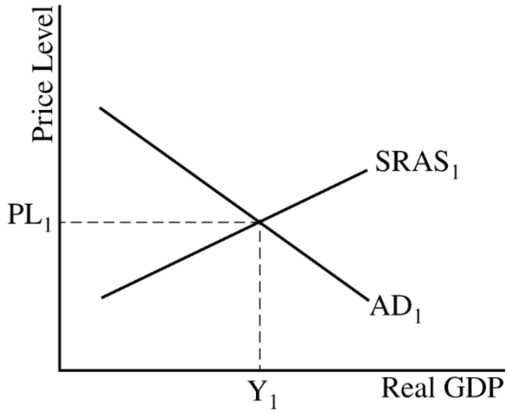
Total for part (f) 2 points

(g) State that the Federal Reserve should sell the euro and buy the dollar. **1 point**

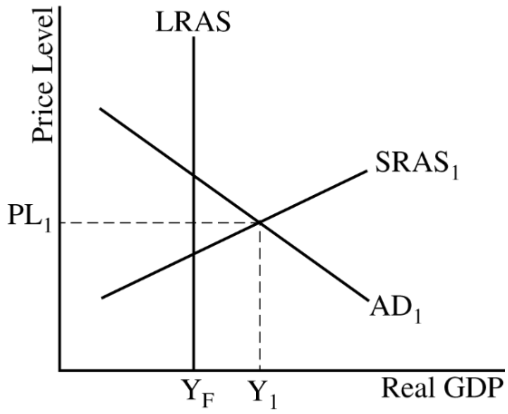
Total for question 1 10 points

Question 1: Long — 10 points

(a) 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**

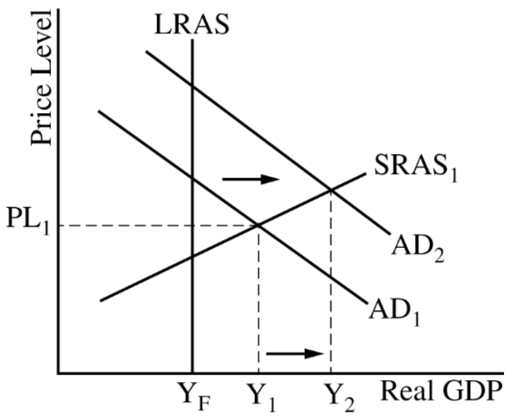


For the second point, the graph must show a vertical LRAS curve to the left of Y_1 and label the full employment output Y_F. **1 point**

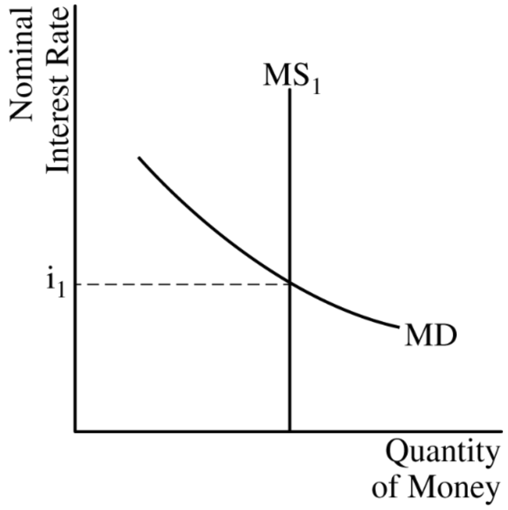


Total for part (a) — 2 points

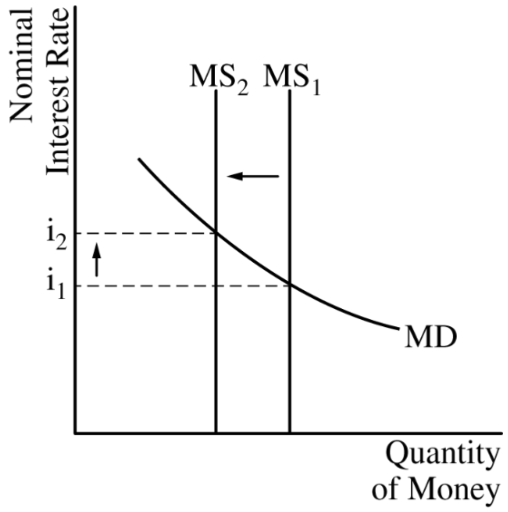
(b) On the graph from part (a), show the impact of the government's action with a rightward shift of the AD curve and an increase in short-run equilibrium real output labeled Y_2. **1 point**



(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**



		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**

Total for question 1 10 points

2017

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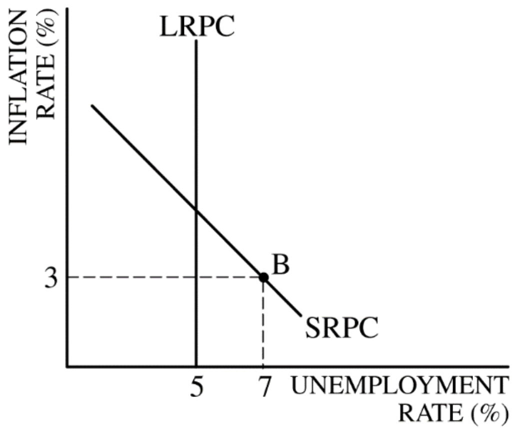
Scoring Guidelines

2017 SCORING GUIDELINES

Question 1

9 points (2 + 2 + 1 + 2 + 1 + 1)



(a) 2 points:

- One point is earned for drawing a correctly labeled graph of a downward-sloping short-run Phillips curve (SRPC).
- One point is earned for showing a correctly labeled vertical long-run Phillips curve (LRPC) at the natural rate of unemployment, 5%, and for showing point B on the SRPC to the right of LRPC at the actual unemployment rate, 7%, and the inflation rate, 3%.

(b) 2 points:

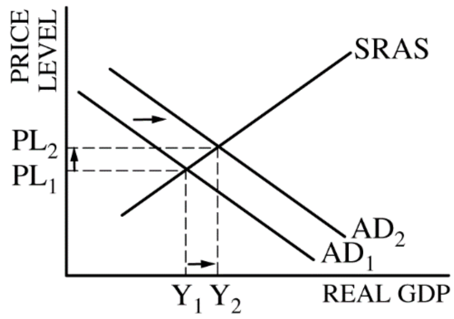
- One point is earned for stating that the short-run aggregate supply (SRAS) curve will shift to the right in the long run and for explaining that nominal wages will fall in response to high unemployment.
- One point is earned for stating that LRPC will remain unchanged.

(c) 1 point:

- One point is earned for stating that the government should either increase its expenditures (or purchases) or decrease taxes.

2017 SCORING GUIDELINES

Question 1 (continued)



(d) 2 points:

- One point is earned for drawing a correctly labeled graph showing a downward-sloping AD curve, upward-sloping SRAS curve, the equilibrium price level, and the equilibrium real GDP.

- One point is earned for showing a rightward shift of the AD curve and for showing an increase in both the price level and real GDP.

(e) 1 point:

- One point is earned for stating that the supply of country X's currency will increase and for explaining that spending on imports will increase as a result of the increase in real GDP.

(f) 1 point:

- One point is earned for stating that country X's currency will depreciate.

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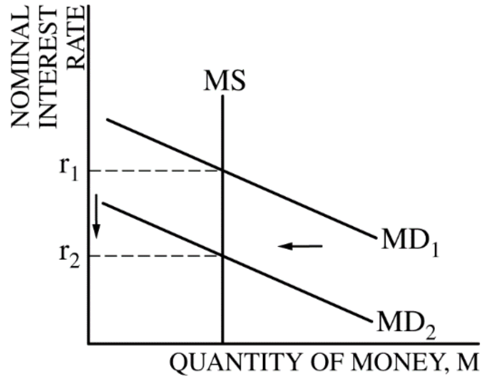
Question 2

6 points (2 + 2 +1 + 1)



(a) 2 points:

- One point is earned for drawing a correctly labeled graph of the money market.
- One point is earned for showing a leftward shift in the money demand curve, resulting in a lower nominal interest rate.

(b) 2 points:

- One point is earned for stating that the price of previously issued bonds will increase.
- One point is earned for stating that both the price level and real income will increase and for explaining that the lower interest rate will increase consumption, investment, and/or net exports (interest-sensitive spending), which increases aggregate demand.

(c) 1 point:

- One point is earned for stating that the velocity of money will increase.

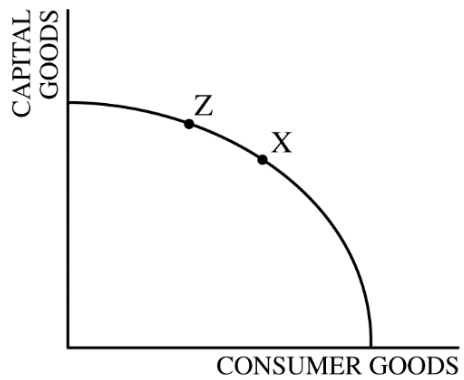
(d) 1 point:

- One point is earned for stating that the central bank would sell bonds.

2017 SCORING GUIDELINES

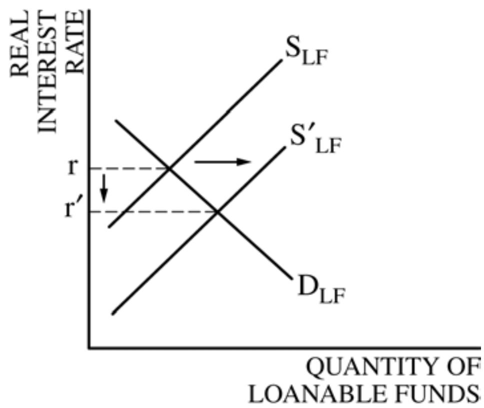
Question 3

5 points (1 + 2 + 1 + 1)



(a) 1 point:

- One point is earned for drawing a correctly labeled graph of the production possibilities curve (PPC) and for showing point X on the curve.



(b) 2 points:

- One point is earned for drawing a correctly labeled graph of the loanable funds market.
- One point is earned for showing a rightward shift of the supply curve and a decrease in the real interest rate.

(c) 1 point:

- One point is earned for showing point Z to the left of point X on the curve.

(d) 1 point:

- One point is earned for stating that the long-run aggregate supply (LRAS) curve will shift to the right and for explaining that capital accumulation will increase.

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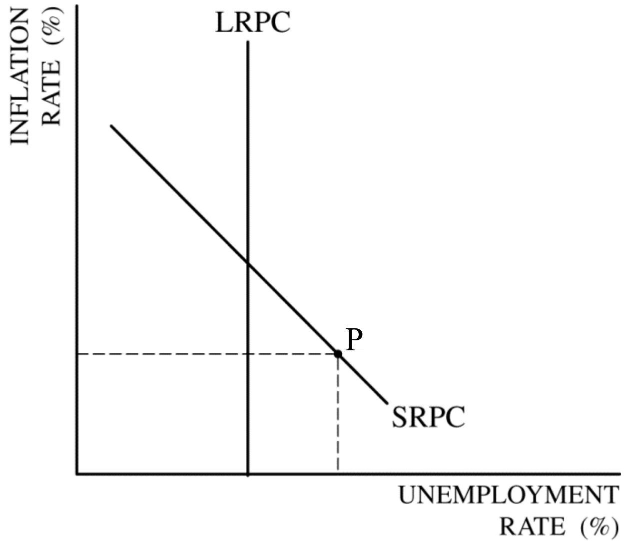
2016 SCORING GUIDELINES

Question 1

10 points (2+1+1+2+1+1+2}



(a) 2 points:

- One point is earned for drawing a correctly labeled graph showing a vertical LRPC and a downward sloping SRPC.
- One point is earned for showing point P on the SRPC to the right of LRPC.

(b) 1 point:

- One point is earned for stating that SRPC will shift to the left, and for explaining that producing at a level of output below full employment will create higher unemployment and lower inflationary expectations that will result in lower nominal wages and input costs.

(c) 1 point:

- One point is earned for stating that the Federal Reserve should buy bonds.

(d) 2 points:

- One point is earned for stating that the federal funds rate will decrease and for explaining that the money supply will increase, which will increase reserves and decrease the federal funds rate.
- One point is earned for stating that the real interest rate will decrease in the short run.

2016 SCORING GUIDELINES

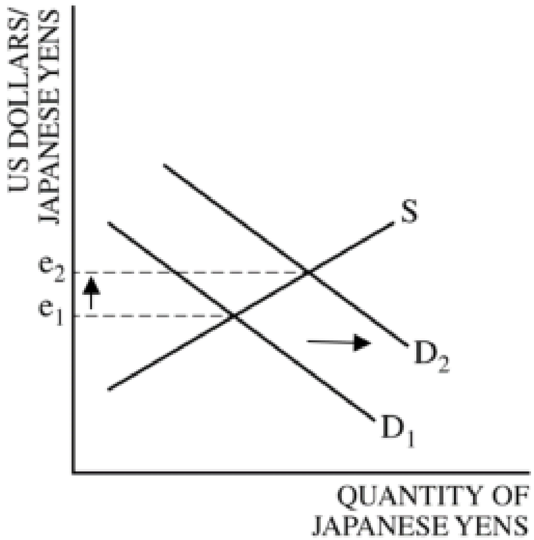
Question 1 (continued)

(e) 1 point:

- One point is earned for stating that real GDP will increase in the short run and for explaining that a decrease in the real interest rate will increase interest-sensitive spending, which includes consumption and investment in plant and equipment, resulting in an increase in aggregate demand.

(f) 1 point:

- One point is earned for stating that the demand for the Japanese yen will increase in the foreign exchange market.



(g) 2 points:

- One point is earned for drawing a correctly labeled graph of the foreign exchange market for the Japanese yen.
- One point is earned for showing a rightward shift of the demand curve for the yen and showing an increase in the dollar price of the yen (appreciating yen).

2016 SCORING GUIDELINES

Question 2

6 points (1+1+2+1+1)

(a) 1 point:

- One point is earned for stating that new loans are zero because the bank has no excess reserves (or because the bank is already fully loaned up).

(b) 1 point:

- One point is earned for correctly calculating the maximum amount of new loans that First Superior Bank can make as \$90 (= \$100 x (1 – 0.10)).

(c) 2 points:

- One point is earned for correctly calculating the maximum change over time in loans in the banking system as \$900 (= \$90 × 10).
- One point is earned for correctly calculating the maximum change over time in demand deposits in the banking system as \$1,000 (= \$100 × 10).

(d) 1 point:

- One point is earned for correctly calculating the maximum change over time in the money supply in the banking system as \$900 (= \$90 × 10).

(e) 1 point:

- One point is earned for stating that the money supply can be smaller than the maximum change identified when the public holds more money and /or banks hold more excess reserves.

2016 SCORING GUIDELINES

Question 3

5 points (1+1+2+1)

(a) 1 point:

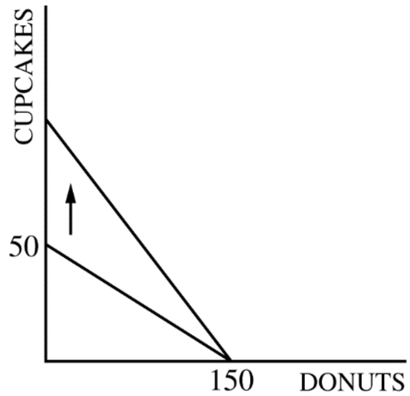
- One point is earned for stating that John has the absolute advantage in producing donuts and for explaining that John can produce more donuts than Erica in one day (200>150).

(b) 1 point:

- One point is earned for stating that Erica has a comparative advantage in producing donuts and for explaining that Erica's opportunity cost of producing one donut (1/3 of a cupcake) is less than John's opportunity cost of producing one donut (1/2 of a cupcake).

(c) 2 points:

- One point is earned for indicating that John will benefit from specialization and trade.
- One point is earned for indicating that Erica will not benefit from specialization and trade.



(d) 1 point:

- One point is earned for drawing a correctly labeled graph of Erica's production possibilities curve, before the technology change, and for rotating the production possibilities curve outward showing greater production of cupcakes after the technology change.