

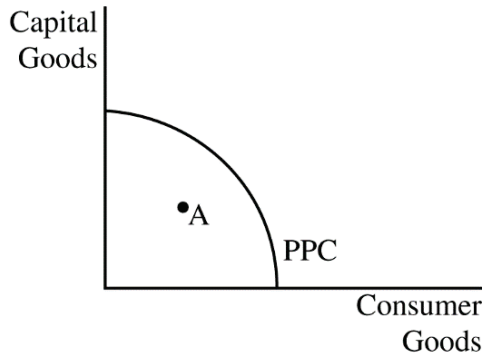
Question 3: Short**5 points**

- (a) Calculate the number of people that are unemployed as 63,000 and show your work. **1 point**

$$\begin{aligned} \text{Unemployed} &= \text{Unemployment Rate} \times \text{Labor Force Participation Rate} \\ &\quad \times \text{Adult Population} = 9\% \times 70\% \times 1,000,000 = 63,000 \end{aligned}$$

- (b) State that the country of Zeta is currently experiencing a recessionary gap and explain that the current unemployment rate (9%) is higher than the natural rate of unemployment (5%). **1 point**

- (c) Draw a correctly labeled graph of the production possibilities curve (PPC) for Zeta that shows point A below the PPC. **1 point**



- (d) (i) State that the labor force participation rate will decrease and explain that the labor force will decrease because the workers who stopped looking for employment are no longer considered to be unemployed. **1 point**

- (ii) State that the unemployment rate will decrease. **1 point**

Total for question 3 5 points

Question 2: Short**5 points**

- (a) Calculate Country A's real GDP in 2021 as 44,000, calculate Country A's real GDP per capita in 2021 as 400, and show your work. **1 point**

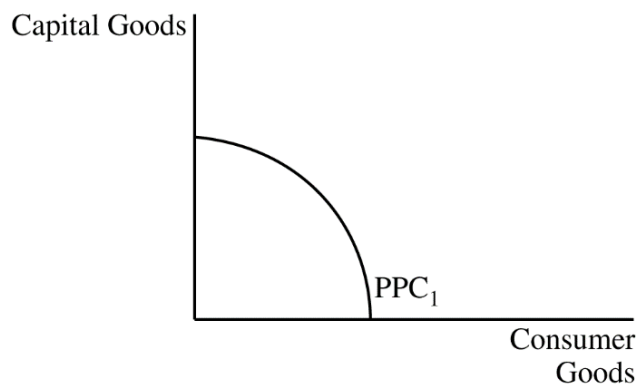
$$\text{Real GDP} = \frac{88,000}{200} \times 100 = 44,000$$

$$\text{Real GDP per Capita} = \frac{44,000}{110} = 400$$

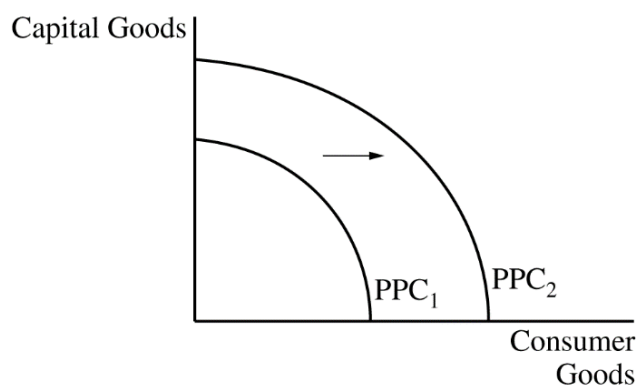
- (b) State that the standard of living for the average person in Country A has stayed the same from 2020 to 2021 and explain that real GDP per capita in Country A did not change from 2020 to 2021. **1 point**

- (c) State that an increase in government spending on education will promote economic growth in Country A and explain that human capital will increase and the labor force will become more productive. **1 point**

- (d) Draw a correctly labeled graph of the production possibilities curve. **1 point**



- For the second point, the graph must show an outward shift of the production possibilities curve. **1 point**

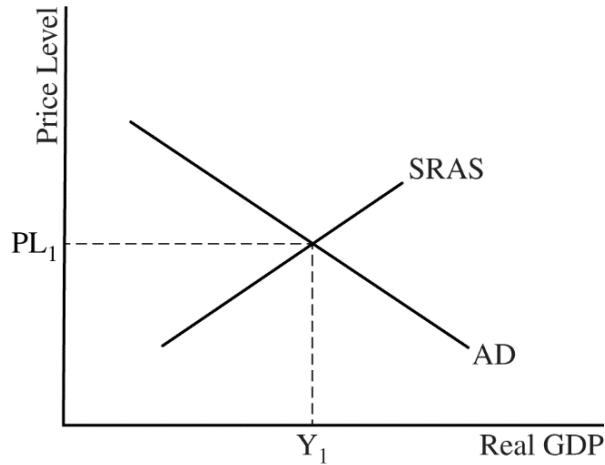
**Total for part (d) 2 points****Total for question 2 5 points**

2019**AP[®]** **CollegeBoard**

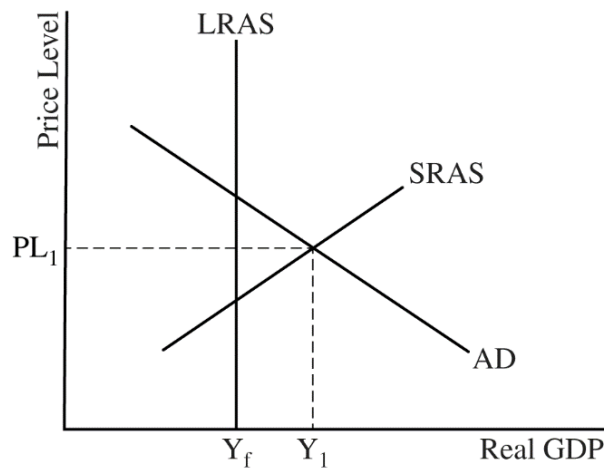
AP[®] Macroeconomics

Scoring Guidelines

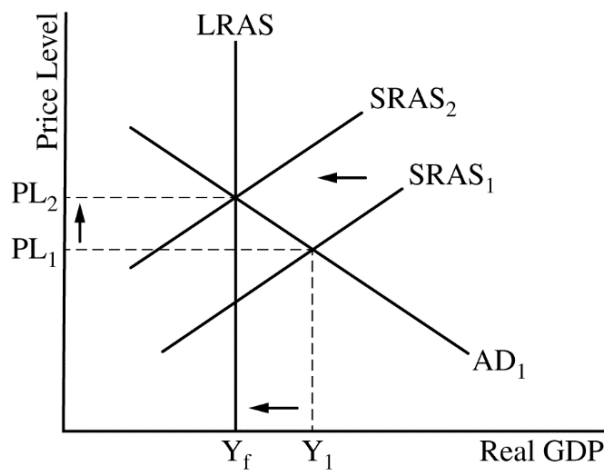
Set 2

2019 SCORING GUIDELINES**Question 1****10 points (2 + 2 + 3 + 2 + 1)****(a) 2 points**

- One point is earned for drawing a correctly labeled graph showing a downward sloping aggregate demand (AD) curve, an upward sloping short-run aggregate supply (SRAS) curve, the equilibrium output level labeled Y_1 , and the equilibrium price level labeled PL_1 .



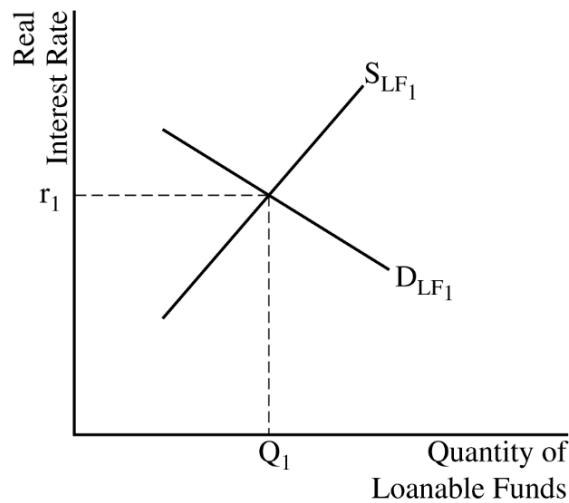
- One point is earned for drawing a correctly labeled vertical long-run aggregate supply (LRAS) curve with full employment output labeled Y_f to the left of the short-run equilibrium output level, Y_1 .

2019 SCORING GUIDELINES**Question 1 (continued)****(b) 2 points**

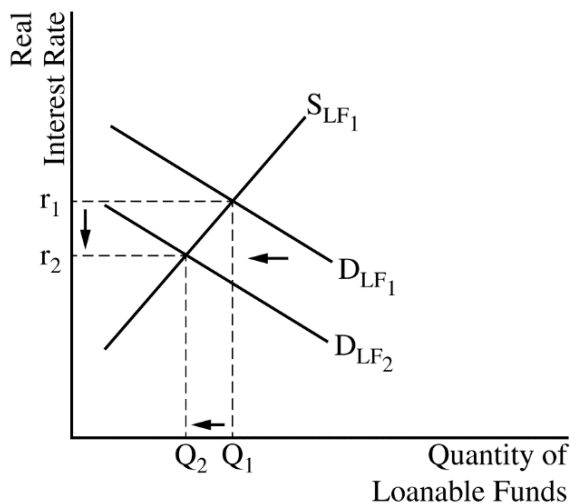
- One point is earned for showing a leftward shift in the SRAS curve and for showing PL_2 higher than PL_1 .
- One point is earned for explaining that the SRAS curve will shift to the left due to the increase in input prices, nominal wages, or inflationary expectations.

(c) 3 points

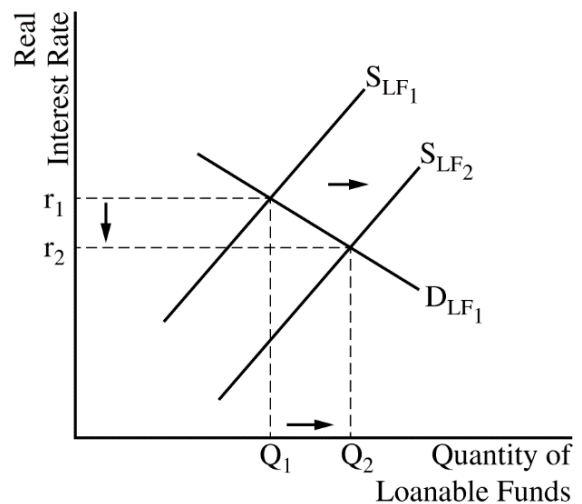
- One point is earned for stating a decrease in government spending, a decrease in transfer payments, or an increase in taxes.
- One point is earned for stating that the unemployment rate will increase and the natural rate of unemployment will not change.
- One point is earned for stating that the automatic adjustment will produce a higher price level than the fiscal policy.

2019 SCORING GUIDELINES**Question 1 (continued)****(d) 2 points**

- One point is earned for drawing a correctly labeled graph of the loanable funds market.



OR



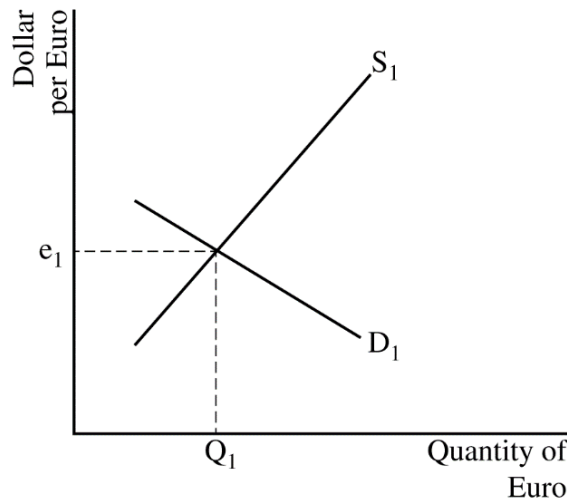
- One point is earned for showing a leftward shift of the demand for loanable funds curve (or a rightward shift in the supply of loanable funds curve) and a decrease in the real interest rate.

(e) 1 point

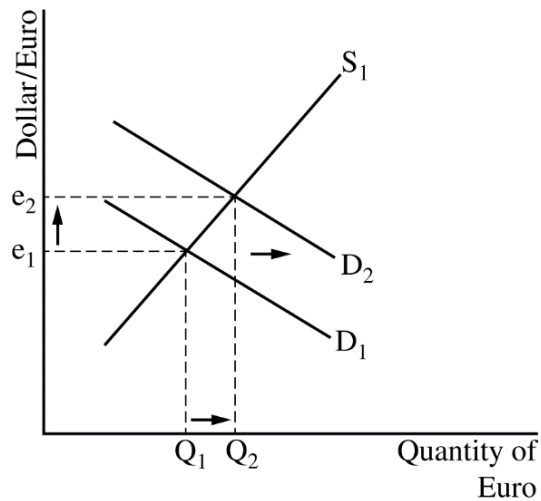
- One point is earned for stating that the LRAS curve will shift to the right and for explaining that the lower real interest rate will lead to increased capital formation due to increased investment spending.

2019 SCORING GUIDELINES**Question 2****5 points (1 + 2 + 2)****(a) 1 point**

- One point is earned for stating that the U.S. current account will be in deficit and for explaining that an increase in the U.S. real GDP increases the U.S.'s demand for European goods and services, which increases imports.

(b) 2 points

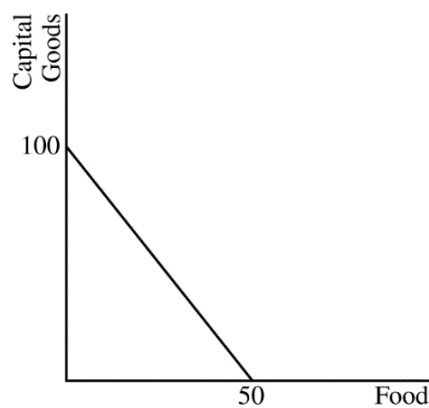
- One point is earned for drawing a correctly labeled graph of the foreign exchange market for the euro.



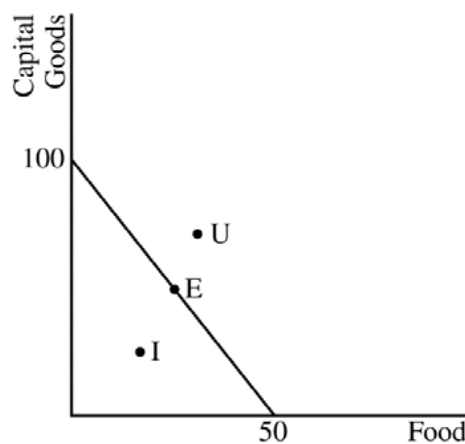
- One point is earned for shifting the demand curve for the euro to the right and showing an increase in the value of the euro relative to the U.S. dollar.

2019 SCORING GUIDELINES**Question 2 (continued)****(c) 2 points**

- One point is earned for stating that the demand for the dollar will decrease and for explaining that capital flows from the European Union to the U.S. will decrease.
- One point is earned for stating that the dollar will depreciate.

2019 SCORING GUIDELINES**Question 3****5 points (1 + 1 + 1 + 1 + 1)****(a) 1 point**

- One point is earned for drawing a correctly labeled production possibilities curve (PPC) for Sweden with food on the horizontal axis, capital goods on the vertical axis, and the relevant numerical values plotted.

**(b) 1 point**

- One point is earned for showing point I inside the PPC, point E on the PPC, and point U outside the PPC.

(c) 1 point

- One point is earned for stating that Sweden's economic growth rate will slow or be reduced.

2019 SCORING GUIDELINES**Question 3 (continued)****(d) 1 point**

- One point is earned for stating that Norway has a comparative advantage in the production of capital goods and for explaining that it has the lowest opportunity cost in producing capital goods (the opportunity cost of producing one unit of capital goods in Norway is $1/4$ a unit of food and in Sweden is $1/2$ a unit of food).

(e) 1 point

- One point is earned for stating a number between 20 and 40 units of capital.