

2022

AP<sup>®</sup>

 CollegeBoard

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# AP<sup>®</sup> Macroeconomics

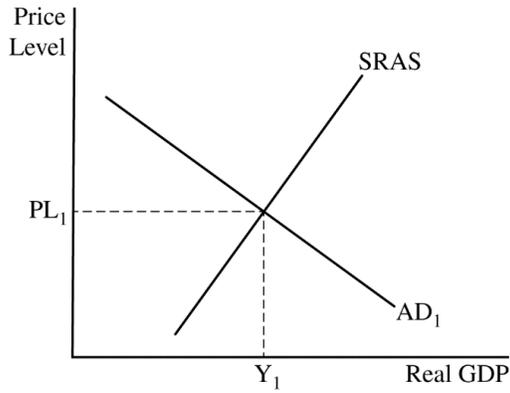
## Scoring Guidelines

### Set 2

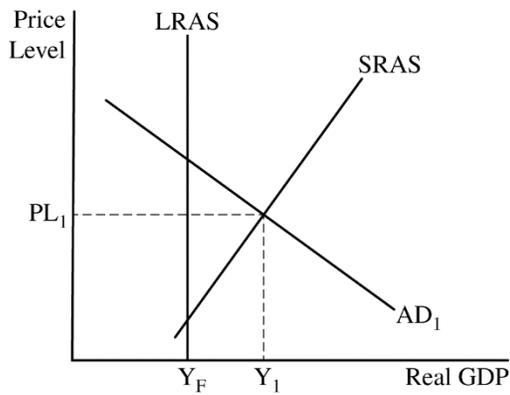
**Question 1: Long**

**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**

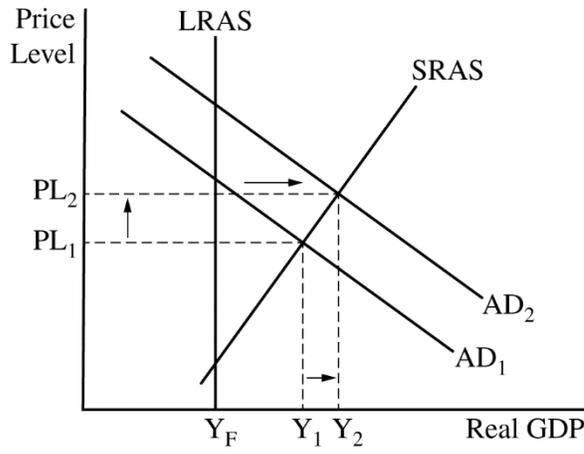


- For the second point, the graph must show a vertical long-run aggregate supply curve to the left of  $Y_1$  and label the full-employment output  $Y_F$ . **1 point**



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

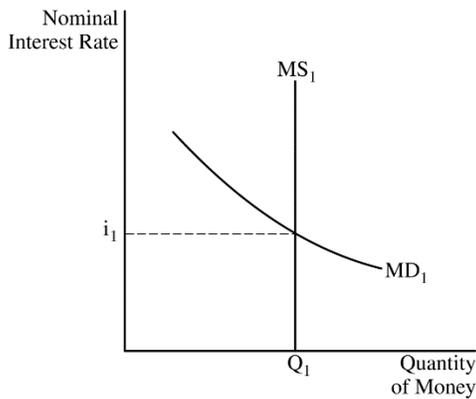
- (b)** On the graph from part (a), show the short-run effect of the increase in government spending as a rightward shift of the aggregate demand curve, resulting in an increase in equilibrium real output and an increase in the equilibrium price level, labeled  $Y_2$  and  $PL_2$  respectively. **1 point**



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

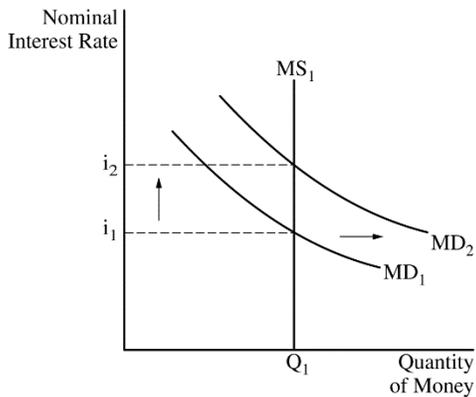
**(d)** Draw a correctly labeled graph of the money market.

**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 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**

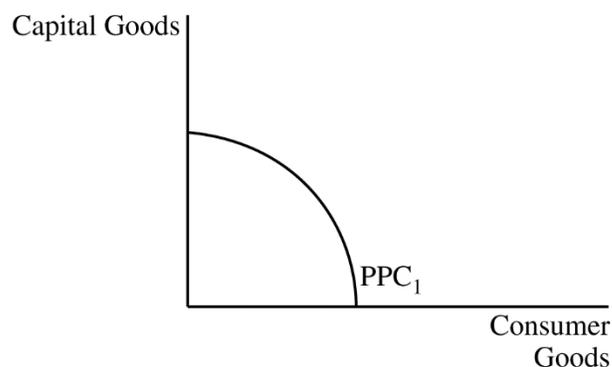
$$\text{Real GDP} = \frac{88,000}{200} \times 100 = 44,000$$

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

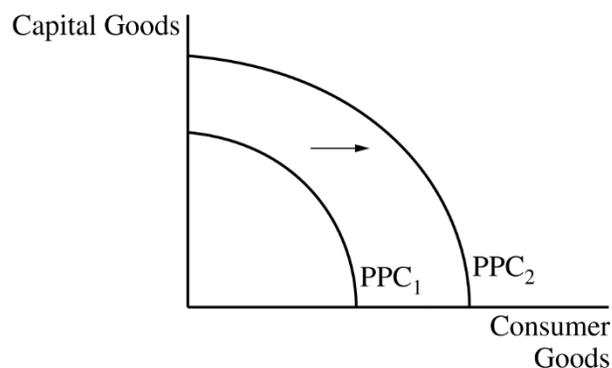
- (b) State that the standard of living for the average person in Country A has stayed the same from 2020 to 2021 and explain that real GDP per capita in Country A did not change from 2020 to 2021. **1 point**

- (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**



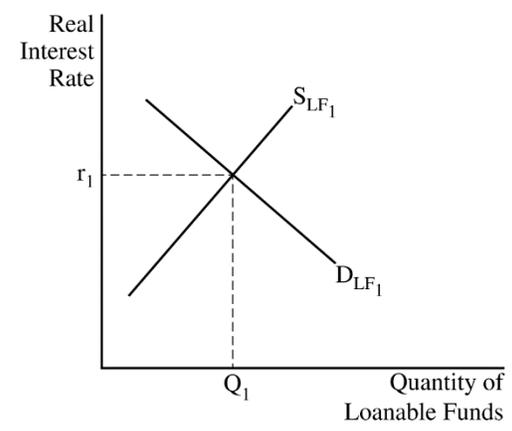
- For the second point, the graph must show an outward shift of the production possibilities curve. **1 point**

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

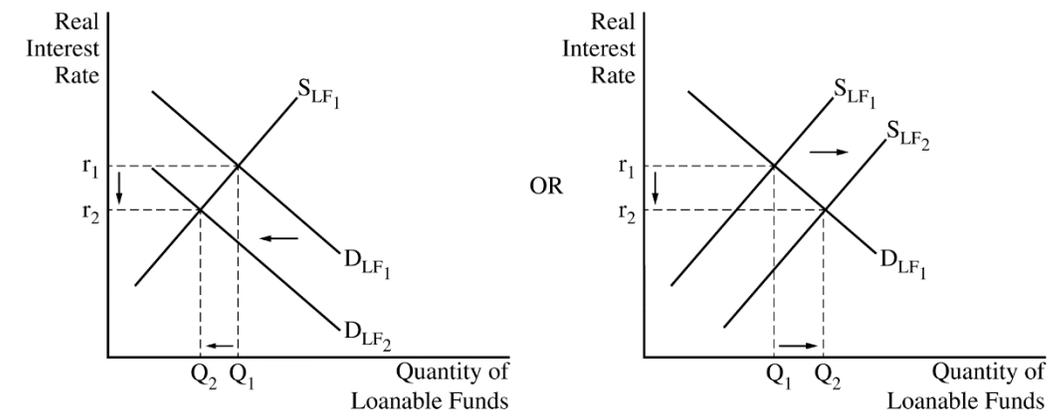
**Question 3: Short** **5 points**

**(a)** State increase taxes, decrease government spending, or decrease transfer payments. **1 point**

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



For the second point, the graph must show a leftward shift of the demand for loanable funds curve (or a rightward shift of the supply of loanable funds curve), resulting in a decrease in the real interest rate. **1 point**



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

**(c) (i)** State that aggregate demand will increase and explain that interest-sensitive spending (consumption, investment, or net exports) will increase. **1 point**

**(ii)** State that potential real output will increase and explain that the decrease in the real interest rate means the cost of borrowing has decreased, which increases investment spending on plant and equipment and increases capital formation. **1 point**

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

**Total for question 3 5 points**