

2023



AP[®] Macroeconomics

Sample Student Responses and Scoring Commentary

Set 1

Inside:

Free-Response Question 3

- Scoring Guidelines**
- Student Samples**
- Scoring Commentary**

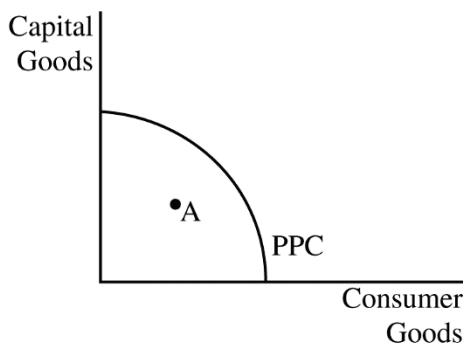
Question 3: Short**5 points**

- (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

● **Important:** Completely fill in the circle that corresponds to the question you are answering on this page.

Question 1 **Question 2** **Question 3**



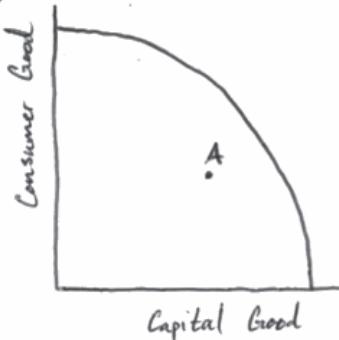
Begin your response to each question at the top of a new page.

a) $1,000,000 \cdot 0.09 = 90,000$

There are 90,000 people that are unemployed

b) The economy of Zeta is currently experiencing a recessionary gap. The country's unemployment rate is higher than its natural rate of unemployment, which meant the economy is currently in a recession.

c)



- d) i) The labor force participation rate will decrease. Discouraged workers who stopped looking for a job is not counted as part of the work force, therefore the labor force participation rate will decrease as people stopped looking for jobs.
 ii) The unemployment rate will decrease.



- **Important:** Completely fill in the circle that corresponds to the question you are answering on this page.

Question 1 Question 2 Question 3



Begin your response to each question at the top of a new page.

a) labor force \times unemployment rate = $1,000,000 \times .09 =$
9,000 people unemployed.

b) There is a recessionary gap because the rate of unemployment is higher than the natural rate of unemployment.

c)



- a) There will be no change because the individuals were unemployed and not a part of the labor force participation rate.
ii. The unemployment rate will decrease.

Use a pen with black or dark blue ink only. Do NOT write your name. Do NOT write outside the box.

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- **Important:** Completely fill in the circle that corresponds to the question you are answering on this page.

Question 1 **Question 2** **Question 3**



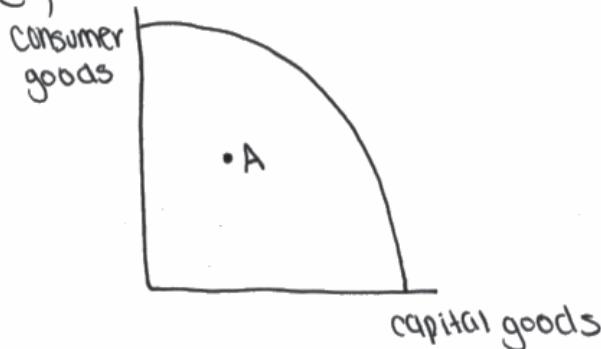
Begin your response to each question at the top of a new page.

3.

(a) unemployed = $(1,000,000 \times 0.09 = 90,000)$ 90,000

(b) The economy of Zeta is currently experiencing an inflationary gap because the unemployment rate should be between 4-6% and it's currently at 9%.

(c)



(d)

- (i) the labor force participation rate will decrease because the unemployed still count as actively looking for work in the labor force but now they won't be if they quit looking for work.
- (ii) the unemployment rate will increase.



Question 3

Note: Student samples are quoted verbatim and may contain spelling and grammatical errors.

Overview

This question tested students' understanding of unemployment, output gaps, and the production possibilities curve. Students were told to assume that in the country of Zeta, the civilian noninstitutional population aged 16 and over is 1,000,000; the labor force participation rate is 70%, the unemployment rate is 9%, and the natural rate of unemployment is 5%. In part (a) students were asked to calculate the number of people in Zeta that are unemployed and to show their work. In part (b) students were asked if the economy of Zeta is currently experiencing a recessionary gap, an inflationary gap, or no output gap and to explain. In part (c) students were told that the economy of Zeta produces consumer goods and capital goods. They were asked to draw a correctly labeled graph of the production possibilities curve for Zeta and to indicate a point, labeled A, that represents the current state of Zeta's economy. Finally, in part (d) students were asked if some individuals who were previously counted as unemployed in Zeta stop looking for work what will happen to (i) the labor force participation rate and explain, and (ii) the unemployment rate.

Sample: 3A

Score: 4

The response did not earn the point in part (a) for incorrectly calculating the number of people that are unemployed. The response earned 1 point in part (b) for stating that the country of Zeta is currently experiencing a recessionary gap and explaining that the current unemployment rate is higher than the natural rate of unemployment. The response earned 1 point in part (c) for drawing a correctly labeled graph of the production possibilities curve for Zeta that shows point A below the PPC. The response earned 1 point in part (d)(i) for stating that the labor force participation rate will decrease and explaining that the workers who stopped looking for employment are no longer considered to be unemployed. The response earned 1 point in part (d)(ii) for stating that the unemployment rate will decrease.

Sample: 3B

Score: 3

The response did not earn the point in part (a) for incorrectly calculating the number of people that are unemployed. The response earned 1 point in part (b) for stating that the country of Zeta is currently experiencing a recessionary gap and explaining that the current unemployment rate is higher than the natural rate of unemployment. The response earned 1 point in part (c) for drawing a correctly labeled graph of the production possibilities curve for Zeta that shows point A below the PPC. The response did not earn the point in part (d)(i) because it does not state that the labor force participation rate will decrease. The response earned 1 point in part (d)(ii) for stating that the unemployment rate will decrease.

Question 3 (continued)

Sample: 3C

Score: 2

The response did not earn the point in part (a) for incorrectly calculating the number of people that are unemployed. The response did not earn the point in part (b) because it does not state that the country of Zeta is currently experiencing a recessionary gap. The response earned 1 point in part (c) for drawing a correctly labeled graph of the production possibilities curve for Zeta that shows point A below the PPC. The response earned 1 point in part (d)(i) for stating that the labor force participation rate will decrease and explaining that the workers who stopped looking for employment are no longer considered to be unemployed. The response did not earn the point in part (d)(ii) because it does not state that the unemployment rate will decrease.