

3. 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%.
- (a) Calculate the number of people in Zeta that are unemployed. Show your work.
- (b) Is the economy of Zeta currently experiencing a recessionary gap, an inflationary gap, or no output gap? Explain.
- (c) Consumer goods and capital goods are produced in the country of Zeta. Draw a correctly labeled graph of the production possibilities curve for Zeta. Indicate a point, labeled A, that represents the current state of Zeta's economy.
- (d) If some individuals who are counted as unemployed in Zeta stop looking for work, what will happen to each of the following?
- (i) The labor force participation rate. Explain.
 - (ii) The unemployment rate

Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.

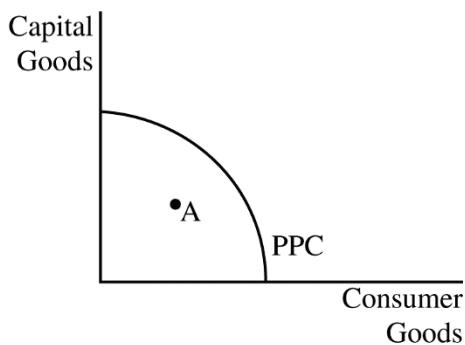
Question 3: Short**5 points**

- (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