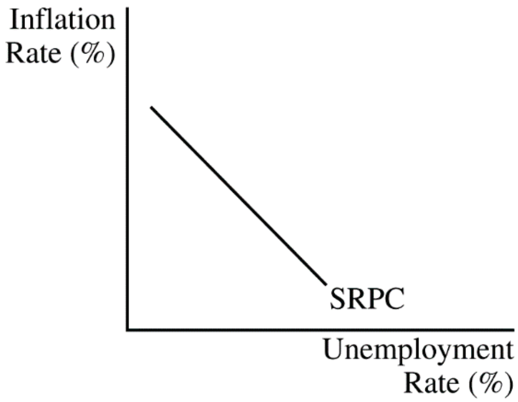
2023

AP® Macroeconomics

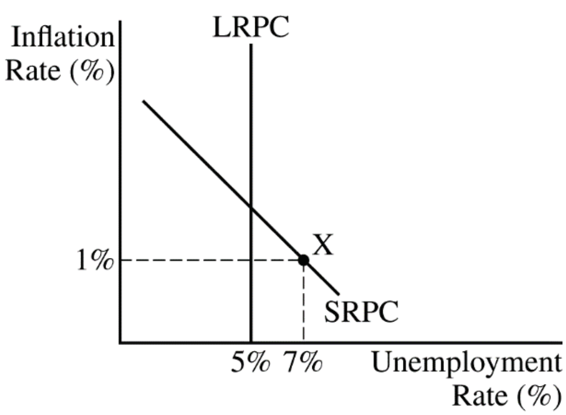
Scoring Guidelines
Set 2

Question 1: Long — 10 points

(a)	Draw a correctly labeled graph of the short-run Phillips curve (SRPC).	**1 point**



For the second point, the graph must include a vertical long-run Phillips curve (LRPC) at the natural rate of unemployment (5%) and must include point X on the SRPC to the right of the LRPC at the actual unemployment rate (7%) and the actual inflation rate (1%).	**1 point**



Total for part (a) — 2 points

(b)	State that the expected inflation rate is greater than 1% and explain that the actual unemployment rate (7%) is greater than the natural rate of unemployment (5%); or explain that the economy is in a recession.	**1 point**
(c) (i)	Calculate the maximum change in aggregate demand as \$180 billion and show your work.	**1 point**

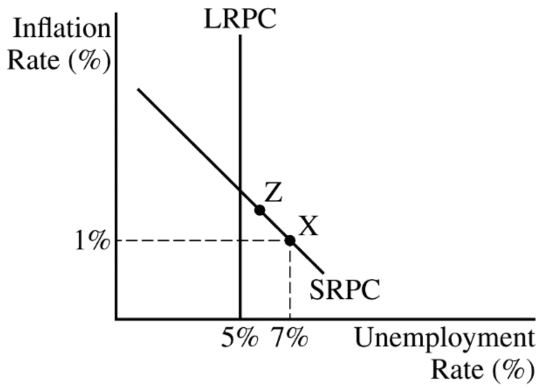
$$\text{Maximum } \Delta \text{ in AD} = -\$20 \text{ billion} \times \frac{-0.9}{1-0.9} = -\$20 \text{ billion} \times -9 = \$180 \text{ billion}$$

(ii)	Calculate the maximum change in aggregate demand as \$200 billion and show your work.	**1 point**

$$\text{Maximum } \Delta \text{ in AD} = \$20 \text{ billion} \times \frac{1}{1-0.9} = \$20 \text{ billion} \times 10 = \$200 \text{ billion}$$

Total for part (c) — 2 points

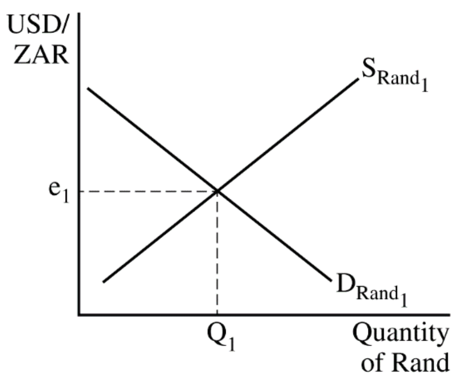
(d)	On the graph from part (a), show point Z on the SRPC to the left of point X.	**1 point**



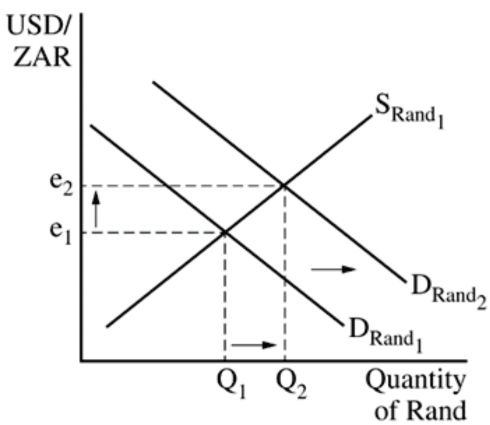
(e)	State that aggregate demand would increase and explain that the increase in disposable income would increase consumption spending.	**1 point**
(f) (i)	State that the short-run aggregate supply curve will shift to the right and explain that input prices (e.g., nominal wages) and/or inflationary expectations will decrease.	**1 point**
(ii)	State that the short-run Phillips curve will shift to the left.	**1 point**
(iii)	State that the actual unemployment rate will decrease.	**1 point**
	Total for part (f)	**3 points**
	Total for question 1	**10 points**

Question 2: Short — 5 points

(a)	State that United States net exports will decrease and explain that the demand for goods from South Africa will increase, which increases United States imports.	**1 point**
(b) (i)	State that the capital and financial account balance in the United States will move into surplus.	**1 point**
(ii)	State that actual unemployment in South Africa will decrease in the short run and explain that South African exports will increase, which will increase aggregate demand and real GDP in South Africa.	**1 point**
	Total for part (b)	**2 points**
(c)	Draw a correctly labeled graph of the foreign exchange market for the rand.	**1 point**



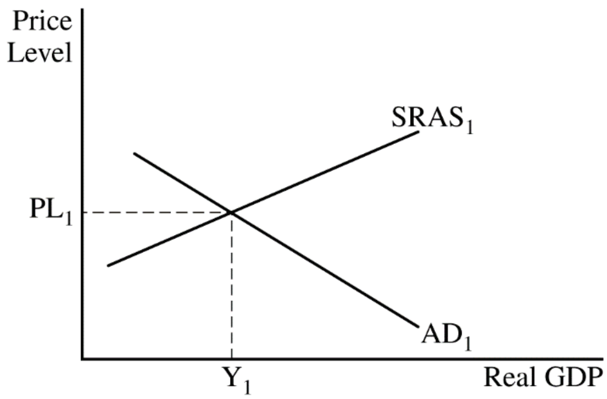
For the second point, the graph must show a rightward shift in the demand curve for the rand, resulting in an appreciation of the rand. **1 point**



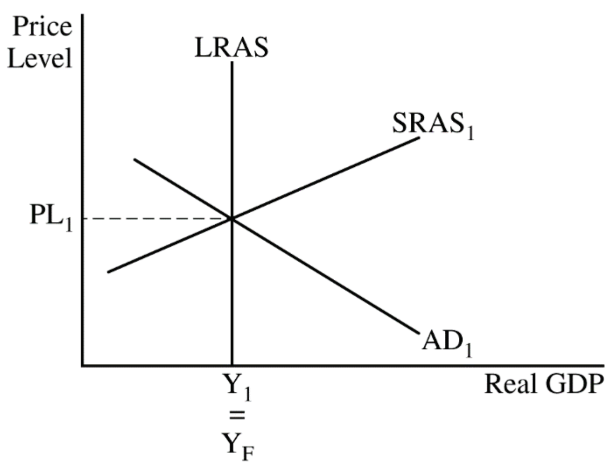
Total for part (c)	**2 points**
Total for question 2	**5 points**

Question 3: Short — 5 points

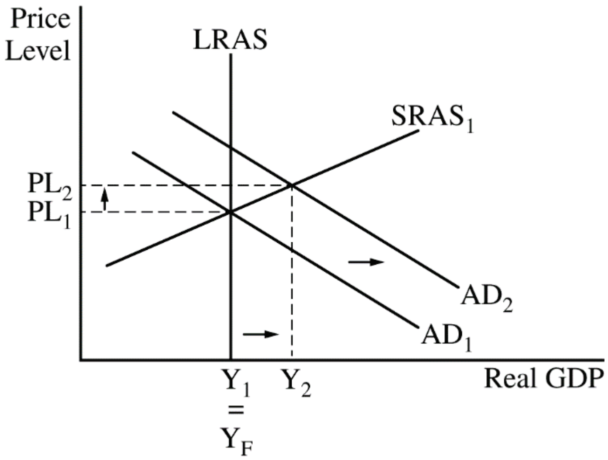
(a) Draw a correctly labeled aggregate demand–aggregate supply graph that shows PL_1 and Y_1 at the intersection of aggregate demand and short-run aggregate supply. **1 point**



For the second point, the graph must show a vertical long-run aggregate supply curve at equilibrium real output $Y_1 = Y_F$. **1 point**



Total for part (a) 2 points

(b)	On the graph from part (a), show the short-run effect of the increase in consumer confidence as a rightward shift of the aggregate demand curve, resulting in an increase in real output, labeled Y_2, and an increase in the price level, labeled PL_2. 	**1 point**
(c)	State that the central bank would increase its administered interest rates or increase interest on reserves.	**1 point**
(d)	State that real output will decrease and explain that the increase in interest rates will decrease interest-sensitive spending (consumption, investment, or net exports), which decreases aggregate demand.	**1 point**

Total for question 3 **5 points**