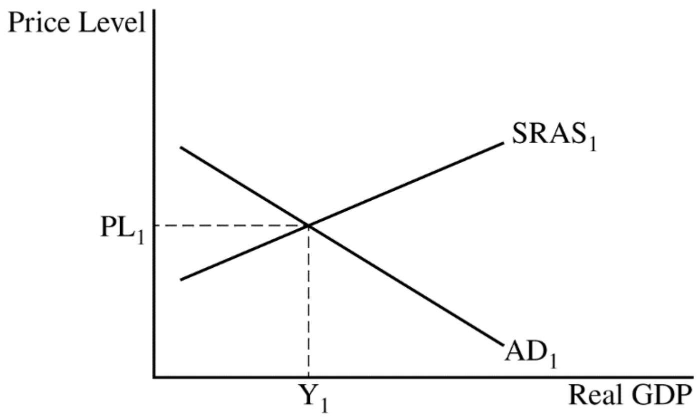
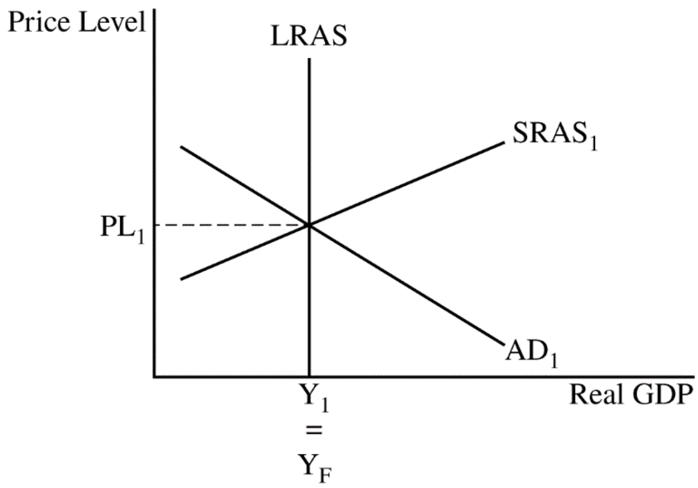
Question 1: Long — 10 points

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



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

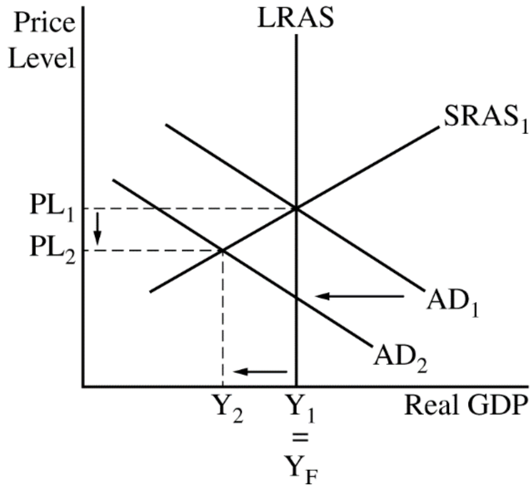


Total for part (a) 2 points

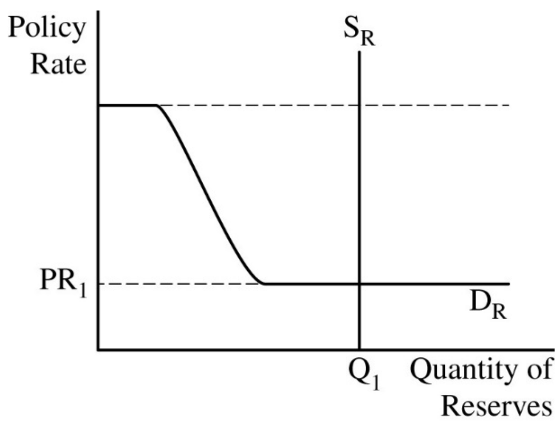
(b) (i) Calculate the marginal propensity to consume as 0.4 and show your work. **1 point**

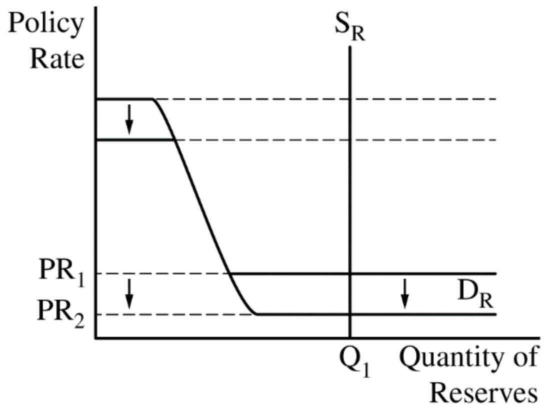
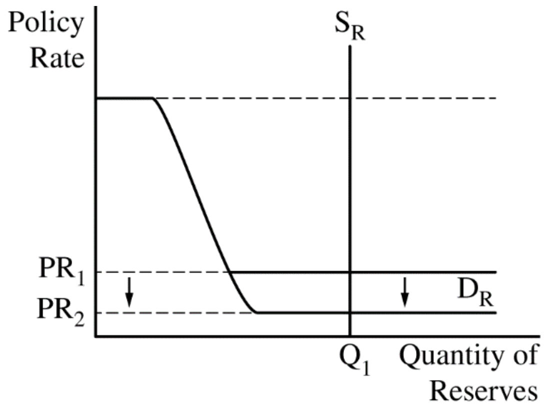
$$\text{MPC} = \frac{\Delta \text{ Consumer Spending}}{\Delta \text{ Disposable Income}} = \frac{\$100{,}000 - \$110{,}000}{\$110{,}000 - \$135{,}000} = \frac{-\$10{,}000}{-\$25{,}000} = 0.4$$

(ii)	On the graph from part (a), show the short-run effect of the decrease in consumer spending as a leftward shift of the AD curve, resulting in a decrease in the price level to PL_2 and a decrease in real output to Y_2.	**1 point**



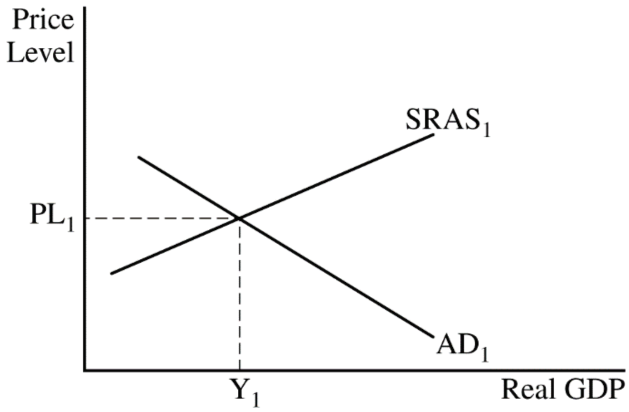
	Total for part (b)	**2 points**
(c)	Explain that input prices (e.g., nominal wages) and/or inflationary expectations will decrease, causing SRAS to increase until it reaches full employment.	**1 point**
(d)	State that the central bank would decrease its administered interest rates or decrease interest on reserves.	**1 point**
(e)	Draw a correctly labeled graph of the reserve market with the supply curve intersecting the demand curve in the range of ample reserves.	**1 point**



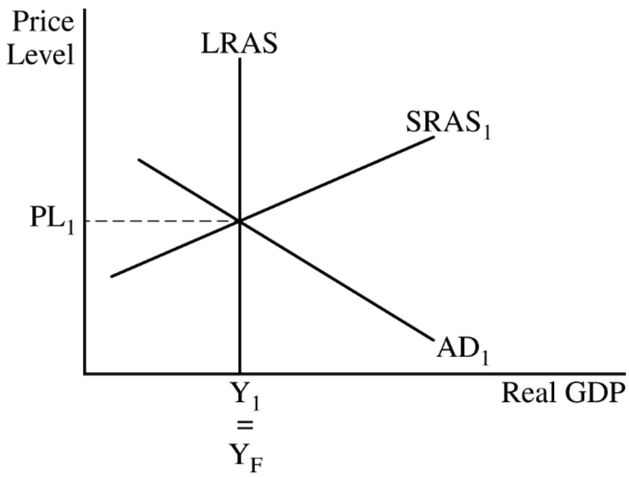
	For the second point, the graph must show a decrease in the administered interest rates, resulting in a decrease in the policy rate.  OR For the second point, the graph must show a decrease in the lower bound of the demand curve for reserves, resulting in a decrease in the policy rate.  	**1 point**
	Total for part (e)	**2 points**
(f)	For the first point, state that the quantity of national savings would decrease and the unemployment rate would decrease.	**1 point**
	For the second point, explain that the decrease in nominal interest rates will increase interest-sensitive spending (consumption, investment, or net exports), causing an increase in aggregate demand and real output.	**1 point**
	Total for part (f)	**2 points**
	Total for question 1	**10 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**

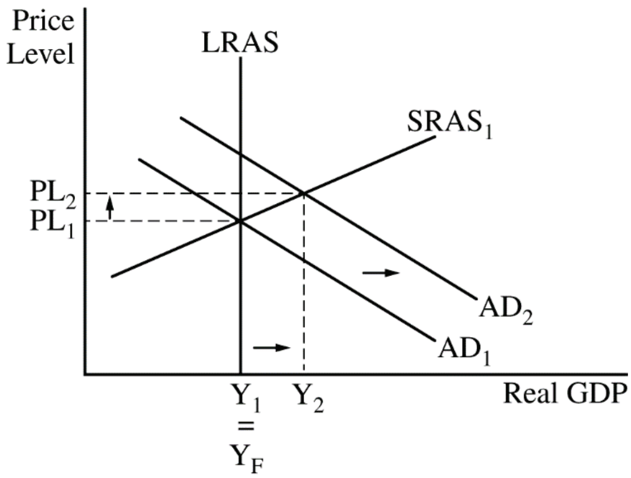


For the second point, the graph must show a vertical long-run aggregate supply curve at equilibrium real output $Y_1 = Y_F$. **1 point**



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**

Question 3: Short — 5 points

(a)	**(i)**	State that the government budget will move into deficit in the short run and explain that tax revenues (T) will decrease and transfer payments (TR) will increase.	**1 point**
	(ii)	State that the government debt will increase.	**1 point**
		Total for part (a)	**2 points**
(b)		Identify an increase in taxes or a decrease in government spending.	**1 point**
(c)		State that the actual unemployment rate will increase in the short run and explain that aggregate demand will decrease, which will decrease real output.	**1 point**
(d)		State that the government's efforts to maintain a balanced budget made Geeland's recession more severe in the short run and explain that in order to maintain a balanced budget, the government had to implement contractionary fiscal policy during a recession. (It is also acceptable to explain that the government's efforts to maintain a balanced budget will decrease real output or aggregate demand and that unemployment will increase.)	**1 point**
		Total for question 3	**5 points**