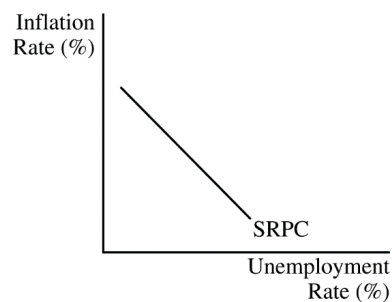
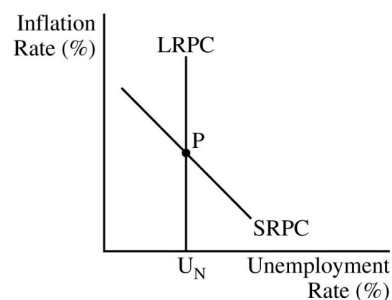
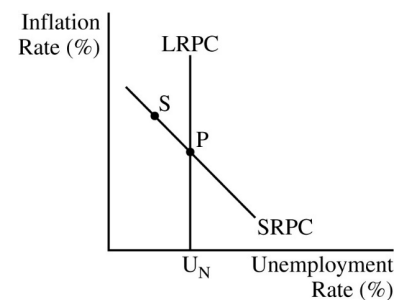


Question 1: Long**10 points****A** Draw a correctly labeled graph of the short-run Phillips curve (SRPC). **1 point**

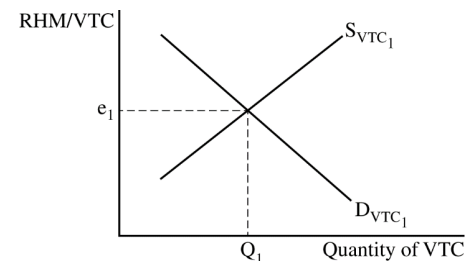
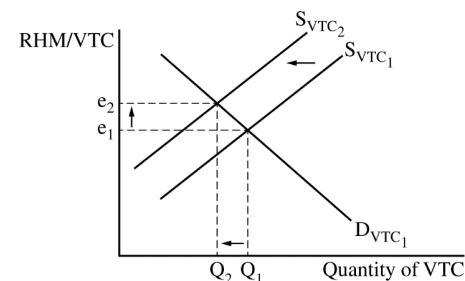
Point 1

Point 2 The graph must include a correctly labeled long-run Phillips curve (LRPC) and show a point labeled P at the intersection of the short-run and long-run Phillips curves. **1 point**Point 3 **B (i)** State that real output will increase and explain that the new residential construction projects increase investment spending, which increases aggregate demand. **1 point****(ii)** On the graph from part A, show a point labeled S on the SRPC to the left of point P. **1 point**

Point 4

**C** Draw a correctly labeled graph of the foreign exchange market for the Vortanian crown. **1 point**

Point 5

Point 6 The graph must show a leftward shift in the supply curve of the Vortanian crown, resulting in an appreciation of the Vortanian crown. **1 point****D** State that Vortania's net exports will decrease. **1 point**

Point 7

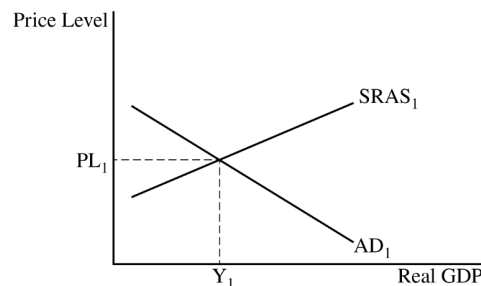
Point 8 **E (i)** State that the capital and financial account (CFA) balance in Vortania will move into surplus and explain that the current account (CA) moved into deficit and the balance of payments must balance (CA+CFA=0). **1 point****(ii)** State that employment in Vortania will decrease. **1 point**

Point 9

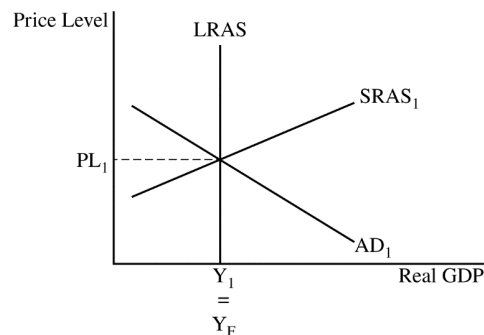
Point 10 **F** State that the central bank of Vortania would sell Vortanian crowns in the foreign exchange market and explain that the increased supply of the Vortanian crown will cause it to depreciate. **1 point**

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**



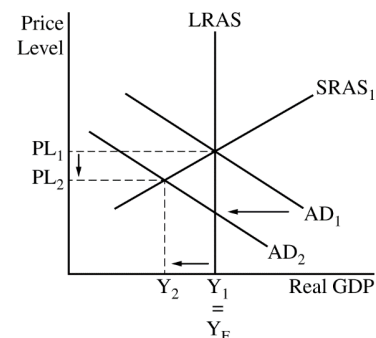
For the second point, the graph must show a vertical long-run aggregate supply (LRAS) curve at equilibrium real output $Y_1 = Y_F$. **1 point**

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

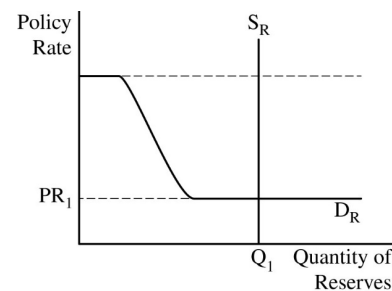
- (b) (i) Calculate the marginal propensity to consume as 0.4 and show your work. **1 point**

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

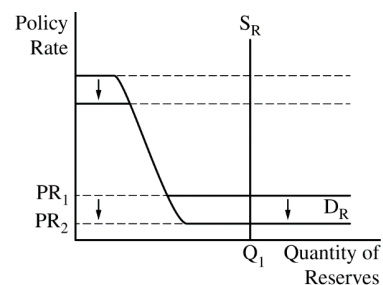
- (ii) On the graph from part (a), show the short-run effect of the decrease in consumer spending as a leftward shift of the AD curve, resulting in a decrease in the price level to PL_2 and a decrease in real output to Y_2 . **1 point**

**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**

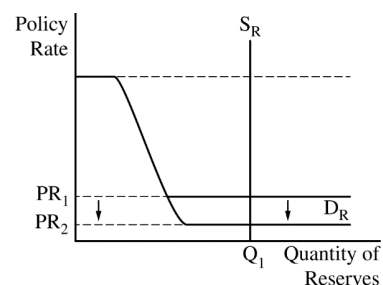


For the second point, the graph must show a decrease in the administered interest rates, resulting in a decrease in the policy rate. **1 point**



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.



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

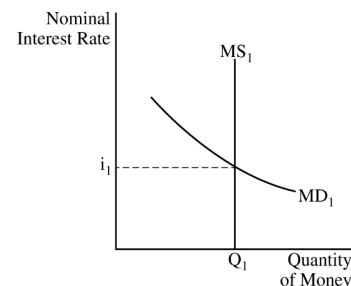
Question 2: Short

5 points

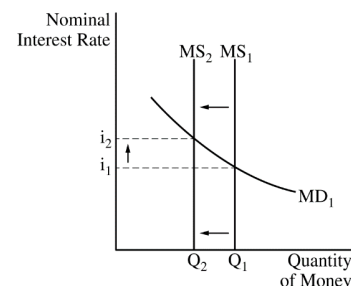
- (a) Calculate the maximum change in the money supply as a decrease of \$500,000 and show your work. **1 point**

$$\text{Change in MS} = \text{Bond Sale} \times \text{Money Multiplier} = -\$100,000 \times \frac{1}{0.2} = -\$500,000$$

- (b) Draw a correctly labeled graph of the money market. **1 point**



For the second point, the graph must show a leftward shift in the money supply curve, resulting in a higher nominal interest rate. **1 point**



Total for part (b) 2 points

- (c) State that nominal gross domestic product will decrease and explain that according to the quantity theory of money ($MV=PY$), a decrease in the money supply will decrease nominal gross domestic product for a given velocity. **1 point**

- (d) State that the price level decreases. **1 point**

Total for question 2 5 points