AP® Macroeconomics
2003 Sample Student Responses

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a) The full employment output is at $Q_F$. Because of the recession, the economy is operating at $Q_1$, Pl-1.

b) The decrease in spending will shift Aggregate demand from $AD_1$ to $AD_2$. This lowers the level of output to $Q_2$. However, since the economy is operating in the horizontal range, there will be no change in price level.

c) The unemployment rate will increase in the short run. There will be a decrease in AD, thereby decreasing the quantity of output. Firms will then need fewer workers to produce goods and people will lose jobs.

d) A Fed purchase of bonds will increase the money supply (from $SM_1$ to $SM_2$) which lowers the interest rate from $i_1$ to $i_2$. The lower interest rate will result in a greater...
Write in the box the number of the question you are answering on this page as it is designated in the examination.

quantity of funds invested. This shifts aggregate demand to the right, increasing output and price level (in the intermediate range).

e) An increase in the interest rate will discourage foreign investors from investing in the US. As a result, the demand for the dollar decreases. The dollar depreciates. Exports will increase because it is now relatively less expensive for foreign countries to buy US goods. Imports will decrease because it is now relatively more expensive for the US to buy foreign goods.
Write in the box the number of the question you are answering on this page as it is designated in the examination.

1. (One)

Based on the graph, full-employment output (i) is shown by the vertical line of LRAS (Long-run Aggregate Aggregate Supply), current output level (ii) is shown by quantity of RGDPI (Qi) and current price level is shown by Pi.

b) If the economy will move from point 1 to point 2,

\[ P_1 \to P_2 \]

\[ Q_2 \leq Q_1 \]

A major decrease in government spending result in a decrease of AD (Aggregate Demand). Aggregate demand will shift leftward from AD1 to AD2. (i) As a result of this decrease, the level of output will also decrease. SRAS will move downward from point \( Q_1 \) to point \( Q_2 \). (ii) A decrease in AD will also decrease the price level. Price level will move downward from point \( P_1 \) to \( P_2 \).

c) The decrease in government spending will increase the unemployment rate. This is because less employees or workers is needed to produce lower level RGDPI. Since there is a decrease in level of output, more workers or employees will be laid off from the working industries and less people will be hired, this factor will increase the unemployment rate.
When the Fed purchases bonds, the money supply will be increased. This is because more money will be available in the market. When supply of money is increasing without the change of demand, the interest rate will decrease. As seen in the graph, interest rate will move downward from point 1 (I₁) to point 2 (I₂).

An increase in money supply results a decrease in interest rate. A decrease in interest rate will entice investment. Investment will increase, which also results in an increase in output. Output will increase. When output is increasing without a change in demands, the price level will go down. Shown by the graph.
A decrease in interest rate means the value of dollars depreciate. It will be cheaper for foreign currency to buy dollars. This means that U.S. goods will cost cheaper than foreign goods. As a result, U.S. exports will increase; it is because more foreigner will be able and willing to buy U.S. goods (because it is cheaper) and U.S. imports will decrease; it is because foreign goods will become more expensive for U.S. market to buy, people will buy less foreign goods.