AP Macroeconomics
2001 Scoring Guidelines

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Question 1

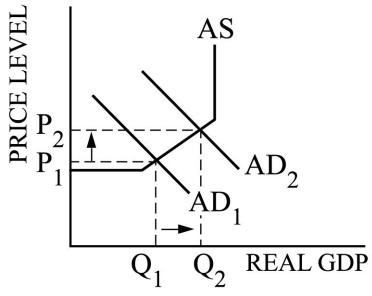
Correct Answer:

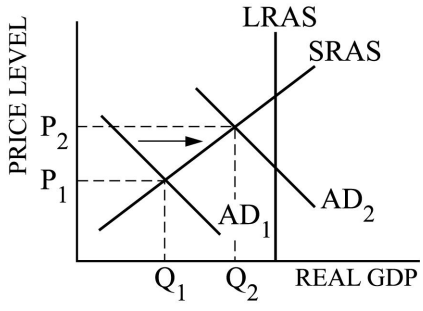
The increase in government spending will shift out (increase) the aggregate demand curve. Since the economy is below full employment, there will be an increase in real output and an increase in the price level (assuming an upward-sloping aggregate supply curve). The increase in government spending will generate an increase in demand for loanable funds, and the increase in income will increase the demand for money. Thus, interest rates will increase, and interest-sensitive expenditures, such as investment, will fall.

A reduction in corporate profits-taxes will lead to more investment and an outward shift in the aggregate demand curve. Greater investment leads to a larger capital stock and an outward shift in the aggregate supply curve. As a result, real output increases. The impact on the price level is indeterminate since the shifts have counteracting effects. With a greater capital stock, the production possibilities frontier will shift out.

2+2+5+1=10 points

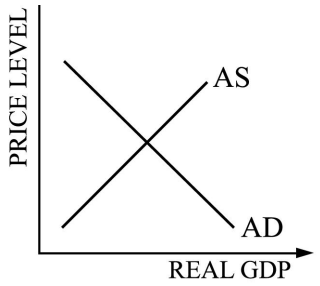
a) Real output and the price level increase (graph needed). From the student's initial level of real output or GDP, the student must show an opportunity for GDP to increase (i.e., not have a vertical AS curve).

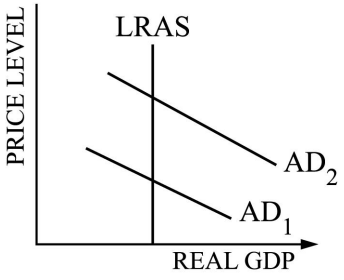




1 point for properly labeled graph with an increase in AD

NO credit for:





1 point for P↑ *and* Q↑ (or results consistent with graph) All or nothing for the P and Q point. Price does not have to increase if student draws both AD curves in the horizontal range of AS. No point if only the AS curve shifts.

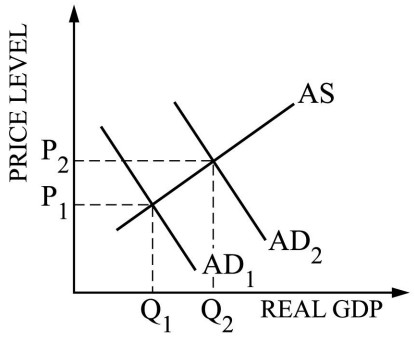
Question 1 (cont.)

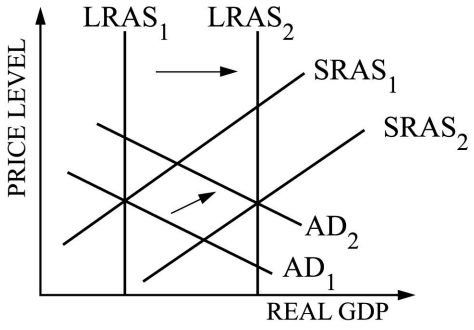
b) **1 point** for interest rates up as government borrows more money in the market for loanable funds or the demand for money increases with a higher GDP

(It is acceptable, of course, to give one point to the student who speaks to the possible ambiguity of the situation given that nominal rates increase and the price level increases.)

1 point for investment falls — an interest-sensitive expenditure
(a point for a correct link of interest change in b (i) to change in investment)

c) **1 point** for graph with AD increase *and* explanation that investment spending increases or shareholder wealth/income increase causes a spending increase





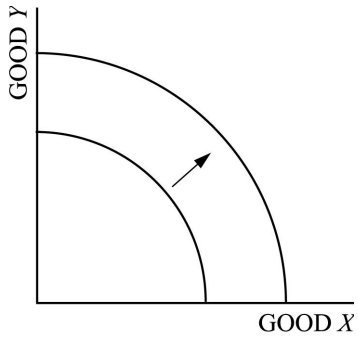
1 point for shifting out the AS curve

1 point for explaining AS increase, i.e., more capital or lower production costs

1 point for real output increases (may be linked to a single shift in either AD or AS)

1 point for the price level change is *indeterminate* — must use both AD and AS shifts to earn the point

d) **1 point** for PPF shifts away from origin on a graph—must have *two* PPF curves.



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Question 2

Correct answer:

Foreigners will increase their purchases of the higher-yielding European Union assets and reduce their purchases of U.S. financial assets. As a result, there will be a reduced demand for the U.S. dollar, and the dollar will depreciate. (Alternatively, there is an increased supply of dollars to purchase EUROs, appreciating the EURO and depreciating the dollar.) With the depreciation of the dollar, U.S. exports will increase as they will now be less expensive in the European markets. U.S. imports will decrease as they become more expensive.

1+1+1+1= 4 points

(a) **1 point** With relatively higher real interest rates in Europe (relatively lower real interest rates in the U.S.) there will be **fewer purchases** (less demand) *for U.S. financial assets.*

(b) **1 point** The **dollar depreciates** because of the **reduced demand for U.S**. **dollars** (or increased supply of dollars to buy EUROs).

- Must have dollar depreciation linked to the decreased demand for $ (or increased supply of dollars to buy EUROs). **(NO Assertions Accepted)**

For parts (c) and (d):

Even if (b) is incorrect, students may earn points in (c) and (d) for consistency.

(c) **1 point** U.S. exports **increase**, because **they are now less expensive** to foreigners.

- Must give an explanation beyond the "change in the value of the dollar"
- Explanation **must reflect the relative price effect** caused by the change in the value of the dollar. Acceptable arguments include:
  - American goods have become **relatively inexpensive**.
  - American goods **cost less** than European goods.
  - American goods **are relatively more affordable** than European goods.
  - American goods **are cheaper** than European goods.
- explanations *not accepted*:
  - **Weak currency**
  - **Depreciated dollar**

Question 2 (cont.)

(d) **1 point** U.S. **imports** decrease because **foreign goods are now more expensive.**

- Must give an explanation beyond the "change in the value of the dollar".
- Explanation **must reflect the relative price effect** caused by the change in the value of the dollar. Acceptable arguments include:
  - European goods have become **relatively more expensive**.
  - European goods now **cost more** than American goods.
  - European goods **are now relatively less affordable** than American goods.
  - American goods **are cheaper** than European goods.
- explanations *not accepted*:
  - **Weak currency**
  - **Depreciated dollar**

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Question 3

Correct answer:

Since both cash and checking account balances (demand deposits) are part of the money supply (M1), there will be no change in the money supply from her switching dollars between cash and her checking account. With an additional $1,000 of cash reserves, First Federal may increase its loans by $800. With a 20 percent reserve requirement, $200 of the $1,000 must be kept as required reserves. The money supply could experience a net increase of $4,000. With a 20 percent reserve requirement, the money supply multiplier is 5. A new cash deposit of $1,000 could generate a $5,000 increase in the money supply; taking into account the reduction of $1,000 in cash, the money supply increases by $4,000. Alternatively, the $800 of new reserves available for loans can generate a $4,000 increase in the money supply. (In this later case the $1,000 of lost cash is replaced exactly by the $1,000 of required reserves. So, the maximum change in the money supply is the $4,000.) The full increase in the money supply will not occur when funds are not fully redeposited (i.e., a leakage to cash or currency) or if banks hold excess reserves.

2+2+2+1 =7 points

(a) **1 point** **No immediate change** in the money supply

1 point Currency falls but demand deposits increase ($M = \bar{C} + D$)

(b) **1 point** **$800**

1 point **1000 – 200 of required reserves = 800**
(where 200 = 1000 x 0.20)

(c) **1 point** **$4,000**

1 point $4000 found by: **$1000 x 5 and then subtract the $1000** that was already part of the money supply: $5000-1000 = $4000
or $4000 found by multiplying **$800 x 5**
(where **5 = Money multiplier = 1/ rr = 1/ 0.2**)

Alternate explanation worth 1 point: $5000 found by **$1000 x 5**

(d) **1 point** **Possible answers:**

- the public **holding cash and not redepositing** funds in banks
- **banks are unwilling to loan out all excess reserves** (voluntary excess reserves)
- the public is **unwilling to demand loans** (insufficient loan demand)

Not acceptable:

- **A change in reserve requirements** (because this would change the maximum amount that can be lent out, but not the ability for the banking system to lend all that money)