Quiz 3: Use both graphs and a short written explanation to answer each of the questions below. Be clear and precise.

Use Krugman & Obstfeld's AA-DD diagram and ERM diagram to answer the following. Assume the economy is operating below full employment, but is otherwise in equilibrium.

1. Assume that the central bank is committed to a fixed exchange rate. Show and explain how a tax cut would affect real GDP, the balance of payments, interest rates, and the current account balance.

2. Now assume that the central bank allows the currency to float. Show and explain how a tax cut would affect real GDP, the spot forex rate, interest rates, and the current account balance. Assume markets treat the tax cut as temporary.

3. Now suppose that Congress decides to make the tax cut permanent, and forward exchange markets adjust to this expectation. How would forward rates adjust. Relative to your initial starting point, what would happen to real GDP, the spot forex rate, interest rates, and the current account balance?

4. In which case(s) does the tax cut provide the greatest fiscal stimulus? The least?

5. Now assume instead that the economy was operating at, not below, full employment. In which case(s) would the tax cut be inflationary? Use an AS-AD model to illustrate your answer.

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**Diagram 1:**
- Tax cut shifts DD out.
- As spending increases, Y ↑, so LT ↑. This puts upward pressure on R, and downward pressure on E, creating a BOP surplus. Central bank must buy Forex reserves with new money to bring R and E back into alignment.
- Y ↑, BOP surplus (temporarily), R unchanged after intervention, and CAB deficit due to Y ↑.
2. 

$Y^\uparrow$, so $L^\uparrow$, so $R^\downarrow$.
So $E^\uparrow$, which makes $CAB^\downarrow$.

3. 

If $E^\downarrow$, then $FR$ shifts down, $EV$ on spot, and $CAB^\downarrow$ more.

As a result, $AA$ shifts down, and the effect on $Y$ is canceled.

If $Y$ doesn't rise, then neither does $L$, so $R$ is also unaffected.

Relative to initial equilibrium, $E^\downarrow$ and $CAB^\downarrow$, but $R$ and $Y$ don't change.

4. Tax cuts are most effective in 1, least in 3.

5. \[ \text{If economy is at full employment, tax cuts in 1 with fixed rates are most inflationary, in 2 less so. In 3 there is no shift in AD, since CAB deficits crowd out the effect, so there is no inflation.} \]