1. If you are at all surprised by this first question, then you haven’t been paying attention. Imagine an economy described by the following equations:

\[ C = 1200 + 0.75Y_d \]
\[ I = 400 \]
\[ G = 200 \]
\[ NX = 300 \]

A. Calculate equilibrium GDP if \( T = 0 \). (3)

\[
Y = 1200 + 0.75Y + 400 + 200 + 300 \\
Y = 2100 + 0.75Y \\
0.25Y = 2100 \\
Y = 2100/0.25 = 8400
\]

B. Calculate equilibrium GDP if \( T = 200 \). (3)

\[
Y = 1200 + 0.75(Y - 200) + 400 + 200 + 300 \\
Y = 2100 + 0.75Y - 150 \\
0.25Y = 1950 \\
Y = 1950/0.25 = 7800
\]

C. How does the value of the expenditure multiplier change from part A to part B? (3)

It doesn’t. It’s constant at 4.

D. How will equilibrium GDP change if government spending is increased by $100? (3)

It will increase by $400.
2. Here is a slightly altered version of question 2 from the assignment that was due the week of October 4th. In two diagrams, one showing the AE model and the other showing the AS/AD model, show the probable effects of an increase in aggregate expenditures when unemployment is low. Be sure to label your axes and curves correctly. (3)

When unemployment is low, the AS curve is likely to be steep.

3. The chapter from the O’Rourke book on Cuba, “Bad Socialism” describes students working on the sugar harvest. The students who were harvesting sugar in Cuba wrecked the harvest, in part, because they didn’t care. Why didn’t they care? (3)

They had no incentive to care. They would receive no additional benefit if the sugar harvest had been larger.
4. List and explain three problems with activist fiscal policy. (3)

Gosh, I can do better than that. Here are six:

1. Information lags
   Even the most current information about the economy is about a month old. It takes that long to collect and process data, so we don’t know where the economy is, only where it was a little while ago. Trying to control the economy on this information is rather like trying to drive your car by looking through the rear view window.

2. Policymaking lags
   Once Congress and the president get the information, it takes a really long time for them to organize and enact a response to it. This is like driving on a bellyful of muscle relaxants, it takes a long time for you to respond to information you get.

3. Effectiveness lags
   Once policies are enacted, it takes a while for them to have an effect on the economy. This is like having a car with built-in delays on the accelerator and the brakes.

4. Lack of knowledge about full employment
   We don’t really know where the road is.

5. Lack of knowledge about multipliers
   We don’t know how hard to hit the gas or the brakes.

6. Politicians respond to their own political influences
   One person in the car wants to go to Pizza Hut, the other wants to go to Bennigans.
5. Here’s a question from the first midterm relating to aggregate supply. In an AS/AD model with both a short run aggregate supply (SRAS) and a long run aggregate supply (LRAS) curve, show and explain how attempting to push unemployment too low simply leads to inflation in the long run. (4)

6. In an AS/AD model with both a short run aggregate supply (SRAS) and a long run aggregate supply (LRAS) curve, show and explain how attempting to push unemployment too low simply leads to inflation in the long run. (3)

If unemployment is pushed too low, perhaps due to an increase in government spending or a tax cut, the low unemployment rate will put upward pressure on wages. As wages rise, aggregate supply will contract, shifting the SRAS curve up and leading to higher prices and a level of real GDP that moves back to the LRAS/full employment level.
6. One topic we discussed was automatic stabilizers.

A. Give one example of an automatic stabilizer. (3)

Gosh, I can do better than that. Here are three:
1. Proportional (flat rate) or progressive (increasing rate) income taxes instead of fixed (constant amount) taxes.
2. International trade in which imports depend on GDP.
3. Unemployment insurance

B. What effect will an automatic stabilizer have on the marginal propensity to spend (MPSp) of an economy? (3)

They reduce the MPSp.

C. What effect will an automatic stabilizer have on the sensitivity of an economy to shocks? (3)

They make it less sensitive to shocks.
7. Label the arrows showing cash flows in an economy. (6)
8. Two interrelated ideas are the fractional reserve banking system and the money multiplier.

A. In a sentence or two, explain what fractional reserve banking is. (3)

Fractional reserve banking is a system in which a bank holds a portion of each deposit in reserve and lends out the remaining part of deposits.

B. If banks hold required reserves of 10% and excess reserves of 3%, what will be the impact on the money supply of a $130 increase in the monetary base? (3)

The actual reserve ratio will be $10\% + 3\% = 13\%$.

The impact on the money supply will be $130/0.13 = $1000$ or a $1000$ increase.
9. Show the effect of the following events on the AS/AD model. Be sure you label your axes and curves correctly.

A. A decrease in the money supply. (2)

B. Stagflation. (2)