9) The sum of accumulated annual federal budget deficits minus surpluses equals
A) the structural deficit. B) the trade deficit.
C) the federal government debt. D) the federal budget.

**Answer:** the government debt is the total amount that the government has borrowed so far. It equals the sum of past budget deficits minus the sum of the past budget surpluses.

15) Suppose real GDP is $10 trillion, and the government wants to increase real GDP to $11 trillion. The marginal propensity to consume is 0.8 and there are no imports or taxes. Assuming that prices do not change, which change in government spending below will generate the extra $1 trillion in real GDP?
A) $200 billion B) $125 billion C) $100 billion D) $400 billion

**Answer:** by definition, the government purchase multiplier is $\Delta Y / \Delta G$ and it is equal to $1 / (1 - \text{MPC}).$ In this problem, $\Delta Y = 11 - 10 = 1$ and MPC = 0.8. So one can get $\Delta G$ from the following: $\Delta Y / \Delta G = 1 / (1 - \text{MPC}) \iff 1 / \Delta G = 1 / (1 - 0.8) \iff \Delta G = 0.2$ trillion.

17) Suppose real GDP equals $10$ trillion and potential GDP equals $10.6$ trillion. Prices are constant and there are no imports. If the MPC equals 0.75, by how much should the government decrease lump-sum taxes to move GDP to potential GDP?
A) $300$ billion B) $200$ billion C) $600$ billion D) $900$ billion

**Answer:** to get the answer, just follow the same path as in 15). However, since the tax is the instrument used by the government here, the tax multiplier formula is needed. Because the government wants to move from 10 to 10.6, $\Delta Y = 0.6$. From the question, MPC = 0.75. So one can get $\Delta T$ using the following formula: $\Delta Y / \Delta T = -\text{MPC}/(1 - \text{MPC})$. Note that the sign of the obtained $\Delta T$ indicates the direction of the change.

20) Suppose that real GDP equals $10$ trillion while potential GDP is $11$ trillion. There are no imports or taxes and prices are constant. If the government wants to increase aggregate demand to fill the gap, it should increase government spending by ________ if the MPC equals ________.
A) $200$ billion; 0.80 B) $1$ trillion; 0.80
C) $250$ billion; 0.75 D) Both answers A and C are correct.

**Answer:** B) is not right because in this question the government wants to increase real GDP by 1 by increasing G. Now, because of the multiplier effect of G, one knows that to get an increase in real GDP of 1, the increase in G would have to be smaller, but B) states that the increase should also be 1. As for A) and C), using the same method as in 15).
24) Contractionary fiscal policy will
   A) generate an increase in real GDP.  
   B) involve cutting taxes.  
   C) involve increasing government spending.  
   D) lower the price level.

Answer: contractionary fiscal policy is used when the government wants to contract or slow down the economy. The government can either decrease G or increase T or both to bring down the aggregate demand. On the other hand, expansionary fiscal policy is used when the government wants to expand or stimulate the economy. The opposite can be done in terms of taxes and government spending.

---

25) In the above figure, suppose the economy is at point A. To move the economy so that it is producing at its potential GDP, the government might increase its purchases
   A) so that the aggregate demand curve and the aggregate supply curve both shift so that they both go through point C.
   B) so that the aggregate supply curve shifts so that it goes through point D.
   C) by $2 trillion.
   D) so that the aggregate demand curve shifts so that it goes through point B.

26) In the above figure, suppose the economy is at point A. By the proper use of fiscal policy, the government can
   A) shift the LAS curve through point A.  
   B) get the economy to point B.  
   C) get the economy to point C.  
   D) get the economy to point D.

Answer: for these 2 questions, note that fiscal policy (T and/or G) can only affect the aggregate demand if there is no supply side effect (supply curves do not shift because of the effect of the taxes on labor supply).
31) Which of the following are a limitation of fiscal policy?
   I. There is a lag between recognizing that fiscal policy might be needed and when it actually takes effect.
   II. It is difficult to know where the economy is in relation to potential GDP.
   III. Monetary policy might counter fiscal policy.

   A) I only       B) I and II       C) I, II and III       D) I and III

**Answer:** according to the book, there are 3 types of limitations of fiscal policy. They are: recognition lag, law-making lag, and impact lag. I and II fall into the recognition lag group. While III is possible, it is not limitation of fiscal policy by its nature. Therefore, III is not right.

32) Looking at the supply-side effects on aggregate supply shows that a tax increase
   A) decreases real GDP.
   B) weakens the incentive to work.
   C) will increase the amount of capital used because people work less.
   D) Both answers A and B are correct.

33) An increase in taxes shifts the labor supply curve _______ and the _______.
   A) The question errs because tax rates only affect aggregate demand.
   B) rightward; before-tax wage rate rises
   C) leftward; after-tax wage rate rises
   D) leftward; after-tax wage rate falls

**Answer:** for these two questions, see figure 15.6 on page 368 in the book. In brief, the explanation goes as follows: start with the labor market, income tax reduces the incentive to work because the take-home wage (after deduction of the tax) falls. Because of that, labor supply goes down (the labor supply curve shits to the left) making the number of people employed go down. With less people in production, the output (real GDP) produced decreases.