Ch. 10 FAQ's

16) The slope of the aggregate expenditure curve is
   A) greater than 0 and less than 1.             B) 1.
   C) 0.                                       D) greater than 1.

   Answer: if one plots total planned expenditure against the level of real GDP, having total
   planned expenditure on the y axis and the level of real GDP on the x axis, one has the
   aggregate expenditure curve (from this, question 14 can be answered). Now, think of real
   GDP as income and planned expenditure as consumption. When income goes up by
   $1000, would the consumption be increased by $1000 as well? This implies that slope of
   the planned expenditure curve is less than the slope of the 45-degree line (see figure
   13.6a P. 314). So the answer is A.

17) As a nation's GDP increases, that nation's
   A) imports increase.                         B) autonomous consumption increases.
   C) autonomous consumption decreases.        D) exports increase.

   Answer: income can be spent on either domestic goods or imports. So income goes up,
   import goes up (P. 311). Now, B and C can be crossed out because of the word
   “autonomous.” Anything with “autonomous” doesn’t change with income. D is wrong
   because income of people in the country has nothing to do with export (income of people
   in foreign countries, on the other hand, does).

29) The presence of income taxes and imports cause the slope of the aggregate expenditure curve to be
   A) flatter than it would be without income taxes and exports.
   B) steeper than it would be without income taxes and exports.
   C) the same as it would be without income taxes and exports.
   D) probably different than it would be without income taxes and exports, but income taxes make it steeper
      while imports make it flatter.

   Answer: let’s start with income tax. Because it is income tax, the tax is zero when
   income is zero. However, when income is zero, autonomous expenditure is still present.
   So with or without income tax, the y-intercept doesn’t change. Now, with positive
   income, the income tax (%) reduces income. And when income goes down, expenditure
   goes down. Therefore, the AE curve pivots down around the y-intercept. Same thing
   goes for import. No income, no import. So the y-intercept doesn’t change. However,
   because AE = C+I+G+X-M, when import goes up, AE goes down at each and every level
   of income. So, again, the AE curve is flatter than it would have been without income
   taxes and exports.
<table>
<thead>
<tr>
<th>Consumption expenditure:</th>
<th>$C = 8 + 0.7Y$</th>
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</thead>
<tbody>
<tr>
<td>Investment:</td>
<td>$I = 5$</td>
</tr>
<tr>
<td>Government purchases:</td>
<td>$G = 7$</td>
</tr>
<tr>
<td>Exports:</td>
<td>$X = 10$</td>
</tr>
<tr>
<td>Imports:</td>
<td>$M = 0.2Y$</td>
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32) The equations above describe the economy of La La Land. What is the equation for the aggregate expenditure curve?

A) $AE = 30 + 0.5Y$.  
B) $AE = 13 + 0.5Y$.  
C) $AE = 30 - 0.5Y$.  
D) $AE = 30 + 0.9Y$.  

33) The equations above describe the economy of La La Land. What is the equilibrium level of expenditure?

A) 30  
B) 29  
C) 60  
D) 90  

34) The equations above describe the economy of La La Land. What is the equilibrium level of consumption expenditure?

A) 60  
B) 40  
C) 50  
D) None of the above answers are correct.  

**Consumption function:**  
$C = 600 + 0.8Y$  

**Aggregate expenditure function:**  
$AE = 1000 + 0.5Y$  

35) Based on the two equations above, equilibrium expenditure is

A) 1,000.  
B) 3,000.  
C) 2,000.  
D) 1,600.  

**Answer:** for these questions, note that $AE = C + I + G + X - M$. And because one cannot spend more than what one has, equilibrium occurs where income equals expenditure. In this case, real GDP = planned AE. From question 32, $AE = a + bY$. Setting $AE = Y$ gives $Y = a + bY$. And this is one equation in one unknown $Y$. So one can solve for $Y$ (question 33). Plug this equilibrium $Y$ into consumption expenditure equation $C = 8 + 0.7Y$. Then one can get equilibrium level of consumption expenditure of 50 (question 34). As for question 35, because aggregate expenditure function is given, one can just impose equilibrium condition $AE = Y$ and follow the same path.