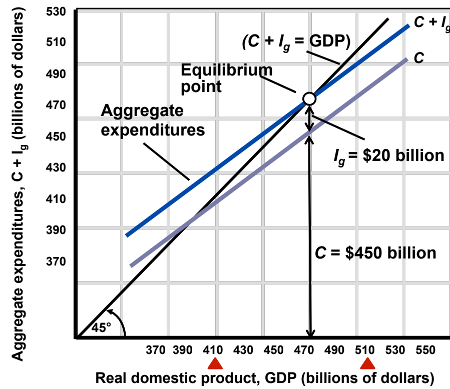
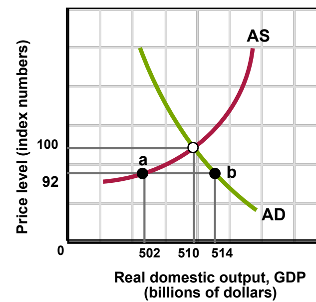
Equilibrium GDP



LO1 11-5

Equilibrium



Real Output Demanded (Billions)	Price Level (Index Number)	Real Output Supplied (Billions)
$506	108	$513
508	104	512
510	100	510
512	96	507
514	92	502

LO3 12-19

Questions 1-4 refer to the graph above.

1. In this figure, the slope of the aggregate expenditures schedule $C + I_g$:
   a. Increases as real GDP increases
   b. Falls as real GDP increases
   c. Is constant and equals the MPC
   d. Is constant and equals the MPS
2. At all points on the 45-degree line:
   a. Equilibrium GDP is possible
   b. Aggregate expenditures exceed real GDP
   c. Consumption exceeds investment
   d. Aggregate expenditures are less than real GDP
3. The $490 billion level of real GDP is not at equilibrium because:
   a. Investment exceeds consumption
   b. Consumption exceeds investment
   c. Planned $C + I_g$ exceeds real GDP
   d. Planned $C + I_g$ is less than real GDP
4. The $430 billion level of real GDP is not at equilibrium because:
   a. Investment exceeds consumption
   b. Consumption exceeds investment
   c. Planned $C + I_g$ exceeds real GDP
   d. Planned $C + I_g$ is less than real GDP

5. By how much will GDP change if firms increase their investment by $8 billion and the MPC is .80? If the MPC is .67? **$40 billion and $24 billion**
6. Suppose that a certain country has an MPC of .9 and a real GDP of $400 billion. If its investment spending decreases by $4 billion, what will be its new level of real GDP? **$360 billion**

Questions 7-10 refer to the graph above.

7. The AD curve slopes downward because:
   a. Per-unit production costs fall as real GDP increases.
   b. Income and substitution effects are at work.
   c. Changes in the determinants of AD alter the amounts of real GDP demanded at each price level.
   d. Decreases in the price level give rise to real-balances effects, interest-rate effects, foreign purchases effects that increase amounts of real GDP supplied.
8. The AS curve slopes upward because:
   a. Per-unit production costs rise as real GDP expands toward and beyond its full-employment level.
   b. Income and substitution effects are at work.
   c. Changes in the determinants of AS alter the amounts of real GDP supplied at each price level.
   d. Increases in the price level give rise to real-balances effects, interest-rate effects, foreign purchases effects that increase the amounts of real GDP supplied.
9. At price level 92:
   a. A GDP surplus of $12 billion occurs that drives the price level up to 100.
   b. A GDP shortage of $12 billion occurs that drives the price level up to 100.
   c. The aggregate amount of real GDP demanded is less than the aggregate amount of GDP supplied.
   d. The economy is operating beyond its capacity to produce.
10. Suppose real output demanded rises by $4 billion at each price level. The new equilibrium price level will be:
    a. 108
    b. 104
    c. 96
    d. 92

11. Why is the long-run aggregate supply curve vertical? **The long-run aggregate supply curve is vertical at the full employment level of real GDP because in the long run wages and other input prices rise and fall to match changes in the price level. So price level changes do not affect firms' profits and thus they create no incentive for firms to alter their output.**

12. Explain the shape of the short-run aggregate supply curve. Why is the short-run curve relatively flat to the left of the full-employment output and relatively steep to the right? **The upsloping aggregate supply curve indicates a direct (or positive) relationship between the price level and the amount of real output that firms will offer for sale. The AS curve is relatively flat below the full employment output because unemployed resources and unused capacity allow firms to respond to price level rises with large increases in real output. It is relatively steep beyond the full employment output because resource shortages and capacity limitations make it difficult to expand real output as the price level rises.**

13. What effects would each of the following have on aggregate demand or aggregate supply? In each case, use a diagram to show the expected effects on the equilibrium price level and the level of real output. Assume all other things remain constant.
    a. A widespread fear of depression on the part of consumers. **AD curve left, output down and price level down (assuming no ratchet effect)**
    b. A $2 increase in the excise tax on a pack of cigarettes. **AS curve left, output down and price level up**
    c. A reduction in interest rates at each price level. **AD curve right, output and price level up**
    d. A major increase in federal spending for health care. **AD curve right, output and price level up (any real improvements in health care resulting from the spending would eventually increase productivity and shift AS right)**
    e. The expectation of rapid inflation. **AD curve right, output and price level up**
    f. The complete disintegration of OPEC, causing oil prices to fall by one-half. **AS curve right, output up and price level down**
    g. A 10 percent reduction in personal income taxes. **AD curve right, output and price level up**
    h. A sizable increase in labor productivity (with no change in nominal wages). **AS curve right, output up and price level down**
    i. A 12 percent increase in nominal wages (with no increase in productivity). **AS curve left, output down and price level up**
    j. Depreciation in the international value of the dollar. **AD curve right (increased net exports); AS curve left (higher input prices)**

14. Assume that (a) the price level is flexible upward but not downward and (b) the economy is currently operating at its full-employment output. Other things equal, how will each of the following affect the equilibrium price level and equilibrium level of real output in the short run?
    a. An increase in aggregate demand. **Price level rises rapidly and little changes in real output**
    b. A decrease in aggregate supply, with no change in aggregate demand. **Price level rises and real output decreases**
    c. Equal increases in aggregate demand and aggregate supply. **Price level does not change, but real output increases**
    d. A decrease in aggregate demand. **Price level does not change, but real output declines**
    e. An increase in aggregate demand that exceeds an increase in aggregate supply. **Price level increases somewhat, as does real output**

15. Explain how an upsloping aggregate supply curve weakens the realized multiplier effect. **An upward sloping aggregate supply curve weakens the effect of the multiplier because any increase in aggregate demand will have both a price and an output effect. For example, if aggregate demand grows by $110 million, this could represent an increase of $100 million in real output and $10 million in higher prices if the inflation rate averages 10 percent. The multiplier is weakened because some of the increase in aggregate demand is absorbed by the higher prices and real output does not change by the full extent of the change in aggregate demand.**