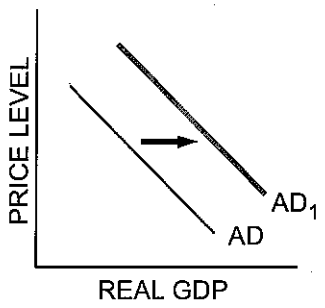
Manipulating the AD and AS Model: Exogenous Demand and Supply Shocks

Part A
Exogenous Demand Shocks

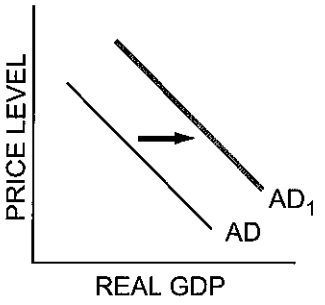
An *exogenous demand shock* is a change in an exogenous variable — a variable determined outside the model — that affects aggregate demand. Read the description of each exogenous demand shock, and then draw a new AD curve that will represent the change the demand shock caused. Label the new curve AD_1. Then briefly explain the reason for the change in the graph.

1. **Exogenous Demand Shock**: Economic booms in both Japan and Europe result in massive increases in orders for exported goods from the United States.



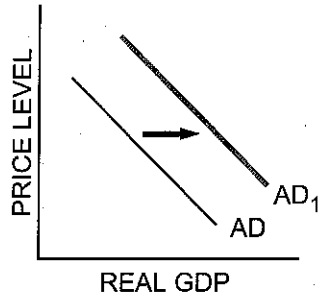
EXPLANATION: ***Increased orders for exports will cause more people to be hired and their increased income will result in increased consumer spending. AD will increase.***

2. **Exogenous Demand Shock:** As part of its countercyclical policy, the government both reduces taxes and increases transfer payments.



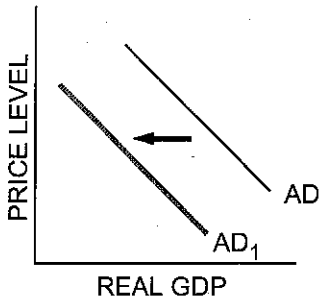
EXPLANATION: ***With increased discretionary incomes, taxpayers will increase comsumption. AD will increase.***

3. **Exogenous Demand Shock:** While the United States was in the midst of the Great Depression, a foreign power attacked. Congress declared war and more than 1,000,000 soldiers were drafted in the first year, while defense spending was increased several times over.



EXPLANATION: *Now consumers who had been unemployed or reluctant to spend their savings will respond by purchasing many goods they had postponed buying. The government is also increasing spending and its demand for goods and services. AD will increase.*

4. **Exogenous Demand Shock:** To balance the budget, the federal government cuts Social Security payments by 10 percent and federal aid to education by 20 percent.

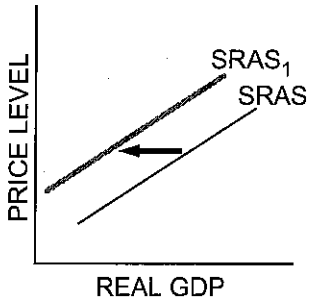


EXPLANATION: *Recipients of Social Security will have less income to spend. Local school districts will cut back by laying off teachers or will raise taxes. Either action will reduce discretionary income, and, thus consumption decreases. In turn, AD will decrease.*

Part B
Exogenous Supply Shocks

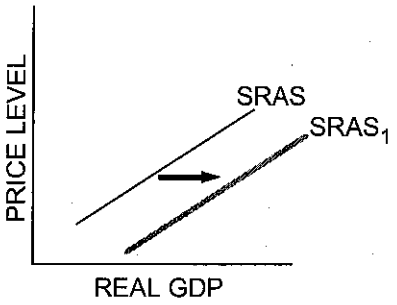
The cause of an *exogenous supply shock* is the change in an exogenous variable — a variable determined outside the model — that affects aggregate supply. Read the description of each exogenous shock to short-run aggregate supply, and then draw a new SRAS curve that will represent the change caused by the shock. Label the new curve $SRAS_1$. Then briefly explain the reason for the change in the graph.

5. **Exogenous Supply Shock:** New environmental standards raise the average cost of autos and trucks 5 percent.



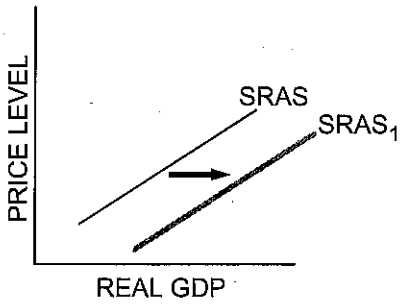
EXPLANATION: *The new standards result in increases in the costs of producing automobiles and trucks. This decreases AS.*

6. **Exogenous Supply Shock:** Fine weather results in the highest corn and wheat yields in 40 years.



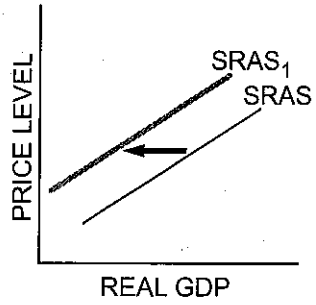
EXPLANATION: *The fine weather will increase the supply of corn and wheat, and if demand remains constant, the price will decrease. This in turn will decrease the price of inputs for many food-related industries. The SRAS curve will shift to the right.*

7. **Exogenous Supply Shock:** Because of decreased international tension, the government sells off thousands of army surplus Jeeps and trucks at prices that are far less than the market price for their commercial counterparts.



EXPLANATION: *The reduction in transportation costs will mean lower operating costs for industries using the Jeeps and trucks. The SRAS curve will shift to the right.*

8. **Exogenous Supply Shock:** An enemy power sets up a blockade of the sea lanes leading to a country, and most ships refuse to deliver cargo through the blockade.

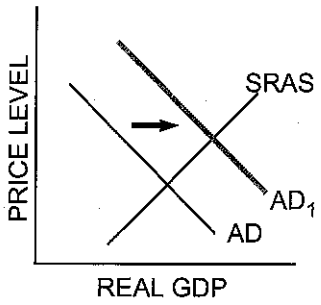


EXPLANATION: *A significant decrease in foreign goods, including inputs to American industries, will increase the cost of production. The SRAS curve will shift to the left.*

Part C
Manipulating the Aggregate Supply and Demand Model

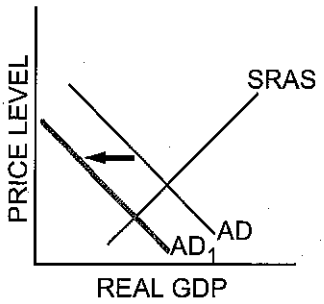
Read each of the scenarios below, and explain the impact the exogenous shocks will have on short-run aggregate supply and aggregate demand. Then draw a correctly labeled aggregate demand and aggregate supply graph to illustrate each short-run impact.

9. During a long, slow recovery from a recession, consumers postponed major purchases. Suddenly they begin to buy cars, refrigerators, televisions and furnaces to replace their failing models.



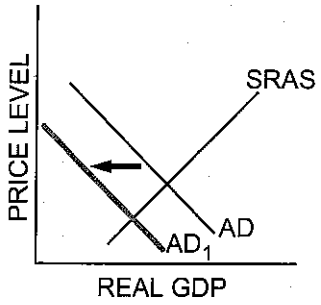
EXPLANATION: *AD will increase as a result of increased autonomous consumer spending.*

10. With no other dramatic changes, the government raises taxes and reduces transfer payments in the hope of balancing the federal budget.



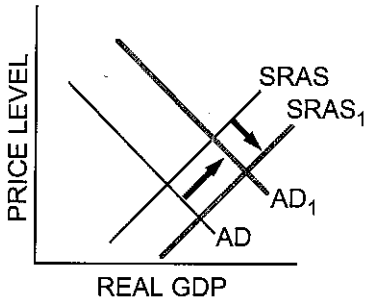
EXPLANATION: *Higher taxes and a reduction in transfer payments reduce disposable income, which reduces consumption spending.*

11. News of possible future layoffs frightens the public into reducing spending and increasing saving for the feared "rainy day."



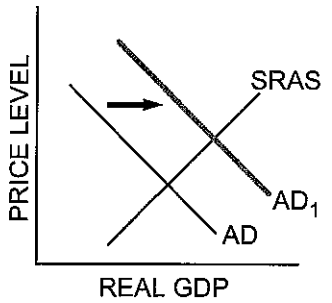
EXPLANATION: *A decrease in consumer confidence decreases consumption spending.*

12. Because of rising tensions in many developing countries, firms begin to build new factories in Econoland and to purchase sophisticated machinery from Econoland businesses that will enable them to produce in Econoland at prices that are competitive.



EXPLANATION: *The increase in investment spending will increase AD. The increase in machinery increases SRAS.*

13. Brazil solves its foreign debt and inflation problems. It then orders $10 billion worth of capital machinery from Econoland. Draw the AD and short-run AS graph for Econoland.



EXPLANATION: *Econoland's exports increase. AD increases.*