ÆFINGADÆMI
ÚR FYRSTU 7 KÖFLUNUM Í MANKIW

Kafli 3, dæmi 4, bls. 60.

a. Pat's opportunity cost of making a pizza is 1/2 gallon of root beer, since she could brew 1/2 gallon in the time (2 hours) it takes her to make a pizza. Pat has an absolute advantage in making pizza since she can make one in two hours, while it takes Kris four hours. Kris's opportunity cost of making a pizza is 2/3 gallons of root beer, since she could brew 2/3 of a gallon in the time (4 hours) it takes her to make a pizza. Since Pat's opportunity cost of making pizza is less than Kris's, Pat has a comparative advantage in making pizza.

b. Since Pat has a comparative advantage in making pizza, she will make pizza and exchange it for root beer that Kris makes.

c. The highest price of pizza in terms of root beer that will make both roommates better off is 2/3 gallons of root beer. If the price were higher than that, then Kris would prefer making her own pizza (at an opportunity cost of 2/3 gallons of root beer) rather than trading for pizza that Pat makes. The lowest price of pizza in terms of root beer that will make both roommates better off is 1/2 gallon of root beer. If the price were lower than that, then Pat would prefer making her own root beer (she can make 1/2 gallon of root beer instead of making a pizza) rather than trading for root beer that Kris makes.

Kafli 3, dæmi 9, bls. 60.

a. With no trade, one pair of white socks trades for one pair of red socks in Boston, since productivity is the same for the two types of socks. The price in Chicago is 2 pairs of red socks per pair of white socks.

b. Boston has an absolute advantage in the production of both types of socks, since a worker in Boston produces more (3 pairs of socks per hour) than a worker in Chicago (2 pairs of red socks per hour or 1 pair of white socks per hour).

Chicago has a comparative advantage in producing red socks, since the opportunity cost of producing a pair of red socks in Chicago is 1/2 pair of white socks, while the opportunity cost of producing a pair of red socks in Boston is 1 pair of white socks. Boston has a comparative advantage in producing white socks, since the opportunity cost of producing a pair of white socks in Boston is 1 pair of red socks, while the opportunity cost of producing a pair of white socks in Chicago is 2 pairs of red socks.

c. If they trade socks, Boston will produce white socks for export, since it has the comparative advantage in white socks, while Chicago produces red socks for export, which is Chicago's comparative advantage.

d. Trade can occur at any price between 1 and 2 pairs of red socks per pair of white socks. At a price lower than 1 pair of red socks per pair of white socks, Boston will choose to produce its own red socks (at a cost of 1 pair of red socks per pair of white socks) instead of buying them from Chicago. At a price higher than 2 pairs of red socks per pair of white socks, Chicago will choose to produce its own white socks (at a cost of 2 pairs of red socks per pair of white socks) instead of buying them from Boston.

Kafli 4, dæmi 3, bls. 90.

a. If people decide to have more children (a change in tastes), they'll want larger vehicles for hauling their kids around, so the demand for minivans will increase. Supply won't be affected. The result is a rise in both price and quantity, as Figure 4-12 shows.

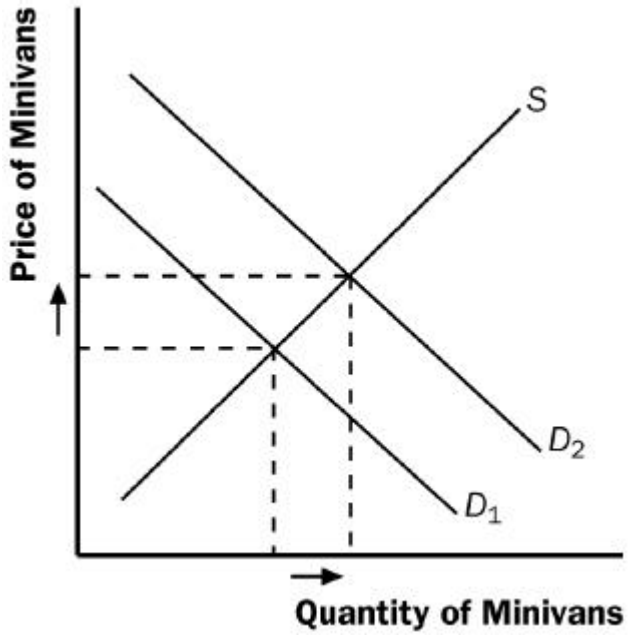


**Figure 4-12**

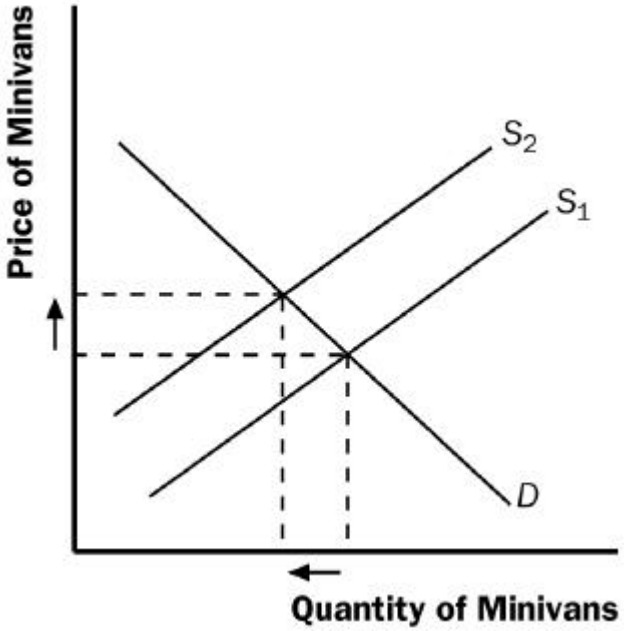


**Figure 4-13**

b. If a strike by steelworkers raises steel prices, the costs of producing a minivan rise (a rise in input prices), so the supply of minivans decreases. Demand won't be affected. The result is a rise in the price of minivans and a decline in the quantity, as Figure 4-13 shows.

c. The development of new automated machinery for the production of minivans is an improvement in technology. The reduction in firms' costs results in an increase in supply. Demand isn't affected. The result is a decline in the price of minivans and an increase in the quantity, as Figure 4-14 shows.

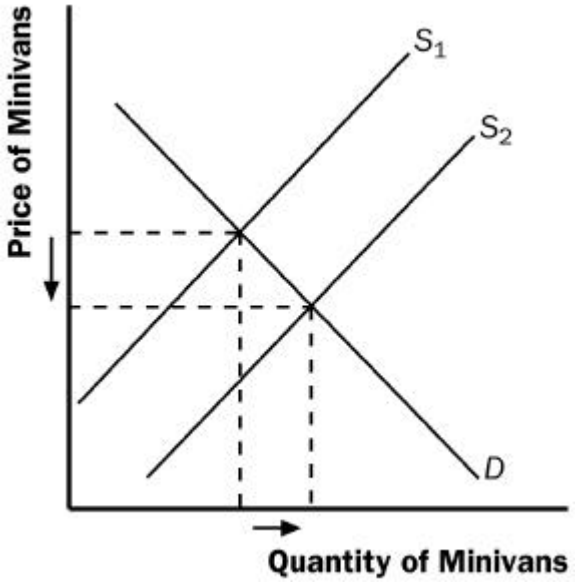


**Figure 4-14**

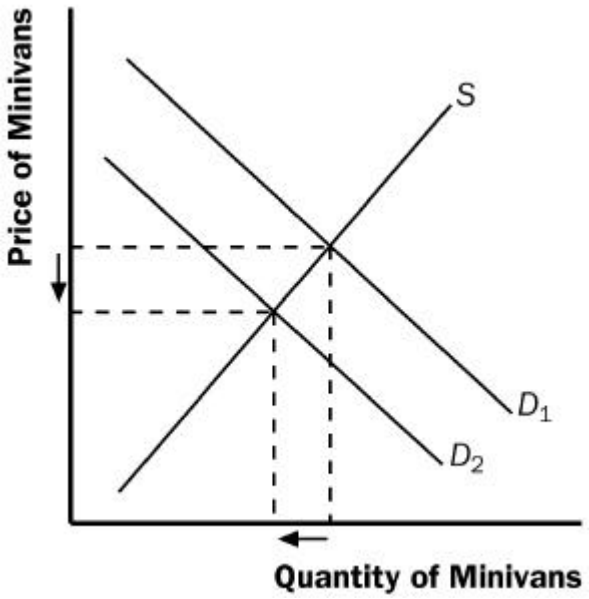


**Figure 4-15**

d. The rise in the price of station wagons affects minivan demand because station wagons are substitutes for minivans (that is, there's a rise in the price of a related good). The result is an increase in demand for minivans. Supply isn't affected. In equilibrium, the price and quantity of minivans both rise, as Figure 4-12 shows.

e. The reduction in peoples' wealth caused by a stock-market crash reduces their income, leading to a reduction in the demand for minivans, since minivans are a normal good. Supply isn't affected. As a result, both price and quantity decline, as Figure 4-15 shows.

Kafli 4, dæmi 11, bls. 91.

a. As Figure 4-31 shows, the supply curve is vertical. The constant supply makes sense because the basketball arena has a fixed number of seats no matter what the price.

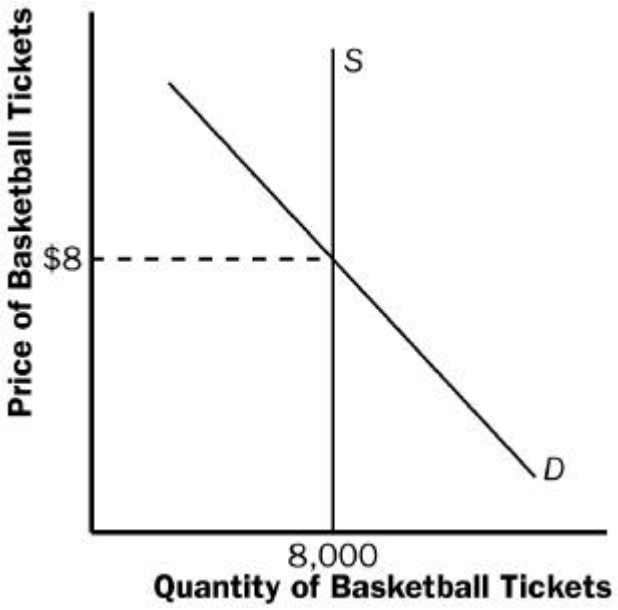


**Figure 4-31**

b. Quantity supplied equals quantity demanded at a price of $8. The equilibrium quantity is 8,000 tickets.

c.

| Price | Quantity Demanded | Quantity Supplied |
|---|---|---|
| $ 4 | 14,000 | 8,000 |
| 8 | 11,000 | 8,000 |
| 12 | 8,000 | 8,000 |
| 16 | 5,000 | 8,000 |
| 20 | 2,000 | 8,000 |

The new equilibrium price will be $12, which equates quantity demanded to quantity supplied. The equilibrium quantity is 8,000 tickets.

Kafli 5, dæmi 2, bls. 115.

a. For business travelers, the price elasticity of demand when the price of tickets rises from $200 to $250 is [(2,000 - 1,900)/1,950]/[(250 - 200)/225] = 3/13 = 0.23. For vacationers, the price elasticity of demand when the price of tickets rises from $200 to $250 is [(800 - 600)/700] / [(250 - 200)/225] = 9/7 = 1.29.

b. The price elasticity of demand for vacationers is higher than the elasticity for business travelers because vacationers can more easily choose a different mode of transportation (like driving or taking the train). Business travelers are less likely to do so since time is more important to them and their schedules are less adaptable.

Kafli 5, dæmi 10, bls. 115.

a. As Figure 5-2 shows, in both markets, the increase in supply reduces the equilibrium price and increases the equilibrium quantity.

b. In the market for pharmaceutical drugs, with inelastic demand, the increase in supply leads to a relatively large decline in the price and not much of an increase in quantity.

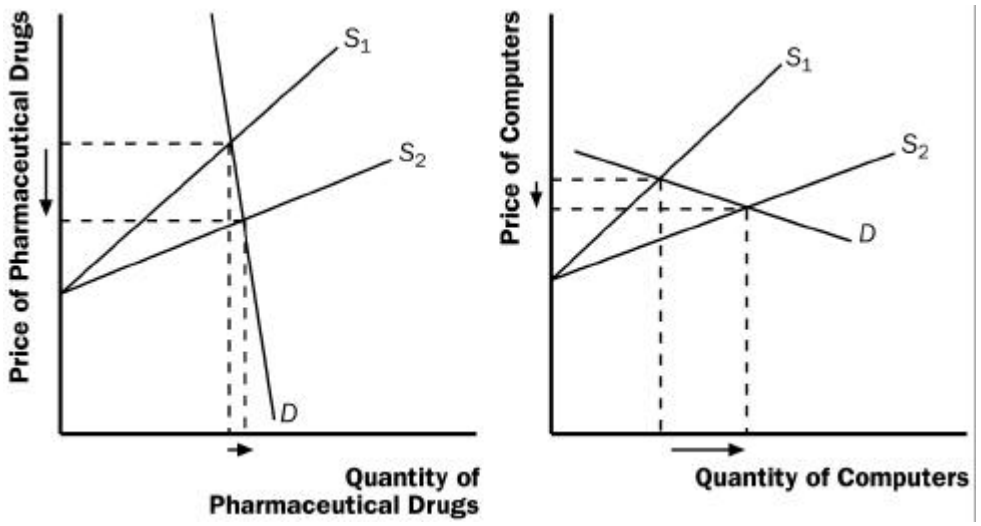


**Figure 5-2**

c. In the market for computers, with elastic demand, the increase in supply leads to a relatively large increase in quantity and not much of a decline in price.

d. In the market for pharmaceutical drugs, since demand is inelastic, the percentage increase in quantity will be less than the percentage decrease in price, so total consumer spending will decline. In contrast, since demand is elastic in the market for computers, the percentage increase in quantity will be greater than the percentage decrease in price, so total consumer spending will increase.

Kafli 6, dæmi 8, bls. 137.

a. Figure 6-8 shows the effects of the minimum wage. In the absence of the minimum wage, the market wage would be $w_1$ and $Q_1$ workers would be employed. With the minimum wage ($w_m$) imposed above $w_1$, the market wage is $w_m$, the number of employed workers is $Q_2$, and the number of workers who are unemployed is $Q_3 - Q_2$. Total wage payments to workers are shown as the area of rectangle ABCD, which equals $w_m$ times $Q_2$.

b. An increase in the minimum wage would decrease employment. The

size of the effect on employment depends only on the elasticity of demand. The elasticity of supply doesn't matter, because there's a surplus of labor.

c. The increase in the minimum wage would increase unemployment. The size of the rise in unemployment depends on both the elasticities of supply and demand. The elasticity of demand determines the quantity of labor demanded, the elasticity of supply determines the quantity of labor supplied, and the difference between the quantity supplied and demanded of labor is the amount of unemployment.

d. If the demand for unskilled labor were inelastic, the rise in the minimum wage would increase total wage payments to unskilled labor. With inelastic demand, the percentage decline in employment would be less than the percentage increase in the wage, so total wage payments increase. However, if the demand for unskilled labor were elastic, total wage payments would decline, since then the percentage decline in employment would exceed the percentage increase in the wage.

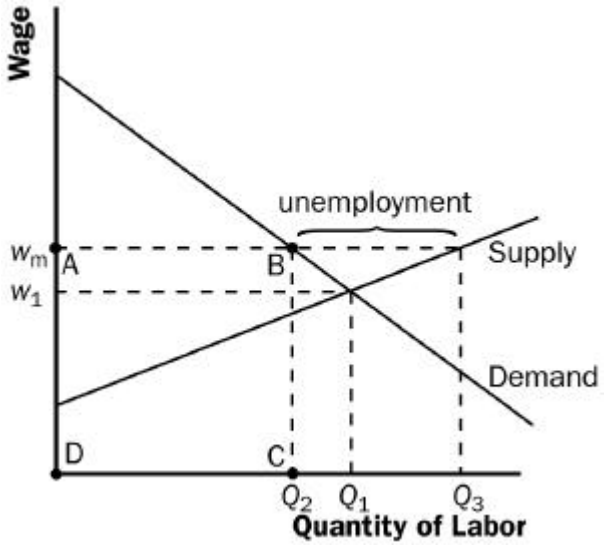


**Figure 6-8**

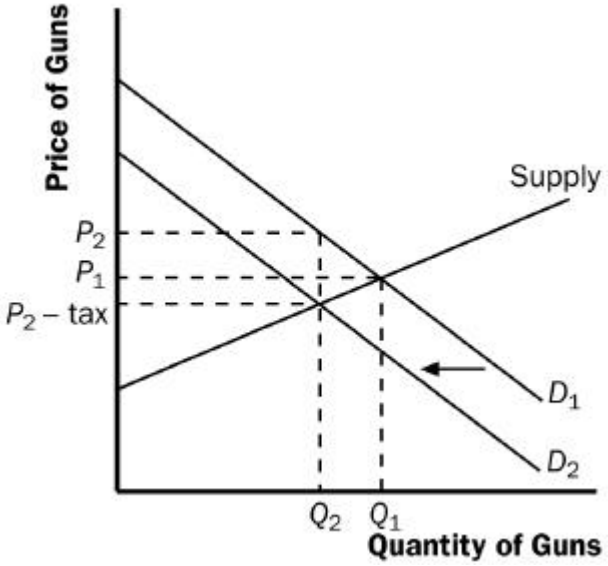


**Figure 6-9**

Kafli 7, dæmi 4, bls. 159.

a. Ernie's supply schedule for water is:

| Price | Quantity Supplied |
|---|---|
| More than $7 | 4 |
| $5 to $7 | 3 |
| $3 to $5 | 2 |
| $1 to $3 | 1 |
| Less than $1 | 0 |

Ernie's supply curve is shown in Figure 7-10.

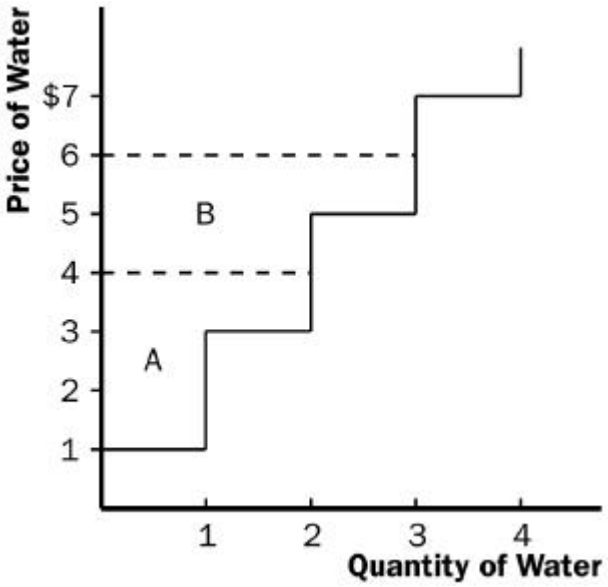

**Figure 7-10**

b. When the price of a bottle of water is $4, Ernie sells two bottles of water. His producer surplus is shown as area A in the figure. He receives $4 for his first bottle of water, but it costs only $1 to produce, so Ernie has producer surplus of $3. He also receives $4 for his second bottle of water, which costs $3 to produce, so he has producer surplus of $1. Thus Ernie's total producer surplus is $3 + $1 = $4, which is the area of A in the figure.

c. When the price of a bottle of water rises from $4 to $6, Ernie sells three bottles of water, an increase of one. His producer surplus consists of both areas A and B in the figure, an increase by the amount of area B. He gets producer surplus of $5 from the first bottle ($6 price minus $1 cost), $3 from the second bottle ($6 price minus $3 cost), and $1 from the third bottle ($6 price minus $5 price), for a total producer surplus of $9. Thus producer surplus rises by $5 (which is the size of area B) when the price of a bottle of water rises from $4 to $6.

Kafli 7, dæmi 6, bls. 159.

a. The effect of falling production costs in the market for stereos results in a shift to the right in the supply curve, as shown in Figure 7-11. As a result, the equilibrium price of stereos declines and the equilibrium quantity increases.

b. The decline in the price of stereos increases consumer surplus from area A to A + B + C + D, an increase in the amount B + C + D. Prior to the shift in supply, producer surplus was areas B + E (the area above the supply curve and below the price). After the shift in supply, producer surplus is areas E + F + G. So producer surplus changes by the amount F + G - B, which may be positive or negative. The increase in quantity increases producer surplus, while the decline in the price reduces producer surplus. Since consumer surplus rises by B + C + D and producer surplus rises by F + G - B, total surplus rises by C + D + F + G.

c. If the supply of stereos is very elastic, then the shift of the supply curve benefits consumers most. To take the most dramatic case, suppose the supply curve were horizontal, as shown in Figure 7-12. Then there is no producer surplus at all. Consumers capture all the benefits of falling production costs, with consumer surplus rising from area A to area A + B.

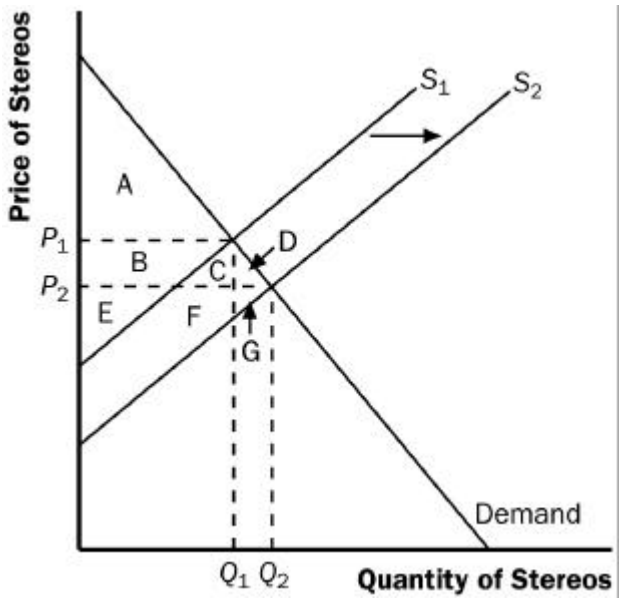


**Figure 7-11**

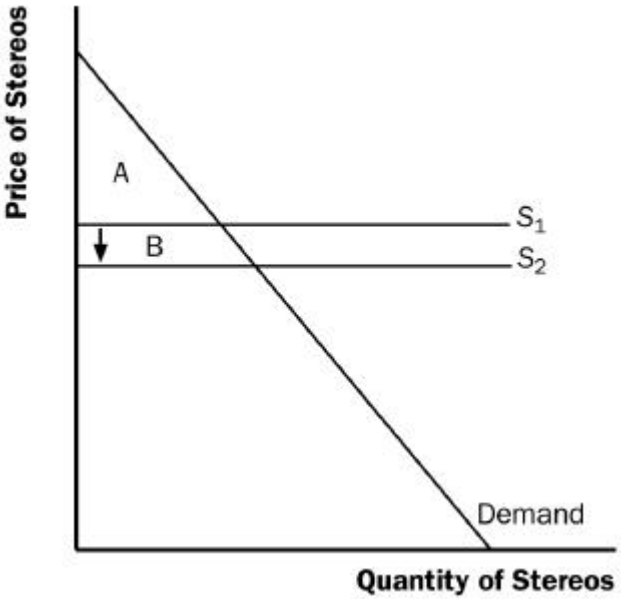


**Figure 7-12**

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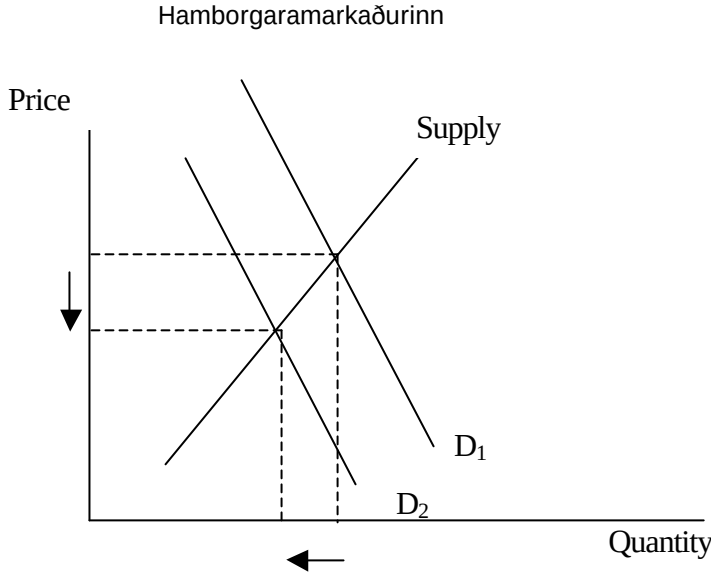
**Aukadæmi** til að hnykkja á muninum á eftirspurn (framboði) og magni eftirspurnar (magni framboðs).

- Breyting á eftirspurn (framboði) => eftirspurnarferillinn (framboðsferillinn) hliðrast
- Breyting á magni eftirspurnar (magni framboðs) => færumst til á eftirspurnarferlinum (framboðsferlinum), þ.e. engin hliðrun.

Dæmið:
Ef pizzur og hamborgarar eru staðkvæmdavörur mun lækkun á verði pizzu.

1. Minnka magn eftirspurnar eftir hamborgurum.
2. Hækka verð á hamborgurum.
3. Minnka eftirspurn eftir hamborgurum.
4. Draga úr framboði á hamborgurum.
5. 3 og 4 eru réttir

Svar:
Ef verð á pizzum lækkar mun eftirspurn eftir hamborgurum minnka, þ.e. eftirspurnar kúrfast hliðrast til vinstri:




Athugum svarmöguleikana:

1. Minnka magn eftirspurnar eftir hamborgurum.
   => þýðir að við erum að færast til á eftispurnarkúrfunni => ekki rétt

2. Hækka verð á hamborgurum.
   => verðið lækkar => ekki rétt

3. Minnka eftirspurn eftir hamborgurum.
   => þýðir að eftirspurnarferillinn hliðrast til vinstri => rétt

4. Draga úr framboði á hamborgurum.
   => þýðir að framboðskúrfan hliðrast til vinstri => ekki rétt (athugið að hins vegar er framboðsmagnið minnkar þar sem við færumst til á framboðsferlinum).

5. 3 og 4 eru réttir
   => 3 er rétt, ekki 4

Réttur svarmöguleiki er því nr. 3.