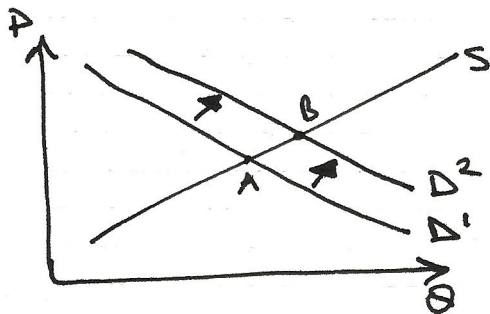


Week #3

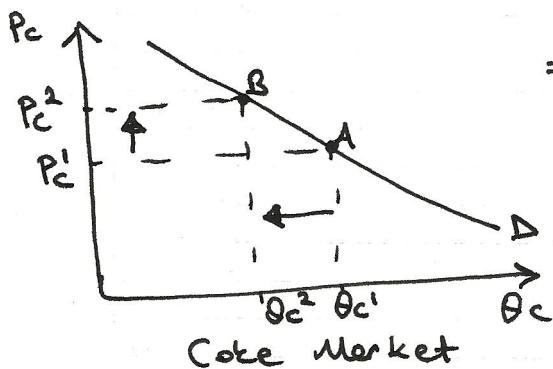
Worksheet - Graphical Solutions

1) Income increase  $\Rightarrow$  increase in demand for a normal good.



2) Price of Coke  $>$  Price of Pepsi  $\Rightarrow P_c > P_p$

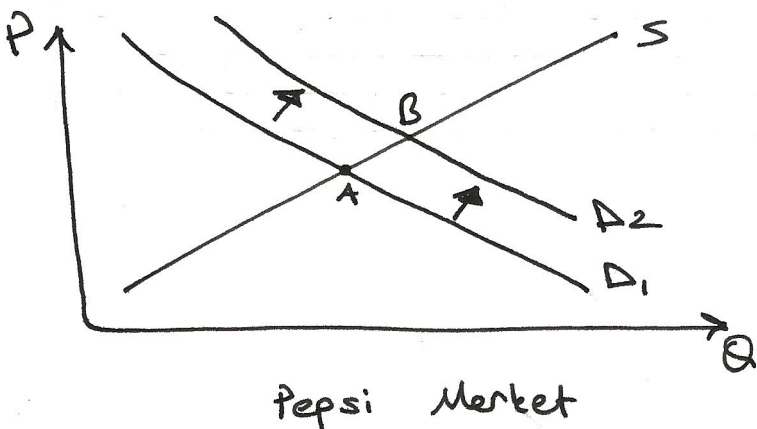
$\hookrightarrow$  or we can think; initially  $P_c = P_p$ , then the  $P_c$  increases



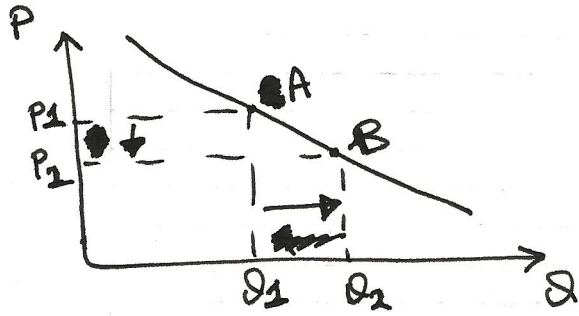
$\Rightarrow$  this is the effect of  $P_c$  increase in Coke Market.

$\Rightarrow$  Also, we know that pepsi and coke are substitute products. So an increase in  $P_c$  ~~increases~~ the demand of Pepsi.

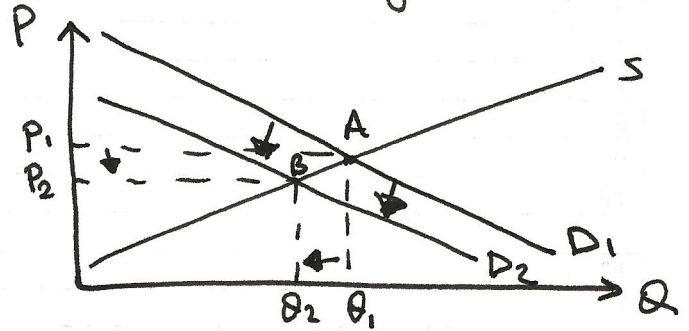
\*  $\frac{\partial X_p \uparrow}{\partial P_c \uparrow} > 0 \Rightarrow$  we can see the above explanation from this formula.



3) Remember: a price change today causes a change in quantity demanded  
 BUT!  
 if there is an expectation about <sup>change in</sup> prices for future, it causes a change in demand.



Price change Today  
 No change in demand but change in quantity demanded.

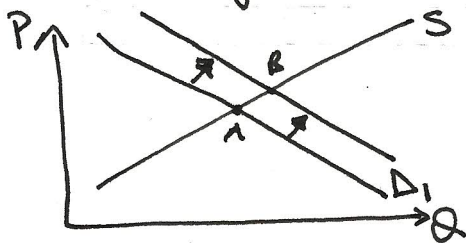


Price change for future  
 $P \downarrow (\text{future}) \rightarrow D \downarrow$   
 decrease in demand for today

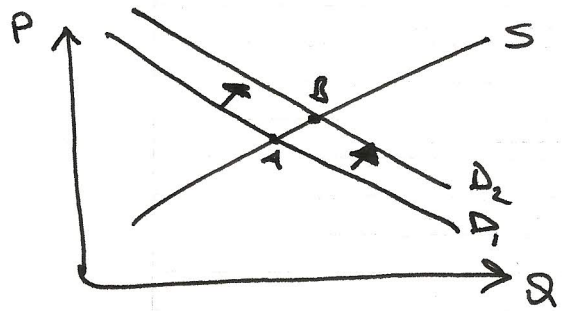
Please note that the answer of this question stated on the solutions is wrong! The correct statements should be as follows;

"If the price of bananas goes down today, then there would be an ~~increase~~ increase in the quantity demanded for bananas today."

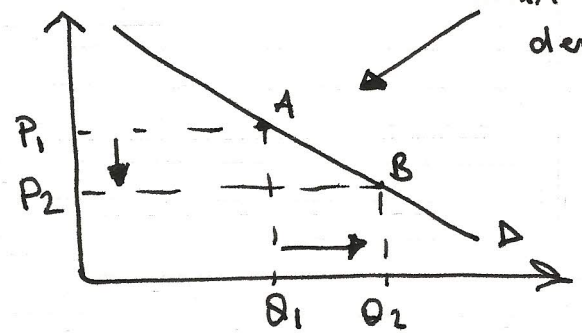
4) Popularity  $\uparrow \rightarrow$  Increase in Demand



5) Price war  $\uparrow$   $\rightarrow$  decrease the price of PC  $\rightarrow$  increase in quantity demanded.



Scanner/Printer Market.

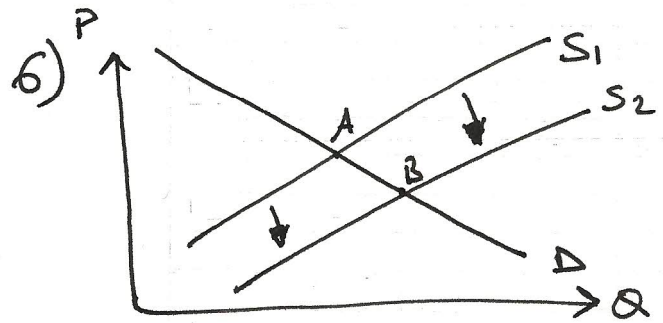


PC Market

• Since Scanner/Printer and PC are complementary goods, the price decrease in PC cause an increase in demand for Scanner/Printer.

Remember  $\Rightarrow \frac{\partial X_{S/P}}{\partial P_{PC}} < 0$

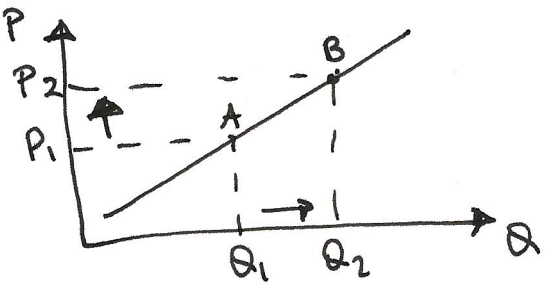
• We know the relationship in complementary goods which is negative.  
 • So if  $P_{PC}$  decreases, demand of scanner/Printer ( $X_{S/P}$ ) increases.



• Improvement in Tech causes an increase in supply.

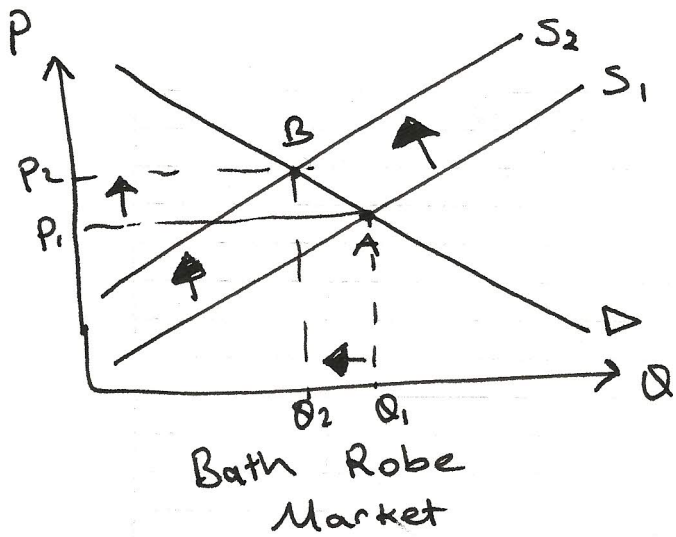
7) Price of Towel increases  $\rightarrow$  quantity supplied increases

Remember: if there is a change in price only, there should be a change in quantity supplied or demanded.



Towel Market

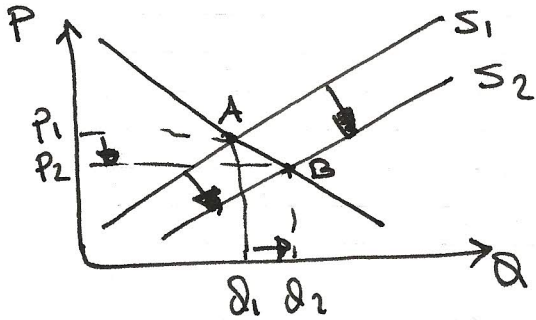
• If the price of alternative item increase, then the supply of the other item decreases. This firm can produce towels or bath robe with same amount of resources. Thus, if price of Towel increases, the firm switches from bath robe to towel and decrease the supply of bath robe.  $\Rightarrow$  See the graph.



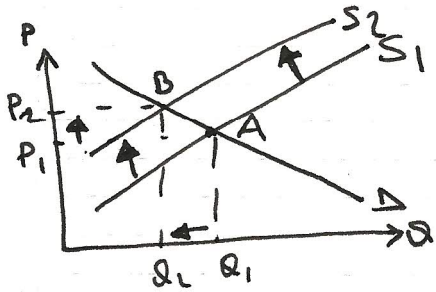
Please note that the solution of this question given in "the Lab #4 Worksheet solutions" is wrong.

The correct answer is:  
 "... and a decrease in supply of both robes"

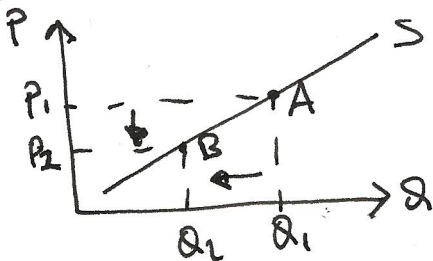
8) # of stores ↑ → Increase in supply



9) Poor weather → decreases the production → decrease in supply



10) Price of printers ↓ → decrease in quantity supplied.



11) Remember a change in price only does not shift demand or supply but it causes a change in quantity supplied and demanded ⇒ which is a movement along demand curve or supply curve.

12) See Q# 11