

Good example of essay on problem # 2

[Technology](#)



BUSINESS ANALYTICS & ECONOMETRICS

In the first situation, when the freeze destroys a large number of orange trees in the area, it can be easily interpreted that the number of oranges would be less than what was expected. This means that the supply would be lesser than what was scheduled even though the demand would still be the same and now it would actually be more than the supply. So, the supply or the output would be decreased. This would be similar to the change in the number of firms in the industry (Hubbard & O'Brien, 2006). In this situation, the supply curve would shift to the left. On the same level of price, the quantity supplied would be decreased now. As can be seen from the graph below, when the freeze hits, the quantity to be supplied decreases and so the curves shifts upwards to the left from S1 to S2; as the demand would remain same, the new equilibrium price would shift from P1 to P2, while the quantity supplied on this price shifts from Q1 to Q2. Overall, the level of price would be raised while the quantity supplied would be reduced.

In the second situation, the scientists discover a new way through technology to double the production of each orange tree. In this situation, the major component is the technology and with this, the production increases which means that the supply would also be increased. When the technology rises, the cost of production becomes less and so, the supply increases (Hubbard & O'Brien, 2006). It is clear from the graph below that as the supply increases, the curve shifts to right from S1 to S2 while the demand curve remains the same. Now, the new equilibrium quantity shifts rightwards from Q1 to Q2 as is clear that the production has been doubled but the simultaneous effect is that the level of price falls from P1 to P2; and

so, overall, with this technology, the output increases while the price decreased.

In the third situation, when the American Medical Association announces the health benefits of the orange juice, the people become more willing and anxious to drink the juice; this means that the demand of orange juice would be raised and the demand curve would shift rightwards while the supply remains the same. As is evident from the graph below, when the demand rises, the price rises along the supply curve from P1 to P2 for the new equilibrium price while the quantity supplied for the same price also rises. It means that when price rises, the quantity supplied also rises, so, now the suppliers are willing to supply more at higher price. But if they keep the quantity same on Q1, the rise in price would have been greater as compared to now.

In the fourth situation, the price for an alternative fruit falls, that is the price of grapefruit falls. In this situation, the demand of orange would also decrease shifting the demand curve to the left as the demand of the grapefruit would be increased which is a substitute product (Hubbard & O'Brien, 2006). As the demand curve shifts to left, while the supply remains the same for the oranges, the output level to be supplied decreases and the new quantity to be supplied is Q2 from Q1 while the price level of the oranges also decreases, as the new equilibrium price shifts from P1 to P2.

References

Hubbard, R. G. & O'brien, A. P. (2006). Microeconomics. Upper Saddle River, N. J.: Pearson Prentice Hall.