

HW#4 From Problem and Applications of Mankiw book, Chapter 4 The Market Forces of Supply and Demand

#1 Answer only part (b) and (e). Follow the instruction of the question and, in addition, and describe the market mechanism that causes the change in the market equilibrium.

3. Consider the market for minivans. For each of the events listed here, identify which of the determinants of demand or supply are affected. Also indicate whether demand or supply increases or decreases. Then draw a diagram to show the effect on the price and quantity of minivans.

~~a. People decide to have more children.~~

b. A strike by steelworkers raises steel prices.

~~c. Engineers develop new automated machinery for the production of minivans.~~

~~d. The price of sports utility vehicles rises~~

e. A stock market crash lowers people's wealth.

#

11. Suppose that the price of basketball tickets at your college is determined by market forces. Currently, the demand and supply schedules are as follows:

Price	Quantity Demanded	Quantity Supplied
\$4	10,000 tickets	8,000 tickets
8	8,000	8,000
12	6,000	8,000
16	4,000	8,000
20	2,000	8,000

- a. Draw the demand and supply curves. What is unusual about this supply curve? Why might this be true?
- b. What are the equilibrium price and quantity of tickets?
- c. Your college plans to increase total enrollment next year by 5,000 students. The additional students will have the following demand schedule:

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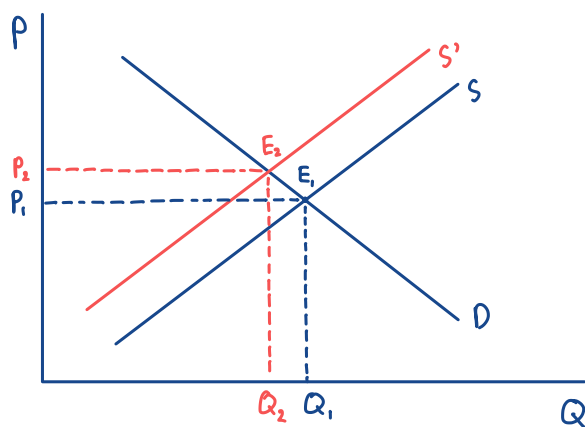
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b.)

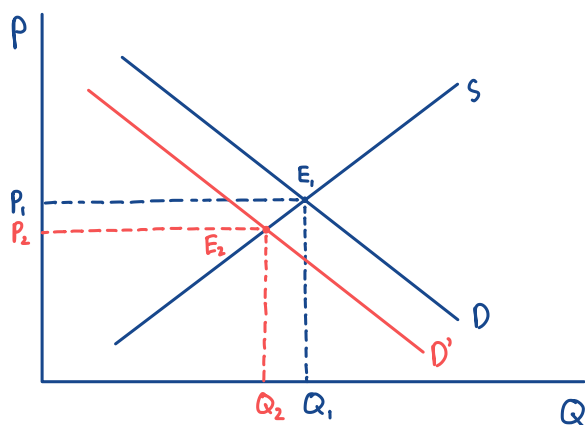


Equilibrium at $E_1 = (Q_1, P_1)$

A strike by steelworkers raises steel prices

- as the steel is raw material for minivan production. Price of steel increase and increase the cost of production, supply decrease from S to S' . The demand will not be affected.
- at P_1 with new S' , we have excess demand of minivans. So the price will increase until P_2 and quantity decrease from Q_1 to Q_2 at new equilibrium E_2 .

e.)



Equilibrium at $E_1 = (Q_1, P_1)$

A stock market crash lower people's wealth

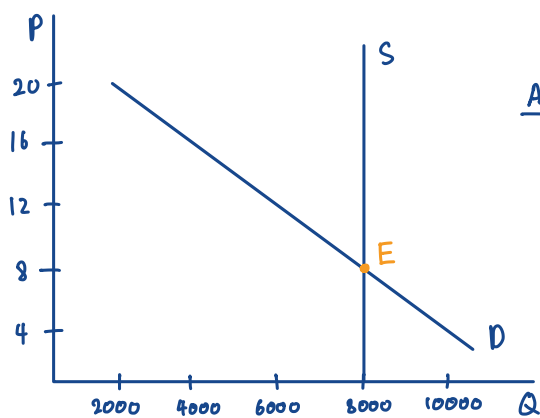
- lower people's spending capability cause lower demand of minivans, D decrease from D_1 to D_2 . The supply didn't affected.
- at E_1 with lower demand of minivans, we have excess supply of minivans. So the price decrease from P_1 to P_2 and the quantity demanded decrease from Q_1 to Q_2 .

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- Your college plans to increase total enrollment next year by 5,000 students. The additional students will have the following demand schedule:

a.)



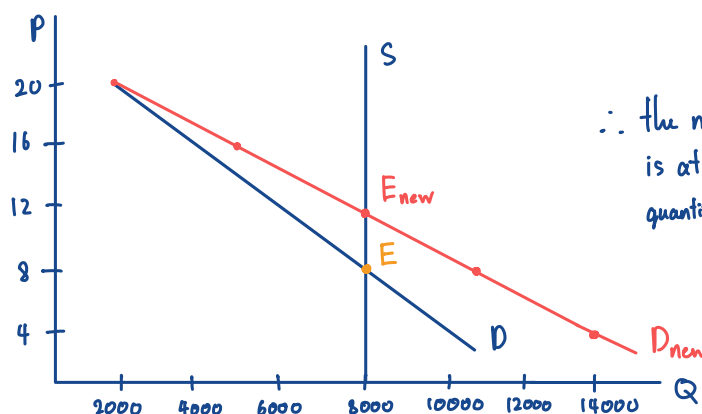
Ans. As usual we used to have positive supply curve, but in this was a constant supply curve. And as we are selling basketball ticket, so the basketball stadium has a fix amount of seat at 8000. This is why the supply curve is constant and not increase like the price increase.

- b.) The equilibrium price is at \$8 and equilibrium quantity of tickets is at 8000 tickets.

Price	Quantity Demanded
\$4	4,000 tickets
8	3,000
12	2,000
16	1,000
20	0

Now add the old demand schedule and the demand schedule for the new students to calculate the new demand schedule for the entire college. What will be the new equilibrium price and quantity?

c.)



∴ the new equilibrium price is at \$12 and equilibrium quantity of ticket still 8000 tickets