

HW#6 Due Feb 10, 2022

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, 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.

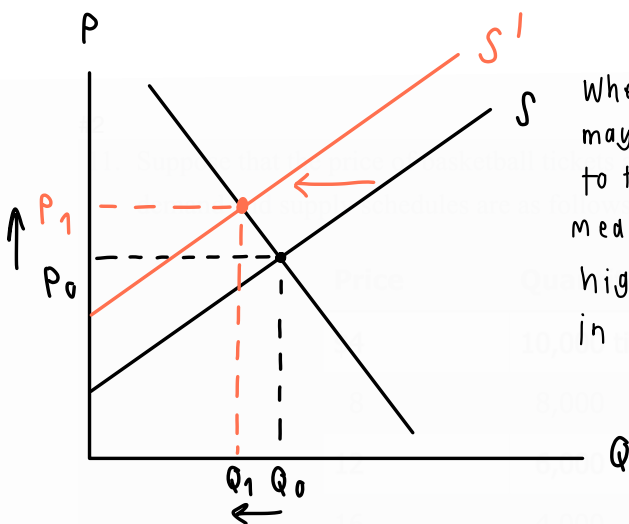
~~a. People decide to have more children.~~

b. A strike by steelworkers raises steel prices.

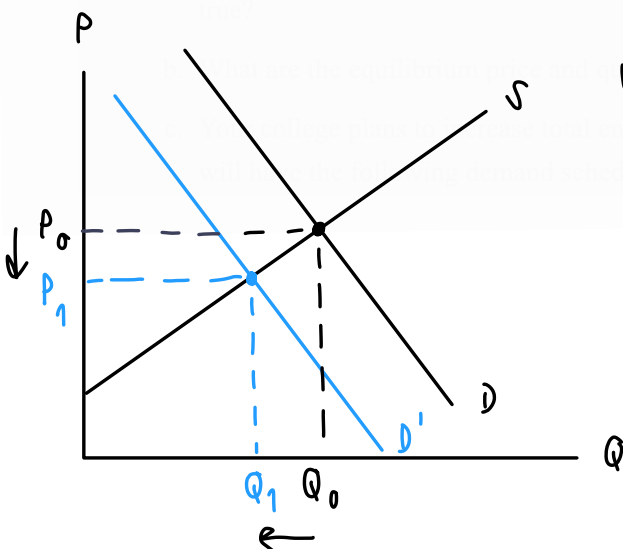
~~c. Engineers develop new automated machinery for the production of minivans.~~

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

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



When the price of the raw material increases, the producers may produce less leading to decrease in supply (shift the S curve to the left  $S$  to  $S'$ ). The price was increased from  $P_0$  to  $P_1$  meaning that the sellers are willing & able to sell at the higher price. Therefore, leading to the decrease in Quantity demanded.



When people's wealth decreases, the ability to pay is also decreased, making the D curve to decrease as well (shift left from  $D$  to  $D'$ ). Then the price will be lowered from  $P_0$  to  $P_1$ .

#2

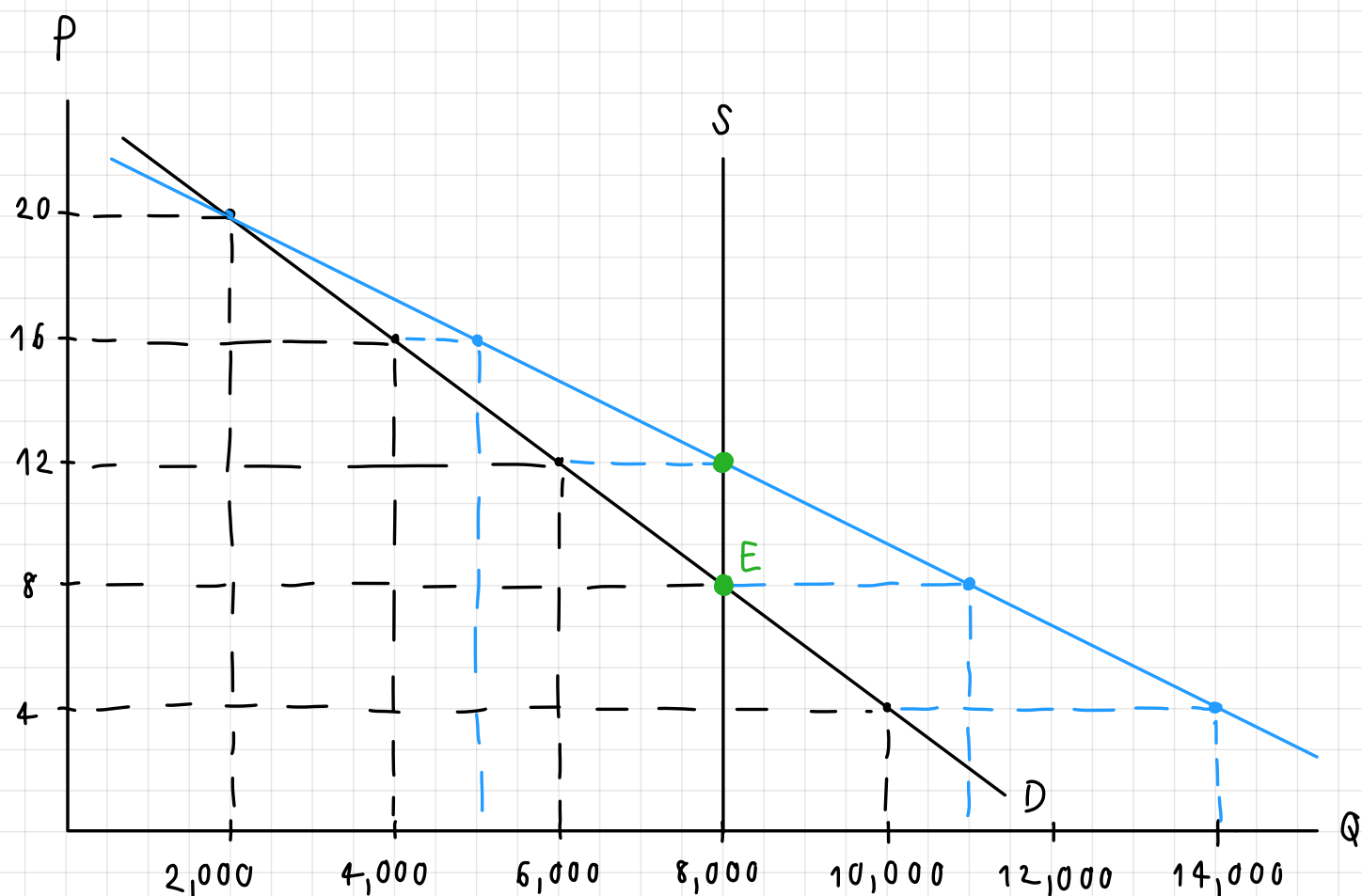
11. Suppose that the price of basketball tickets at your college is determined by market forces. Currently, the demand and supply schedules are as follows:

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

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

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?



d). From the graph, we can see that supply curve is vertical which means the  $Q_s$  is 8,000 tickets at any price given because it is the maximum seats available in the stadium.

b). Equilibrium price = \$8  
 Equilibrium Quantity = 8,000 tickets

c). New equilibrium price = \$12  
 New equilibrium Quantity is still the same = 8,000 tickets.