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.

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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?

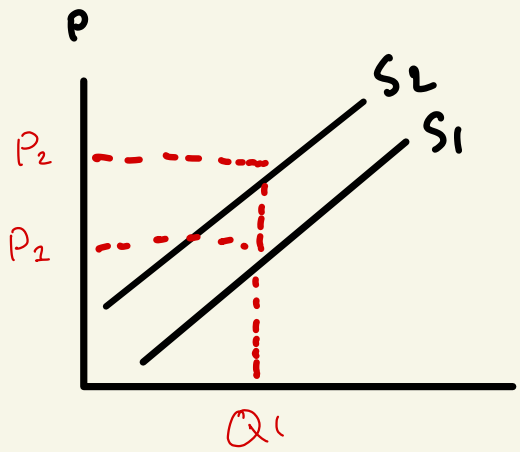
   b. What are the equilibrium price and quantity of tickets?

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

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

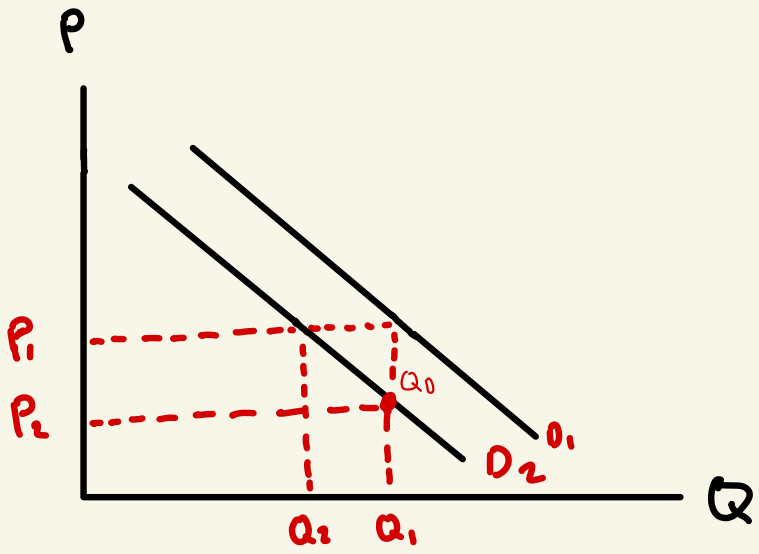
Now add the old demand schedule and the demand schedule for the new students to calculate the new demand schedule for the entire college. What will be the new equilibrium price and quantity?

1b



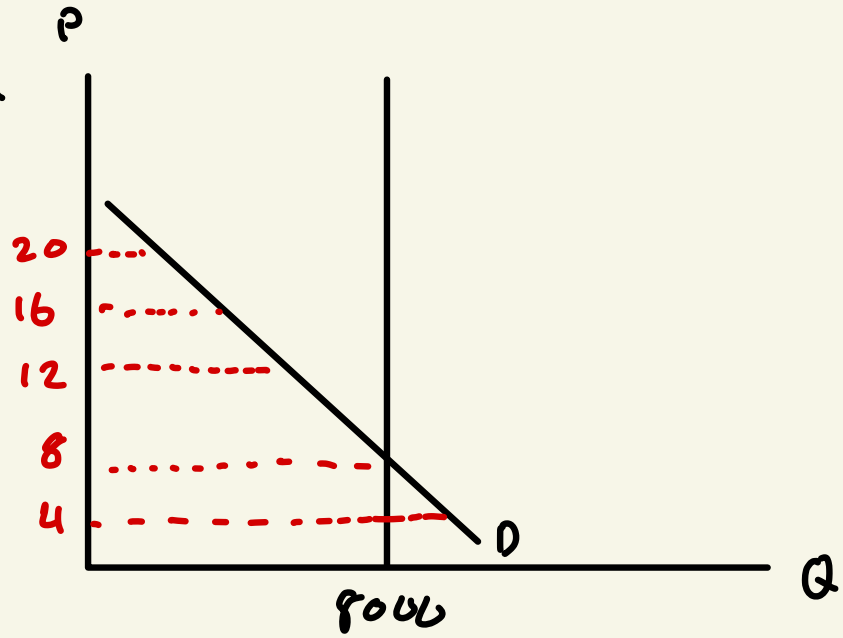
When workers go on strike, the cost of Steel production increases. This will decrease the supply of minivans which will increase the price of minivans. So the Supply graph shift left.

1 e



Demand decreases from D_1 to D_2 because there is decrease in wealth. Graph shifts left. This means that Customers purchase less minivans

2a



The sopply does not change because there is a limited number of spots available. So it is unusual.

2b

Supply : $Q_S = 8000$

Demand : $P = \frac{-1}{500} Q_D + 24$

$P = 8$ At equilibrium, $E = (8000, 8)$

At price \$8, exactly 8000 seats will be sold.

2c

Price	Q_D	Q_S
4	14000	8000
8	11000	8000
12	8000	8000
16	5000	8000
20	2000	8000

New graph → $P = \frac{-1}{750} Q_D + \frac{68}{3}$

Supply → $Q_S = 8000$

Substitution → $\frac{-1}{750}(8000) + \frac{68}{3}$

new equilibrium → $P = \$12$