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.~~

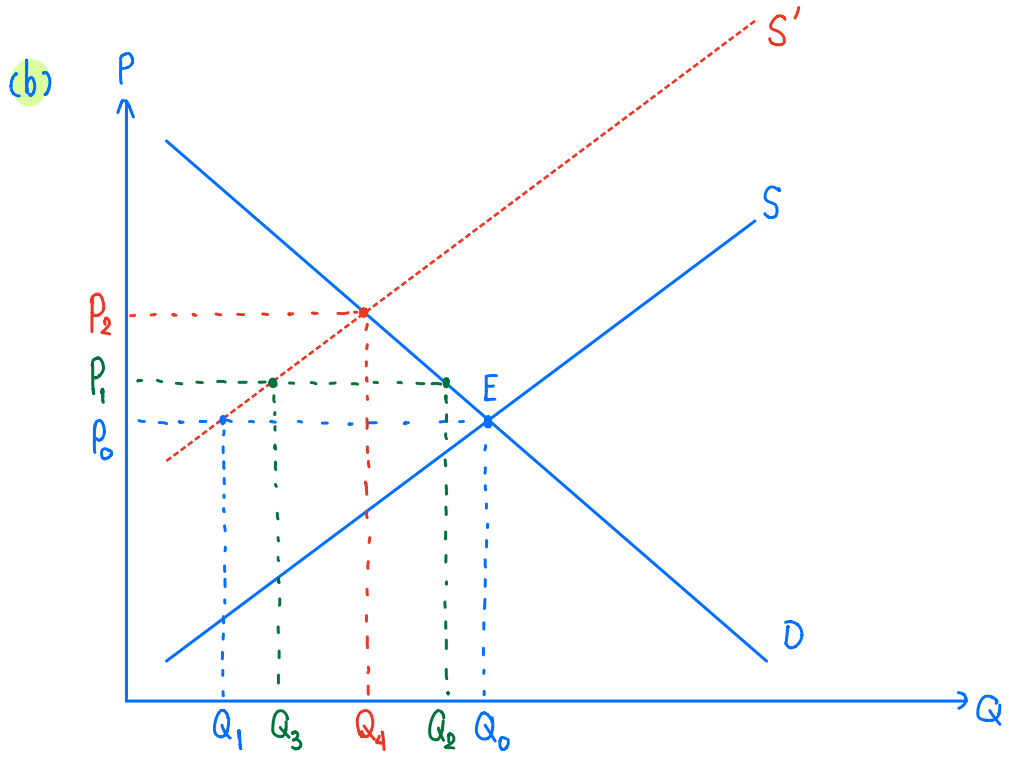
b. A strike by steelworkers raises steel prices.

~~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.

#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.



Initially, the equilibrium is at point E where $P = P_0$ and $Q = Q_0$.

Then, a strike by steelworkers raises steel prices. This causes the supply to decrease from S to S'.

At the price = P_0, quantity supplied decreases from Q_0 to Q_1, but quantity demanded remains unchanged at Q_0. Hence, there is an excess demand = $Q_0 - Q_1 > 0$.

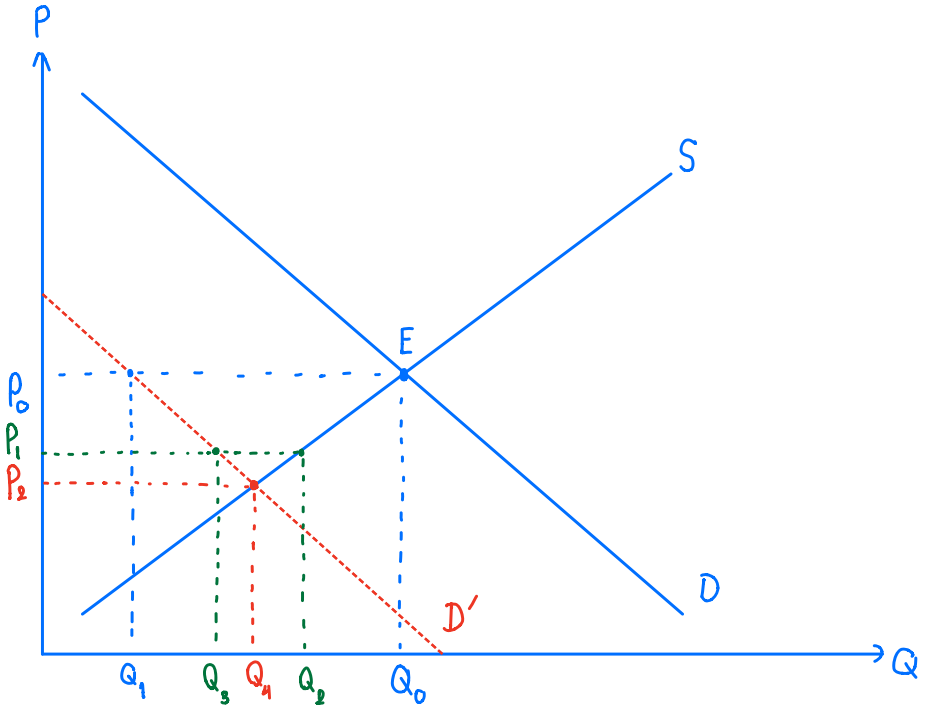
Then the price increases from P_0 to P_1.

At price P_1, quantity supplied increases from Q_1 to Q_3 whereas quantity demanded decreases from Q_0 to Q_2. However, there is an excess demand $= Q_2 - Q_3 > 0$ but less than the one at the price P_c. The price tends to increase.
The price keeps increasing as long as we have excess demand > 0.

The price P_2 is the new equilibrium price because it satisfies the equilibrium condition (Excess demand $= 0$, $Q^d = Q^s$).

As a result, equilibrium price increases from P_0 to P_2 and equilibrium quantity decreases from Q_c to Q_4 when supply decreases. #

e)



Initially, the equilibrium is at point E where $P = P_0$ and $Q = Q_0$.
Then, a stockmarket crash lowers people's wealth causing demand to decrease from D to D'.

At P_0, quantity demanded (Q^d) decreases to Q_1 while quantity supplied (Q^s) remains unchanged at Q_0. So, there is an excess supply $= Q_0 - Q_1 > 0$ then the price

decreases from P_0 to P_1.

At P_1, Q^d increases to Q_3 while Q^s decreases to Q_2. Hence, excess supply still exists (Excess supply = $Q_2 - Q_3$). The price keeps falling as long as there is an excess supply > 0.

The price P_2 is the new equilibrium price because it satisfies the equilibrium condition (Excess demand = 0 , $Q^d = Q^s$).

As a result, equilibrium price decreases from P_0 to P_2 and equilibrium quantity decreases from Q_0 to Q_4 when demand decreases.

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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?