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, 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.

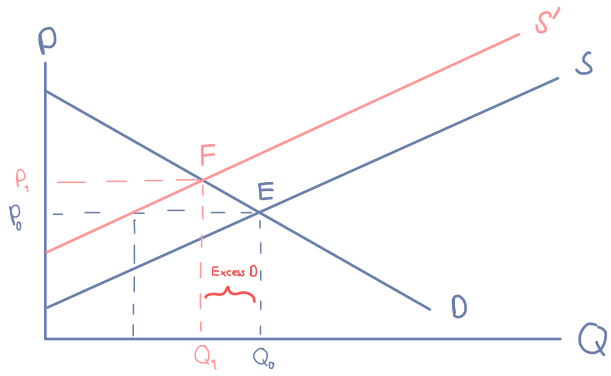
b. A strike by steelworkers raises steel prices.

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

d. The price of sports utility vehicles rises.

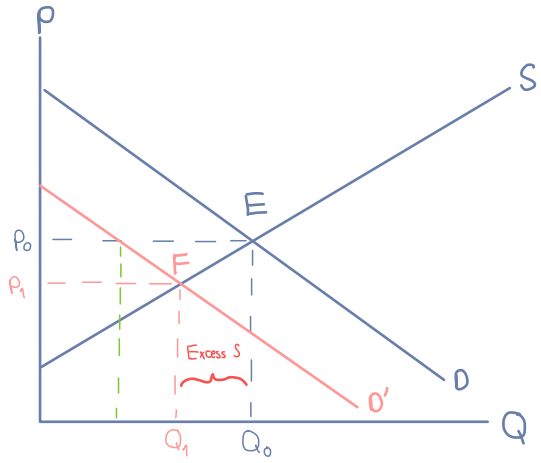
e. A stock market crash lowers people's wealth.

b) • Supply determinant – Changes in price of raw materials (Price higher)
• Supply decreases




At first, the equilibrium is at point $E(Q_0, P_0)$ When supply decreases from s to s', the new equilibrium is at point F

e.) • demand determinant – Changes in number and income of buyers (drop)
• demand decreases




Because the ability to buy drops, demand is decreased. The equilibrium changes from $E(Q_0, P_0)$ to $F(Q_1, P_1)$. Excess supply forces price to be lower from $P_0$ to until it reaches new equilibrium $F(Q_1, P_1)$

#2

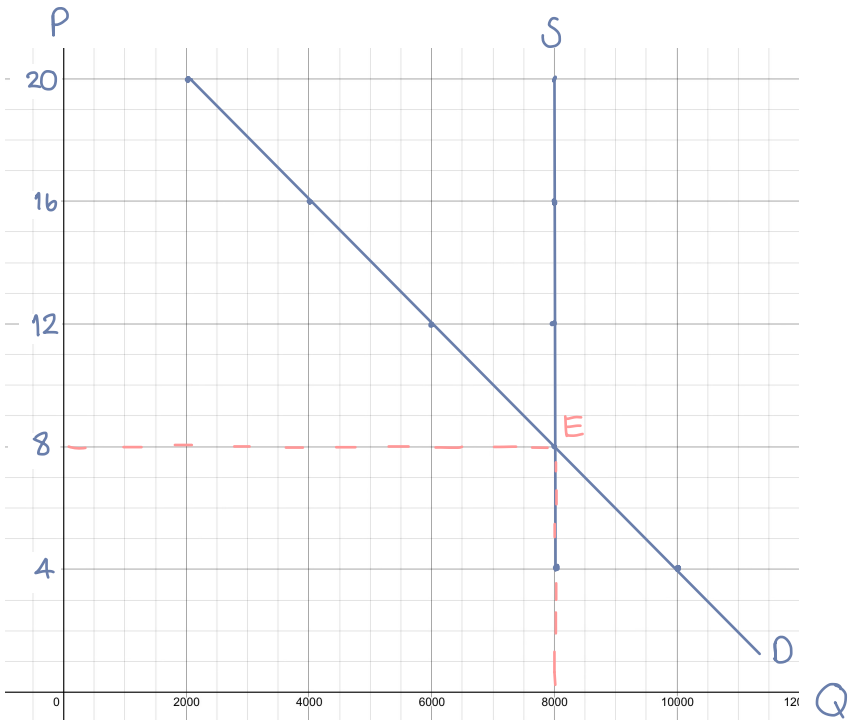
11. Suppose that the price of basketball tickets at your college is determined by market forces. Currently, the demand and supply schedules are as follows:

| 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 |

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:




a) Supply curve is verticle.

It might be true because the number of tickets is limited. No matter how much price is, the number of tickets is fixed.

b) Equilibrium price is $8

Equilibrium quantity of tickets is 8000

| 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?

| Price | Quantity Demanded | Quantity Supplied |
|---|---|---|
| $4 | 14,000 tickets | 8,000 tickets |
| 8 | 11,000 | 8,000 |
| 12 | 8,000 | 8,000 |
| 16 | 5,000 | 8,000 |
| 20 | 2,000 | 8,000 |

c) new equilibrium price is $12
same quantity of 8,000 tickets