Pinyu kosolkarn 6304641100

HW#6 Due March 4, 2021

9. At Fenway Park, home of the Boston Red Sox, seating is limited to about 38,000. Hence, the number of tickets issued is fixed at that figure. Seeing a golden opportunity to raise revenue, the City of Boston levies a per ticket tax of $5 to be paid by the ticket buyer. Boston sports fans, a famously civic-minded lot, dutifully send in the $5 per ticket. Draw a well-labeled graph showing the impact of the tax. On whom does the tax burden fall—the team's owners, the fans, or both? Why?
10. A market is described by the following supply and demand curves:

$$Q^S = 2P$$
$$Q^D = 300 - P$$

   a. Solve for the equilibrium price and quantity.

   b. If the government imposes a price ceiling of $90, does a shortage or surplus (or neither) develop? What are the price, quantity supplied, quantity demanded, and size of the shortage or surplus?

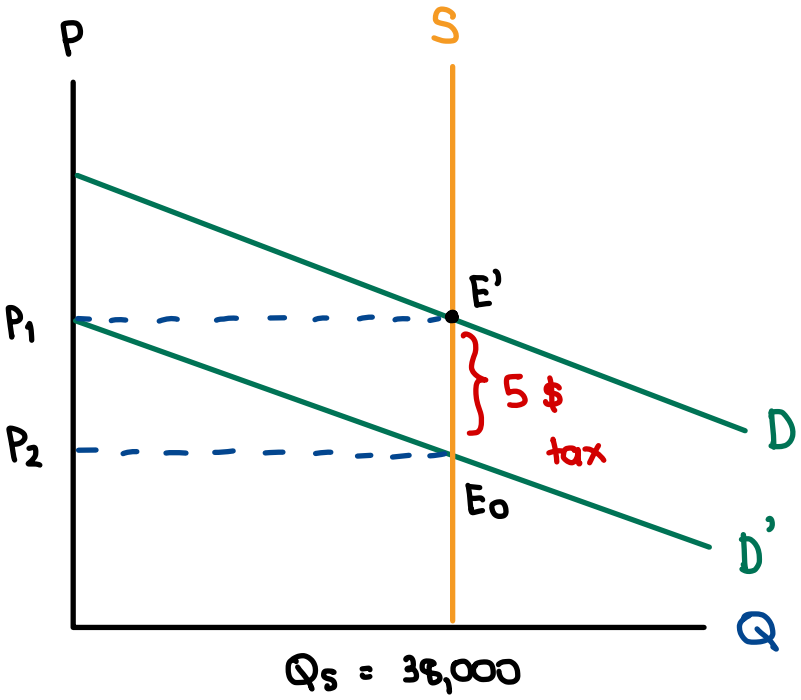
   c. If the government imposes a price floor of $90, does a shortage or surplus (or neither) develop? What are the price, quantity supplied, quantity demanded, and size of the shortage or surplus?

   d. Instead of a price control, the government levies a tax on producers of $30. As a result, the new supply curve is:

$$Q^S = 2(P - 30).$$

   Does a shortage or surplus (or neither) develop? What are the price, quantity supplied, quantity demanded, and size of the shortage or surplus?

9. At Fenway Park, home of the Boston Red Sox, seating is limited to about 38,000. Hence, the number of tickets issued is fixed at that figure. Seeing a golden opportunity to raise revenue, the City of Boston levies a per ticket tax of $5 to be paid by the ticket buyer. Boston sports fans, a famously civic-minded lot, dutifully send in the $5 per ticket. Draw a well-labeled graph showing the impact of the tax. On whom does the tax burden fall—the team's owners, the fans, or both? Why?



The supply curve of this case is inelastic, so the supply Qs cannot change so the supplier have taken the whole tax burden. Therefore, the supplier will need to reduce the price, so they can sell the ticket.

10. A market is described by the following supply and demand curves:

$$Q^S = 2P$$
$$Q^D = 300 - P$$

a. Solve for the equilibrium price and quantity.

b. If the government imposes a price ceiling of \$90, does a shortage or surplus (or neither) develop? What are the price, quantity supplied, quantity demanded, and size of the shortage or surplus?

c. If the government imposes a price floor of \$90, does a shortage or surplus (or neither) develop? What are the price, quantity supplied, quantity demanded, and size of the shortage or surplus?

d. Instead of a price control, the government levies a tax on producers of \$30. As a result, the new supply curve is:

$$Q^S = 2(P - 30).$$

Does a shortage or surplus (or neither) develop? What are the price, quantity supplied, quantity demanded, and size of the shortage or surplus?

10) a) $Q^S = Q^D$

$2P = 300 - P$

$3P = 300$

$P = 100$

$Q_E = 300 - 100$, $2(200)$

$= 200$

$\therefore$ $P = 100$, $Q_E = 200$ #

---

b) 90 \$ is (P MAX)

Quantity demand = $Q_D = 300 - 90$

$= 210$

Quantity supplied = $Q_S = 2P = 2(90)$

$= 180$

$Q_D > Q_S$ Excess demand → shortage develop

Size of shortage = $210 - 180 = 30$

C) 90 $ = (Pmin)

When the price is set (90 $) which is below the equilibrium price which is 100 $. The will make the mechanism continue going and ignore the new price (90 $) Price = 100 $ QD and Qs = 200 units So it's neither surplus or shortage.

New Equilibrium

d) $Q_S = Q_D$

$2P - 60 = 300 - P$

$3P = 360$

$P = 120$

$Q_D = 300 - P$

$= 300 - 120$

$= 180$

Equilibrium price = 120 , Equilibrium quantity = 180

So neither surplus or shortage will develop.

Pinyu Kosolkarn 6304641100