

Econ 101 | Demo B1

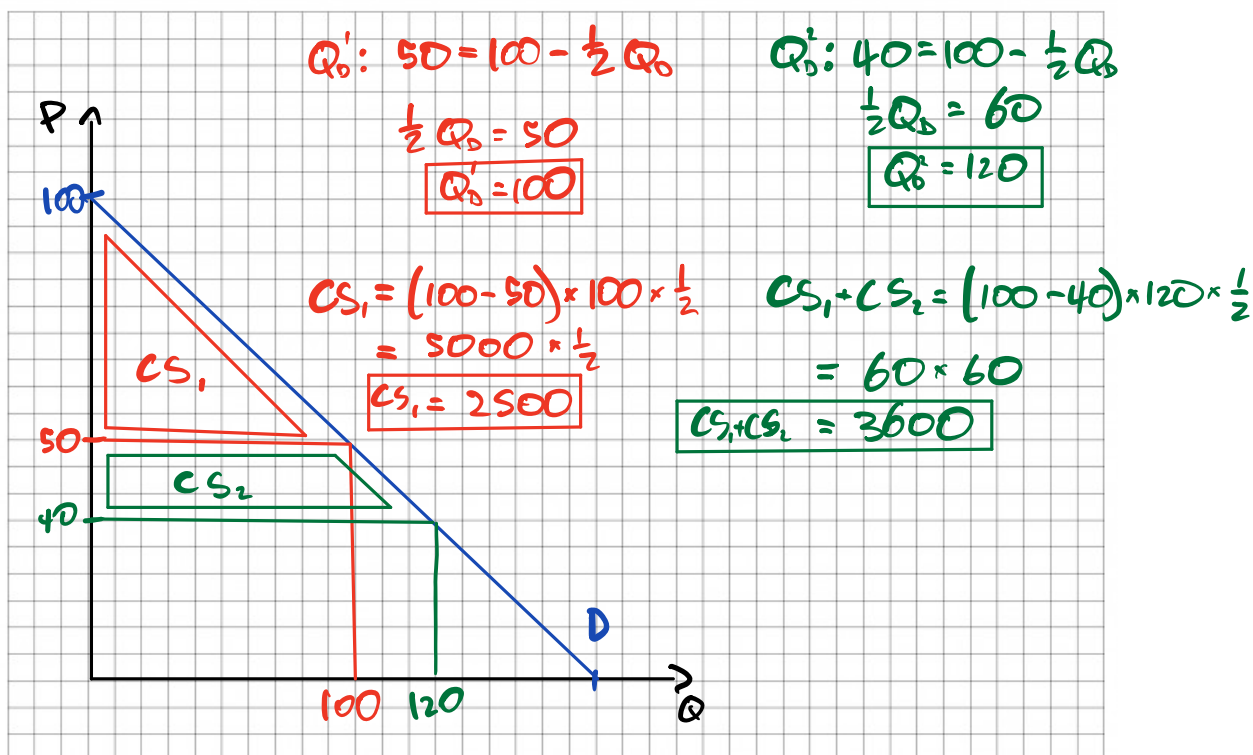
Demos are similar to MiniExams, often taken directly from past semesters. The goal is to both test your knowledge and provide a venue for practice. Work through the problems and check your work against mine. Send me questions at tweidman@richmond.edu. Practice answering clearly and completely. Show your work so someone else can understand your thought process. You are encouraged to work in small groups. Find a study room, grab some classmates, and work together on a whiteboard.

Question 1

Preferences for butter beer can be represented by the following demand curve:

$$P_d = 100 - \frac{1}{2}Q_d$$

Use a graph to plot this demand curve, including the quantity demanded at both 40 galleons and 50 galleons. Then find and label the consumer surplus at these prices.



CS at 40 galleons: 3600

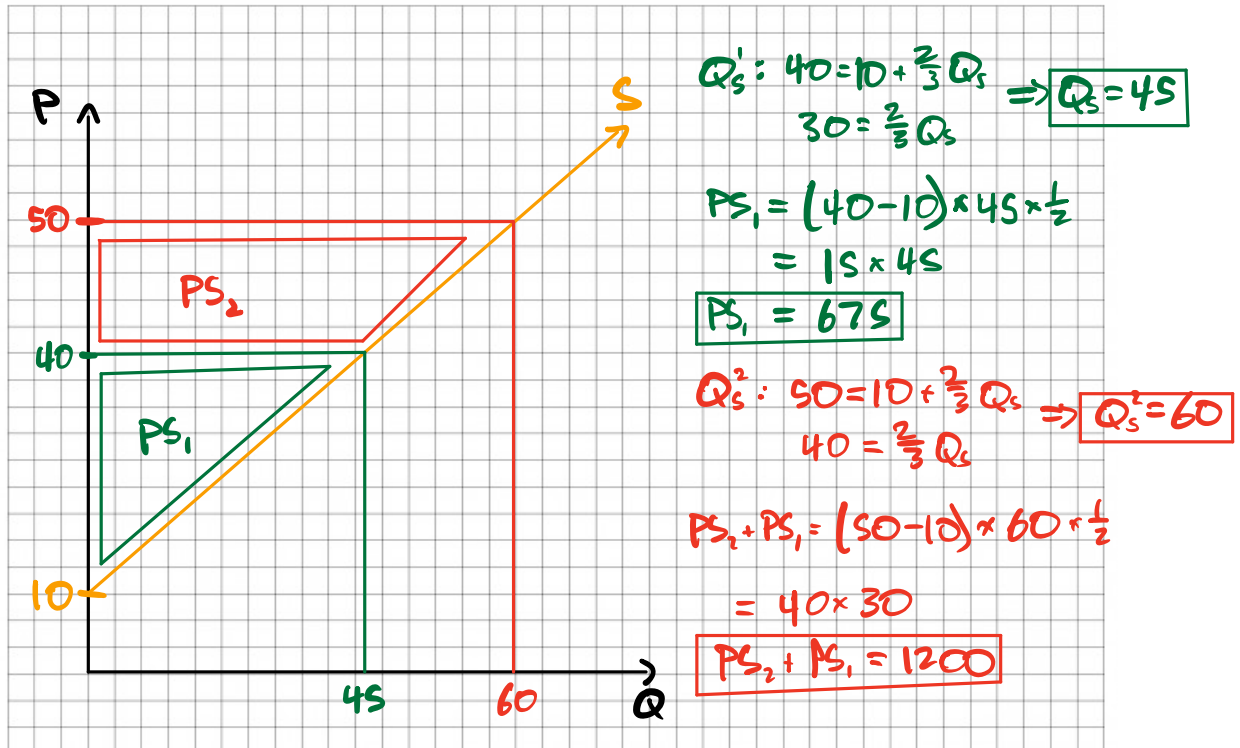
CS at 50 galleons: 2500

Question 2

The supply curve for butter beer can be represented by the following equation:

$$P = 10 + \frac{2}{3}Q$$

Use a graph to plot this supply curve, and find and label the producer surplus at both 40 galleons and 50 galleons.

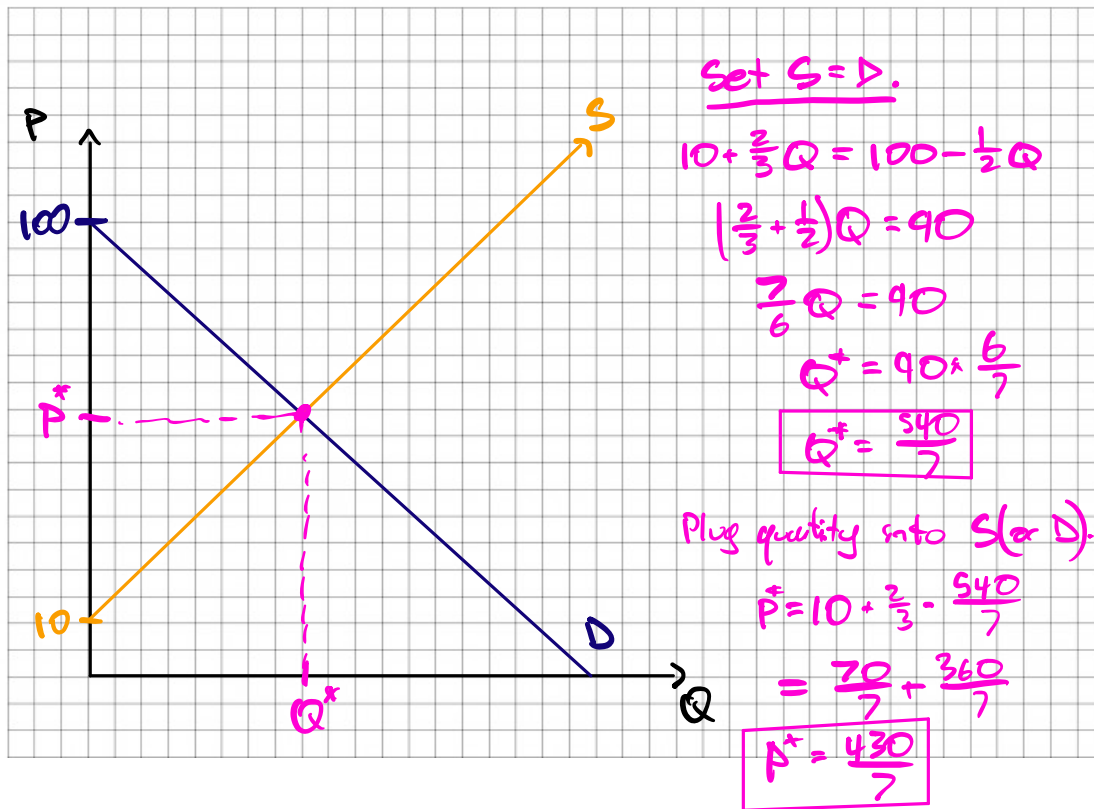


PS at 40 galleons: 675

PS at 50 galleons: 1200

Question 3

What is the market equilibrium price, quantity, ~~and quantity~~? Use a graph and algebra to analyze this market.



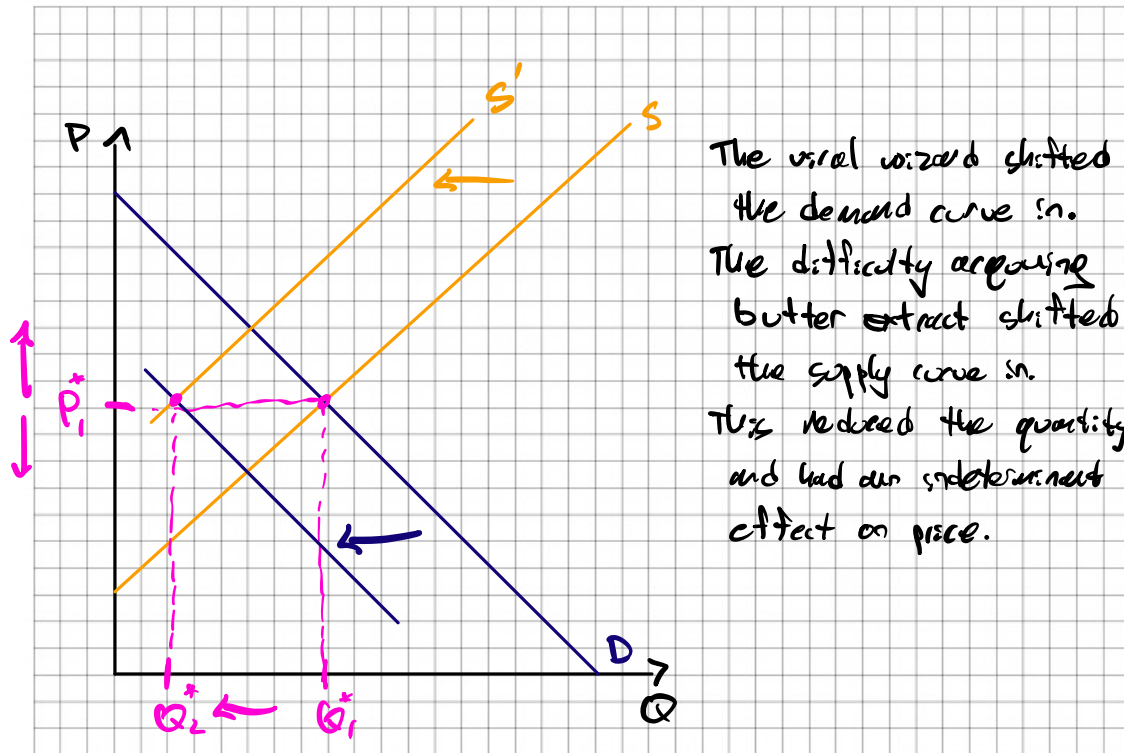
P^* : $\frac{430}{7}$

Q^* : $\frac{540}{7}$

~~What is the market equilibrium price, quantity, and quantity?~~

Question 4

Butter beer has culturally been associated with a good time. This all changed when a high profile wizard went viral slamming the taste. At the same time an ingredient of the drink, butter extract, became incredibly difficult for butter beer makers to acquire. Use a graph to discuss the effect these two events had on the butter beer market.



Demand: UP, CONSTANT, DOWN

Supply: UP, CONSTANT, DOWN

Prices: UP, CONSTANT, DOWN, INDETERMINANT

Quantity: UP, CONSTANT, DOWN, INDETERMINANT