

Market for Beer

P	Qd	Qs
0	20	0
1	18	3
2	16	6
3	14	9
4	12	12
5	10	15
6	8	18
7	6	21
8	4	24
9	2	27
10	0	30

Plot the market demand and supply schedules for beer. Label D1 and S1. Algebraically and graphically solve for the equilibrium price (P^*) and quantity (Q^*). Show all your work.



What is consumer surplus and producer surplus in market equilibrium?

Does the market have shortages or surpluses in beer? Why or why not?

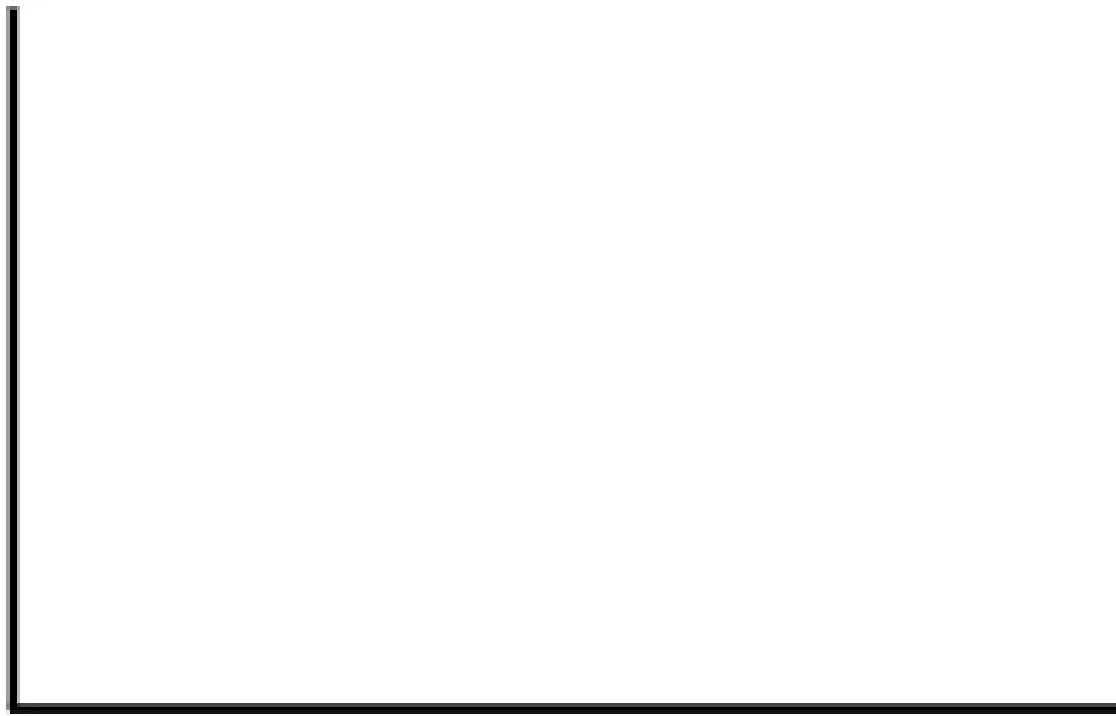
If the price of beer is \$3, then how many beers are purchased? How many beers are produced? (assume no market adjustment)

If the price of beer is \$3, then what is consumer surplus and producer surplus? (assume no market adjustment)

If the price of beer is \$3, then does the market have a shortage or surplus in beer? Why or why not? (assume no market adjustment)

Will the price of beer remain at \$3 or will it change? When will the price of beer stop changing?

The streets of America are flooded with drunks. The government feels that the equilibrium price of beer is too low. Congress imposes a price ceiling at \$5. In the long-run, how many beers will be purchased? In the long-run, how many beers will be produced? Is the price ceiling effective at reducing alcohol consumption? Sketch the graph with the government-imposed price ceiling. Label equilibrium price (P^*) and quantity (Q^*). Label the price ceiling (P_c).



The streets of America are **still** flooded with drunks. The government does not understand why a price ceiling failed to reduce alcohol consumption. You are hired to be the new chief economic consultant to the Democratic party. You decide to impose a price floor (rather than a price ceiling) at \$5 to reduce quantity demanded of beer. Label above the new price floor (P_f).

In the long-run, how many beers will be purchased and produced? Is the price floor effective at reducing alcohol consumption?

The price floor is effective. Congratulations. Why did the original price ceiling fail to reduce Q_d ?

What are the required conditions for effective price ceilings and price floors?

Despite your success at reducing the quantity demanded for beer, you hesitate to continue a price floor at \$5. Explain why an effective price floor is not economically efficient. Assume the price floor is binding and the government does not buyback any of the excess supply. In other words, the government allows the excess supply to rot. Explain your answer with a graph.



Do you believe the government should regulate markets? Why or why not?