

Homework #3

I am rewriting these homework problems. Sorry for the inconvenience. Please check back soon.

Do this too! Suppose that the market demand for hamburgers is given by: $Q_D = 10 - p$ and that the market supply is given by: $Q_S = 2 + p$, where p is the price of a hamburger.

- a. What is the equilibrium price of hamburgers? What is the equilibrium quantity of hamburgers supplied and demanded?
- b. Solve the market demand equation and solve the market supply equation for price. This yields the inverse market demand function and the inverse market supply function.
- c. Graph the inverse market demand and inverse market supply functions, placing quantity on the horizontal axis and price on the vertical axis. Do they intersect at the point corresponding to the equilibrium price and equilibrium quantity?
- d. Now suppose that the government imposes an excise tax of \$2 per hamburger. What is the new quantity of hamburgers supplied and demanded? Hint: At what quantity is the inverse supply curve \$2 higher than the inverse demand curve?
- e. What is the new effective price that consumers pay per hamburger? What is the new price that producers receive per hamburger?