

Problem Set 4

On what and how to submit

- For this and all future problem sets, questions are from the “Problems” section of the questions at the end of the chapter.
- Due before Lecture 4.
- Name the file “ps04_[lastname].pdf”. For example, my file would be “ps04_brooks.pdf”.
- Turn in via this [google survey](#).
- Make sure your name is at the top of the submission.
- You do not need to type your submission. Any **legible** submission in pdf format is ok. For example, you can write the problem set with hand-drawn graphs, take a picture, make a pdf, and submit the pdf.

1. Suppose that market for hamburgers was in equilibrium, with a supply curve of $Q^S = 2000P - 10000$ and a demand curve of $Q^D = 20000 - 1000P$. Responding to populist citizen pressure, the government puts a price ceiling of \$8 on hamburgers.

(a) In market equilibrium, before the ceiling, find

- (a) equilibrium price
- (b) producer surplus
- (c) consumer surplus

(b) After the price ceiling, find

- (a) new quantity
- (b) producer surplus
- (c) consumer surplus
- (d) transfer
- (e) deadweight loss

(c) Up until now, we assumed that all hamburgers were created equal, and it is self-evident that they are not. If there is a variety of hamburger quality, which hamburger sellers will be the most harmed by this policy?