

## Econ 4743, Problem Set 3

{{ student\_name }}

### Instruction:

This problem set is due on Thursday after the Spring break. You are going to submit your work online (no handwriting anymore) for which details will be given next week. But it is vital that you answer the questions first in any text processor by listing the question number followed by your answer in one line or many lines when it is open-question. This is because you are going to transfer your answers to the online submission portal by copy-pasting them and saving your work will save your time and energy. For image submission questions, it is also good to snip the image using an app in your computer or the 'prt sc' key in PC (If taking photo, please don't include other background images in the photo).

### Tax-incidence (Chapter 19)

The market demand for stuffed fleece rabbits is  $Q = 2,600 - 20P$ , and the government places a \$4-per-bunny tax on stuffed fleece rabbit purchases.

1. How much of the tax will be born by consumers if the supply of stuffed fleece rabbits is  $Q = 400$ ? (enter numeric input)

{{ q1 }}

2. and how much of the tax will be born by sellers ? (enter numeric input)

{{ q2 }}

3. Show the previous question graphically and Upload a snippet of your graph as image (.PNG, .JPG, .JPEG, .PDF, no HEIC please)



## II. Deadweight loss (Chapter 20):

Suppose that in the country of Tributia a worker's supply of labor is given by  $H = 140W$ , and a firm's demand for labor by  $H = 2000 - 20W$ , where  $W$  is wage per hour, and  $H$  is quantity of hours worked.

Suppose that the government of Tributia decides to impose a proportional income tax of 25% on all of the worker's earnings.

4. How much dead-weight-loss will be incurred? (enter numeric input)

{{ q4 }}

5. Show our calculations in a piece of paper clearly and Upload a snippet of that as image (.PNG, .JPG, .JPEG, .PDF, no HEIC please)



6. Show graphically that a progressive tax is less efficient than flat tax by drawing two supply demand diagrams for low and high wage earners as discussed in class or the book. Upload a snippet of your graph and explanation as as image (.PNG, .JPG, .JEPG, .PDF, no HEIC please)

