

Intro Microeconomics | Homework D Demo

Question 1 | Adapted From Vignette D

Hogsmeade residents were considering whether to install a memorial of Dobby, the heroic house elf, in their town. The individual marginal benefits for five recently graduated residents is below.

Harry	Ron	Neville	Seamus	Dean
34	29	24	19	14

Handwritten notes: Blue checkmarks under 34, 29, and 24. Blue plus signs between 34+29, 29+24, and 19+14. Blue X marks under 19 and 14. To the right of the table, '= 120' is written in blue.

Any of the five are able to enjoy the statue, regardless of whether they helped pay for it. And it costs 100 galleons per year to operate and maintain the memorial.

Part A

How many of these five residents would visit the memorial if it were built? *All will visit.*

Part B

Neville proposes a referendum that would raise residents' taxes by 20 galleons per year, and puts it to a vote. If each of the five Hogsmeade citizens voted in their own private interests, would this referendum receive a majority vote? *Yes!*

Part C

What is the marginal social benefit from the memorial? *MSB = 120*

Part D

Would this referendum lead to an efficient outcome? *Yes. MSB > MSC*

Part E

Would the proposal receive a majority vote if the tax were 25 galleons? *No. Neville would vote no.*

Part F

Neville proposes allowing a private company to build the memorial and charge residents a lump-sum fee to visit the memorial as they like. If the private company were allowed to set a single fee, would the company be able to cover its costs?

No. There is no price that would cover the costs, that's high enough to ¹cover costs and low enough so that enough residents would participate.

Question 2 | Date Night

Hagrid and McGonagall planned a date night, but had forgotten to decide between two locations: the Leaky Cauldron or Hog's Head Pub. The time for the date was quickly approaching but neither knew where the other was going and didn't have an owl with which to communicate. McGonagall knew Hagrid likes going out with McGonagall ($\Pi = 1$) more than going out alone ($\Pi = 0$), but that he likes going out with her to Hog's Head the best ($\Pi = 2$). Hagrid knew McGonagall likes going out to Hog's Head equally whether with or without Hagrid ($\Pi = 1$), but that she only likes going to the Leaky Cauldron alone ($\Pi = 0, 1$). Find the Nash Equilibrium.

Hagrid

Boxing Method

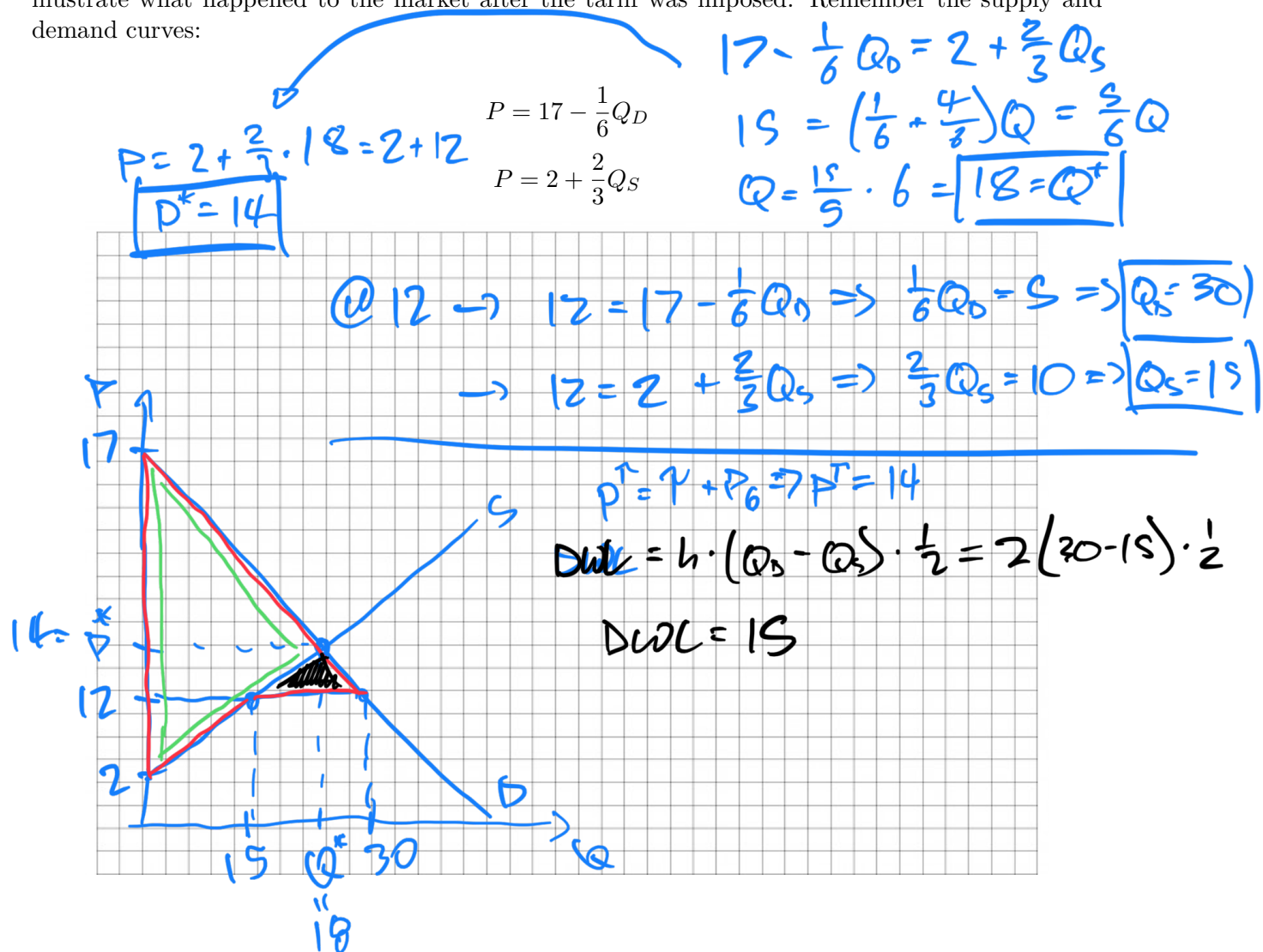
	L	H
L	<div style="display: inline-block; text-align: left; vertical-align: middle;"><div style="border: 1px solid red; padding: 2px;">1</div> 0</div>	<div style="display: inline-block; text-align: left; vertical-align: middle;"><div style="border: 1px solid red; padding: 2px;">1</div> 0</div>
H	<div style="display: inline-block; text-align: left; vertical-align: middle;"><div style="border: 1px solid red; padding: 2px;">1</div> 0</div>	<div style="display: inline-block; text-align: left; vertical-align: middle;"><div style="border: 1px solid red; padding: 2px;">2</div> 1</div>

McGonagall

NE = (H, H)

Question 3 | International Pumpkin Pasties

Economic historians in the wizarding world remember a time before the Ministry had begun meddling with the domestic market. In those earlier days, trade barriers had been lifted for exports of pumpkin pasties to international magical markets with a world price of 12 galleons. At the time, the Ministry of Magic used this opportunity to pad its coffers without facing the political backlash associated with a domestic tax, instead imposing an import tariff of 2 galleons. Use a graph to illustrate what happened to the market after the tariff was imposed. Remember the supply and demand curves:



What is the area of the deadweight loss from the tariff? 15

After the tariff, the price domestically went back to 14, with no imports, and DWL in black.