

Participation Homework #4 (\$8,500): Due Tuesday, October 22nd by the end of your scheduled section

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Section: **004**

Directions: All homework answers **MUST** be **TYPED**. **NO EMAIL SUBMISSIONS**. The homework is collected in class. If you can't be in class then send your homework with a friend or turn it in early by sliding it under my door (306 Kern) with your name and section time clearly marked. **NO late homework is accepted.**

Reminder: You may work in groups but you must write up you own unique responses. You may ask questions about the homework on the Facebook group – however, **DO NOT SIMPLY** ask what the answer is. Explain what you think the answer is and your logic/reasoning, so that someone else can provide real help.

Graphs may be hand drawn provided they are neat. Please include all relevant labels & arrows.

1. College logo t-shirts priced at \$15 sell at a rate of 25 per week, but when the bookstore marks them down to \$10 it finds that it can sell 50 t-shirts per week. What is the price elasticity of demand for the logo t-shirts? Is the demand elastic or inelastic? Show workings. **(\$1,000)**
2. Check out the following [video](http://www.youtube.com/watch?v=ncZkrO06le8) (http://www.youtube.com/watch?v=ncZkrO06le8). Do the early shoppers appear to have elastic or inelastic demand on Black Friday? **(\$500)**
3. In the accompanying table, assume that the price of ice skates increases from \$10 to \$20 per pair. Using the midpoint method, calculate the price elasticity of demand for ice skates for hockey players. Is demand elastic or inelastic? Show workings. **(\$1,000)**

Price of Ice Skates	Quantity Demanded (hockey players)
10	95
20	85
40	75
50	65
60	60

4. If a 20% increase in price causes a 10% drop in the quantity demanded is the price elasticity of demand elastic, unitary, or inelastic? Show workings. **(\$500)**

5. Characterize each of the following goods as perfectly elastic, relatively elastic, relative inelastic, or perfectly inelastic. **(\$1,000)**

- a) A life-saving medication
- b) Demand for a \$20 bill
- c) A fast food restaurant located in the food court of a shopping mall
- d) The water bill you pay

6. A local paintball business receives total revenue of \$8,000 a month when they charge \$10 per person and they receive \$10,000 in total revenue when they charge \$6 per person. Over that range of prices, does the business face elastic, unitary, or inelastic demand? Show workings. **(\$1,000)**

7. A college student enjoys eating pizza. Her willingness to pay for each slice is shown in the following table: **(\$1,000)**

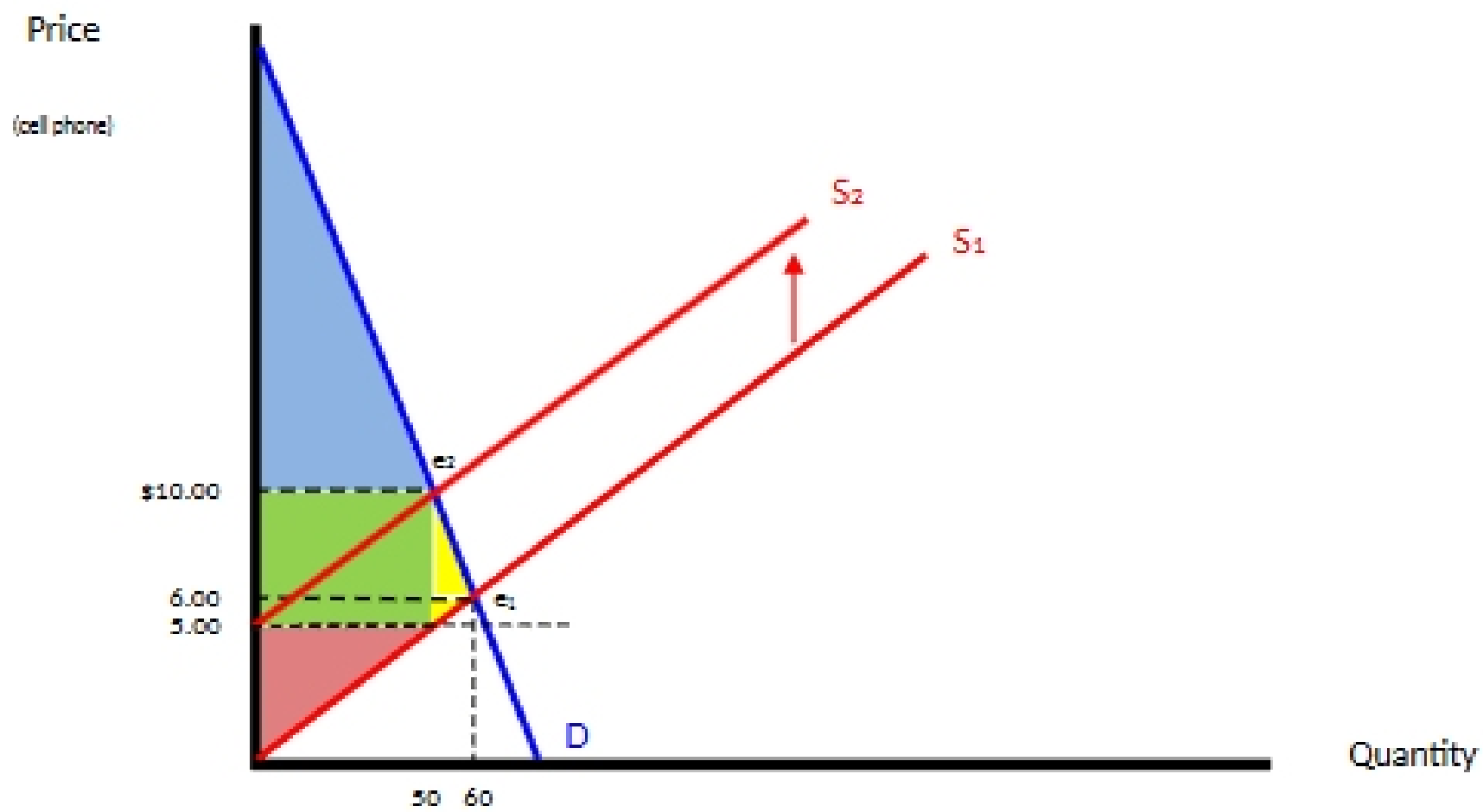
Number of Pizza Slices	Willingness to pay (per slice)
1	\$6
2	\$5
3	\$4
4	\$3
5	\$2
6	\$1
7	\$0

- A) If pizza slices cost \$3, how many servings will she buy? How much consumer surplus does she enjoy?
- B) If the price of pizzas falls to \$2, how much consumer surplus does she enjoy?

8. Leah decides to buy a new sweater from Aritzia for \$80. Leah was willing to pay \$100. When her friend Becky sees the sweater, she loves it and thinks it is worth \$150, so she offers Leah \$125 for the sweater and Leah accepts. Leah and Becky are both thrilled with the exchange.

Determine the total surplus from the original purchase and the additional surplus generated by the resale of the sweater. **(\$1,000)**

9. Suppose that a new \$5.00 tax is placed on each cell phone. From the information in the following graph compute the incidence, deadweight loss, and tax revenue of the tax.



- A) What is the incidence of the tax? (\$500)
- B) What is the deadweight loss of the tax? (\$500)
- C) What is the tax revenue generated by the tax? (\$500)