Problem Set # 6: For those with last 4 of ID’s 3750 - 4999
Deadweight Loss of Taxation and the Laffer Curve?

Let’s analyze the effect of a tax!

In this problem set, you are given 6 cases to analyze. The (no tax) supply and demand curves are the same for each case. You use the supply and demand graphs given to you, along with the information on the tax, to diagram each case. Each case differs only by the amount of a sales tax (legal incidence on sellers). Your goals are 1) to fill out the table on page 8, and 2) to fill in both graphs on page 9.

After you have filled this out, you need to enter your answers on-line. Do not hand this paper in. Only on-line answers will be accepted. To enter your answers on-line:

1) Go to http://faculty.tcu.edu/jlovett
2) Click on “Principles of Microeconomics”
3) Click on “Problem Sets”
4) Scroll down to PS 6 and click on “Click here” to enter your answers on-line.”
5) Fill out the form and bask in the knowledge you have gained. (Note: you can fill out and submit the form out as many times as you wish. Only your last submission will be counted"
6) Bask in the knowledge you have gained.
Case 1. No Tax. Below you are given the supply and demand curves for Kayak rentals in Tilghman Island, Maryland. Use this information to calculate Consumer Surplus, Producer Surplus, Tax Revenues, Net Gain to Society, and the Deadweight Loss when there is no tax on kayak rentals. Use this to fill in the chart on page 7 and the two graphs on page 8.
Case 2. $3/unit Tax. Below you are given the supply and demand curves for Kayak rentals in Tilghman Island, Maryland. Use this information to calculate Consumer Surplus, Producer Surplus, Tax Revenues, Net Gain to Society, and the Deadweight Loss when there is $3/unit tax on kayak rentals. Use this to fill in the chart on page 7 and the two graphs on page 8.
Case 3. $6/unit Tax. Below you are given the supply and demand curves for Kayak rentals in Tilghman Island, Maryland. Use this information to calculate Consumer Surplus, Producer Surplus, Tax Revenues, Net Gain to Society, and the Deadweight Loss when there is $6/unit tax on kayak rentals. Use this to fill in the chart on page 7 and the two graphs on page 8.
Case 4. $9/unit Tax. Below you are given the supply and demand curves for Kayak rentals in Tilghman Island, Maryland. Use this information to calculate Consumer Surplus, Producer Surplus, Tax Revenues, Net Gain to Society, and the Deadweight Loss when there is $9/unit tax on kayak rentals. Use this to fill in the chart on page 7 and the two graphs on page 8.
**Case 5. $12/unit Tax.** Below you are given the supply and demand curves for Kayak rentals in Tilghman Island, Maryland. Use this information to calculate Consumer Surplus, Producer Surplus, Tax Revenues, Net Gain to Society, and the Deadweight Loss when there is $12/unit tax on kayak rentals. Use this to fill in the chart on page 7 and the two graphs on page 8.
Case 6. **$15/unit Tax.** Below you are given the supply and demand curves for Kayak rentals in Tilghman Island, Maryland. Use this information to calculate Consumer Surplus, Producer Surplus, Tax Revenues, Net Gain to Society, and the Deadweight Loss when there is $15/unit tax on kayak rentals. Use this to fill in the chart on page 7 and the two graphs on page 8.
Fill in the table below and the 2 charts on the next page.

<table>
<thead>
<tr>
<th>Case 1:</th>
<th>Case 2:</th>
<th>Case 3:</th>
<th>Case 4:</th>
<th>Case 5:</th>
<th>Case 6:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consumer Surplus</strong></td>
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<tr>
<td><strong>Producer Surplus</strong></td>
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<td><strong>Tax Revenues</strong></td>
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<tr>
<td><strong>Net Gain for Society</strong></td>
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<tr>
<td><strong>Deadweight Loss</strong></td>
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</tbody>
</table>