THIS EQ IS WORTH 4 POINTS.

OCTOBER 17, 2012

EQ8

AGEC 105
between points C and D. Show all work.

Calculate the own-price elasticity of supply.

<table>
<thead>
<tr>
<th>Quantity Supplied</th>
<th>Price</th>
<th>Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>4</td>
<td>D</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>B</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>A</td>
</tr>
</tbody>
</table>

Given the market supply schedule below:

**QUESTION 1 (1 PT)**
All work. Calculate the maximum profit that this firm can earn. Show $1.60/unit.

Suppose that $P = $2.50/unit and the profit maximizing output is 350 units. Also suppose that the corresponding ATC = $0.750.

\[ TC = \text{ATC} \cdot Q \]
\[ TC = 0.75 \cdot Q \]
\[ TR = P \cdot Q = 2.5 \cdot Q \]
\[ \text{Profit} = TR - TC \]

\[ Q = 3.150 \]
On the basis of this diagram, producer surplus is equal to $\frac{2}{2}(30\text{ million}) = 60\text{ million}$. 

Consider the following diagram:

**QUESTION 3 (TPT)**