Sample Problem 15 – Option Combination Net Elasticity

Examine the following information regarding options written on the Example Company stock. At the time of the quotes below, Example Company stock traded at $100.

<table>
<thead>
<tr>
<th>Strike</th>
<th>Call Value</th>
<th>Delta</th>
<th>Gamma</th>
</tr>
</thead>
<tbody>
<tr>
<td>90</td>
<td>12.91</td>
<td>0.76</td>
<td>0.02</td>
</tr>
<tr>
<td>95</td>
<td>9.68</td>
<td>0.65</td>
<td>0.02</td>
</tr>
<tr>
<td>100</td>
<td>7.04</td>
<td>0.54</td>
<td>0.02</td>
</tr>
<tr>
<td>105</td>
<td>4.97</td>
<td>0.43</td>
<td>0.02</td>
</tr>
<tr>
<td>110</td>
<td>3.41</td>
<td>0.33</td>
<td>0.02</td>
</tr>
</tbody>
</table>

Assume you have decided to enter into a call bull spread: You purchase a call with a lower strike price, and sell a call with the next-highest strike price.

a) What two strike prices will give you the most leverage, or the highest net elasticity, to an increase of $1 in the underlying stock price? (Hint: elasticity is % change in position value divided by % change in the underlying stock price).

b) What is the breakeven stock price at maturity for the position you chose in (a)?