Assume that you can buy or sell the following securities:

<table>
<thead>
<tr>
<th>Security</th>
<th>Price Today</th>
</tr>
</thead>
<tbody>
<tr>
<td>TaxCut</td>
<td>$240</td>
</tr>
<tr>
<td>Market</td>
<td>$100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Payoff one year from today if the economy is:</th>
<th>Payoff two years from today if the economy is:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strong</td>
<td>Weak</td>
</tr>
<tr>
<td>TaxCut</td>
<td>$40</td>
<td>$20</td>
</tr>
<tr>
<td>Market</td>
<td>$20</td>
<td>$10</td>
</tr>
</tbody>
</table>

Assume also that you can buy or short-sell risk-free bonds that mature either a year from today or two years from today for whatever amount you chose. The return on these bonds is 3.5% per year.

a. What investment in the market and risk-free bonds will generate cash flows identical to those generated by TaxCut?

b. Calculate the no-arbitrage price for TaxCut?

Note: Feel free to answer parts "c" and "d" with a table.

c. What set of transactions today will generate an arbitrage profit today?

d. What cash flows (each trade and total) will your transactions produce today, a year from today, and two years from today? Note: Use a "+" for inflows and a "-" for outflows.

\[
\begin{align*}
\text{a.} & \quad \text{Buy } 2 \text{ Market, buy bonds that mature for } 50 \text{ in 1 yr.} \\
\text{b.} & \quad 2 \times 100 + \frac{50}{(1.035)^2} = 200 + 46.67 = 246.676 \\
\text{c.} & \quad \text{Buy TaxCut, short 2 Market, short bond} \\
\text{d.} & \quad \begin{array}{ccc}
\text{Trans} & \text{Price} & \text{Price} \\
& +3 & +2 \\
& +3 \text{ Buy TaxCut} & +2 \\
& +2 \text{ Short 2 Market} & +2 \\
& +3 \text{ Short bond} & +3 \\
\text{Total} & +3 & +2 \\
\end{array} \\
\end{align*}
\]