Materials Needed:
Learning Styles Inventory

Instructions:
Complete the Learning Styles Inventory as instructed. Make sure the scores for
the CE, RO, AC, and AE add up to be 120.

1. Record your scores and style in the box below and on the sheet the instructor will
pass around.

<table>
<thead>
<tr>
<th>CE</th>
<th>RO</th>
<th>AC</th>
<th>AE</th>
<th>Style</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The instructor will collect the results from both sections and combine them. You need to
wait for those results before continuing (you can answer #4 and #5 without the data).

Test the claim that each learning style occurs with equal frequency.

2. Find the observed frequency for each learning style and compute the expected
frequency under the assumption that each style occurs with equal frequency.

<table>
<thead>
<tr>
<th></th>
<th>Diverger</th>
<th>Assimilator</th>
<th>Converger</th>
<th>Accommodator</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Are the assumptions of a $\chi^2$ Goodness of Fit test met (write yes or no).

____ The data represent a random sample.

____ The sample data consists of frequency counts.

____ The expected frequency of each category is at least 5.
4. How many degrees of freedom are there?

5. At the $\alpha=0.05$ level of significance, what is the critical value?

6. What is the test statistic?

7. What is the $p$-value?

8. The test statistic (does / does not) fall in the critical region.

9. The p-value is (less / greater) than the significance level.

10. The decision is to (reject / fail to reject) the null hypothesis.

11. There is (sufficient / insufficient) evidence to (reject / support) the claim that the learning styles occur with equal frequency.

12. There is (sufficient / insufficient) evidence to (reject / support) the claim that the learning styles do not occur with equal frequency.