How to Calculate Knowledge Learned

EXAMPLE:
Please rate your **level of knowledge** on the following subjects **BEFORE** attending this workshop:

<table>
<thead>
<tr>
<th>Topic 1</th>
<th>Low level</th>
<th>High level</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td># of responses for topic #1</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Please rate your **level of knowledge** on the following subjects **AFTER** attending this workshop:

<table>
<thead>
<tr>
<th>Topics</th>
<th>Low Level</th>
<th>High Level</th>
<th>Total</th>
<th>Knowledge Learned</th>
</tr>
</thead>
<tbody>
<tr>
<td># of responses for topic #1</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Use this simple formula for figuring the percentage of knowledge learned from your workshop.

1. **Total the rating levels for “knew before attending” and “know after attending” for each topic or question.**
   Using the rating information from the example above:

   **Topic #1 ratings BEFORE attending this workshop:**
   a. **Multiply each rating by the number of responses:**
      - 1x5 = 5 (5 participants rated this topic with a 1)
      - 2x4 = 8 (4 participants rated this topic with a 2)
      - 3x0 = 0 (0 participants rated this topic with a 3)
      - 4x0 = 0 (0 participants rated this topic with a 4)
      - 5x1 = 5 (1 participants rated this topic with a 5)

   b. **Next total the ratings for each level:** 5 + 8 + 0 + 0 + 5 = 18

   **Topic #1 ratings AFTER attending this workshop:**
   c. **Multiply each rating by the number of responses:**
      - 1x0 = 0 (0 participants rated this topic with a 1)
      - 2x0 = 0 (0 participants rated this topic with a 2)
      - 3x0 = 0 (0 participants rated this topic with a 3)
      - 4x7 = 28 (7 participants rated this topic with a 4)
      - 5x3 = 15 (3 participants rated this topic with a 5)

   d. **Next total the ratings for each level:** 0 + 0 + 0 + 28 + 15 = 43

2. **Calculate the spread of knowledge gained.**
   a. Find the difference between the “know after attending” total by the “knew before attending” total:
      
      $$43 - 18 = 25$$

   b. **then divide the spread by the “know after attending” total:**
      
      $$\frac{25}{43} = 0.58$$

3. **Calculate the percentage of knowledge learned.**
   a. **Multiply the spread of knowledge gained by 100:**
      
      $$0.58 \times 100 = 58\%$$