<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
<td>11.2</td>
<td>10.4</td>
<td>21.6</td>
</tr>
<tr>
<td>Unemployed</td>
<td>1.6</td>
<td>1.4</td>
<td>3.0</td>
</tr>
<tr>
<td>Total</td>
<td>12.8</td>
<td>11.8</td>
<td>24.6</td>
</tr>
</tbody>
</table>

3. Use the above data to find the probability that a randomly selected person is a female given that the person is employed.

\[
P(\text{Female} \mid \text{Employed}) = \frac{P(\text{Employed and Female})}{P(\text{Employed})}
\]

\[
P(\text{Female} \mid \text{Employed}) = \frac{10.4}{24.6} / \frac{21.6}{24.6} = \frac{10.4}{21.6}
\]

\[
P(\text{Female} \mid \text{Employed}) \sim 0.481
\]

An easy way to calculate this is to isolate the row for employed and divide female by employed.

\[
P(\text{Female} \mid \text{Employed}) = \frac{10.4}{21.6} \sim 0.481
\]