RMS Practice Question

A researcher was interested in whether teachers’ perceptions of their students affected the way they responded to requests for help in the classroom. A teacher was given a list of all the students in his class and asked to classify each student as either ‘hardworking’ or ‘lazy’. The researcher subsequently sat in the teacher’s classes and observed. Whenever a student asked the teacher for help, the teacher’s response was classified and recorded as ‘help given’ or ‘help not given’.

1. State a non-directional hypothesis for this study.

2. Explain which type of observational sampling was used in this study.

3. Describe how ‘help given’ and ‘help not given’ could be operationalised in this study.

4. Explain an ethical issue raised by this study.

The researcher recorded the data presented in Table 1.

Table 1 - Association between teacher’s perception of students and help-giving.

<table>
<thead>
<tr>
<th></th>
<th>‘Hardworking’ student</th>
<th>‘Lazy’ student</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help given</td>
<td>28</td>
<td>15</td>
</tr>
<tr>
<td>Help not given</td>
<td>25</td>
<td>17</td>
</tr>
</tbody>
</table>

5. Draw a graph or chart to represent the data in Table 1.

6. Explain the conclusion that could be drawn from your graph or chart.

7. Explain which statistical test should be used to analyse the data in this study.

8. Calculate the appropriate statistical test for the data in Table 1.

9. Explain whether the researcher should accept or reject the null hypothesis in this study.