One possible side effect of air pollution is genetic damage. A study designed to examine this problem exposed one group of mice to air near a steel mill and another group to air in a rural area and compared the number of mutations in each group. Here are the data for a mutation at the H*m*-2 gene locus:

|  |  |  |
| --- | --- | --- |
| Mutation | Steel mill air | Rural air |
| Yes | 30 | 23 |
| No |  |  |
| Total | 96 | 150 |

a). Fill in the missing entries in the table.

|  |  |  |
| --- | --- | --- |
| Mutation | Steel mill air | Rural air |
| Yes | 30 | 23 |
| No | 66 | 127 |
| Total | 96 | 150 |

b). Summarize the data numerically and graphically.

c). Is there evidence to conclude that the location is related to the occurrence of mutations? Perform the significance test and summarize the results.