## Carefully read the description of the experiment below. Be prepared to answer the questions that follow the design description as a class quiz.

In mail survey studies it is not unusual to only receive 20 or $30 \%$ response. Since conclusions about the target population will be made on the basis of these respondents, it is important to know if the people who respond are different from the people who do not respond in terms of the variables being measured. This must be true in order to assume that the respondents are representative of the whole target population.

In order to determine that there are no differences in the groups, a
 study usually includes a comparison of initial respondents and respondents after a second, and sometimes third, mailing. In one study the investigators tried to accomplish this comparison by examining for differences between early and late respondents to a questionnaire. Comparisons were made for a number of factors. The number of early and late respondents by gender is given below. How should these values be compared in order to determine if the proportions of male and female respondents differed between the early and late responders?

| Compari | on of Early | y and Late | Late Resp Total |
| :---: | :---: | :---: | :---: |
| Male | 105 | 96 | 201 |
| Female | 41 | 49 | 90 |
| Total | 146 | 145 | 291 |

