

A doctor's office keeps records on all patients that come into the office for annual physicals; based on information collected about each patient, the doctor classifies the patient's risk for heart disease. Below are the results for all patients who have had an annual physical in the last year. One table is for men, and the other is for women.

Risk Level for Heart Disease	Number of Men
Low	41
Moderate	83
High	65

Risk Level for Heart Disease	Number of Women
Low	168
Moderate	225
High	112

The doctor provides the above data to a student for her research paper on heart disease. In her paper, she uses these tables to support the statement: "More women than men are at high risk for heart disease."

- 1) Do you think the student can use the data in these tables to make a statement about men and women *in general*? Why or why not?
- 2) Do you believe the student's statement is a valid conclusion? Give reasons for your answer. Be as thorough as you can; use the back of the page for more space.
- 3) According to the data above, does this doctor's office give more annual physicals to men or to women? What are some plausible reason(s) that there may be more of one gender than the other getting annual physicals at this doctor's office?
- 4) What might be a more fair way to compare the men's and women's results?
- 5) Add a column to the right of each table and label the column "Relative Frequency". For each row, divide the number of patients by the total number of patients in the table. Record the result in your relative frequency column, formatted as a percentage to the nearest tenth of a percent. (Example: .22093 would be expressed as 22.1%)
- 6) How do the relative frequencies you computed above help you to compare men and women? What do you know now that you didn't know when looking at the original data?