## Homework on Joint, Marginal, and Conditional Relative Frequency

In 2015, 100 randomly selected Kimball High students were surveyed about what their preferred cafeteria food was. The data is provided below:

|  | Hot Dog | Pizza | Salad | Other | Do Not Eat <br> Cafeteria <br> Food | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males | 5 | 12 | 3 | 10 | 30 | 60 |
| Females | 3 | 8 | 6 | 8 | 15 | 40 |
| Total | 8 | 20 | 9 | 18 | 45 | 100 |

For each problem,
a) Decide whether what is being asked is joint relative frequency, marginal relative frequency, or a conditional relative frequency.
b) Find the relative frequency.
(Write it as a fraction, decimal, and a percent)

1. The number of males in the survey.
2. The number of people that do not eat cafeteria food.
3. The number of females given they prefer salad.
4. The number of females who prefer salad.
5. The number of students that said OTHER given that they are male.
6. The number of students who prefer pizza.
7. The number of students that prefer hog dog given that they are female.
8. The number of females that do not eat cafeteria food.
9. The number of people that said OTHER.
10. The number of males given that they like pizza.

| Relative Frequency (3 forms) | Type of Frequency |
| :--- | :--- |
| $60 / 100=0.6=60 \%$ | Marginal |

