

Frequency Guided Notes

Gender	Sports	Music	Movies	Total
Girl				
Boy				
Total				

Joint Relative Frequency- tells what percent of all those surveyed are in each category

Example: Of all the students surveyed, what is the percent that are girls who prefer sports?

Example: Of all the students surveyed, what is the percent that are boys who prefer movie?

Marginal Relative Frequency - what percent of the total has a single given characteristic

Example: Of all the students surveyed, what is the percent that prefer music?

Example: Of all the students surveyed, what is the percent that prefer movies?

Conditional Relative Frequency - what portion of a group with a given characteristic also has another characteristic

Example: A person prefers music, given that the person is a girl

Example: Of the boys surveyed, what percent prefers sports?

**In this class, is there an association between gender and whether the student prefers music?
Explain your reasoning.**

The manager of a store selling sports equipment conducted a survey. She asked 145 girls if they had ever been fishing and if they had ever been skiing. There are 46 girls who said they had been fishing, and of those 16 have been skiing too. Of all those surveyed 70 said they had been skiing.

Use the survey data to fill in the table with possible values.

		Fishing	
		Yes	No
Skiing	Yes	<input type="text"/>	<input type="text"/>
	No	<input type="text"/>	<input type="text"/>

Rounded to the nearest whole number, what is the percent of girls surveyed who had never been fishing?

Rounded to the nearest whole number, what is the percent of girls surveyed who had never been skiing?

The table shows the rankings and tuitions of the top 125 universities in the United States.

Rankings and Tuitions of the Top 125 Universities in the United States

Ranking	Tuition			
	< \$20,000	\$20,000– \$29,000	\$30,000– \$39,000	>40,000
1–25	0	0	8	17
26–50	0	6	10	9
51–75	3	12	6	4
76–100	4	8	12	1
101–125	8	8	9	0

What is the relative joint frequency of attending a university in the top 50 and paying less than \$40,000 in tuition?

- A 0.19
- B 0.21
- C 0.26
- D 0.48