



Frequency Table



Mathematical Lawyers



Review

A musician wanted to see what people who bought his last album thought about the songs. Which choice best represents a sample?

- A. Every person who bought the album.
- B. A selection of people who didn't want to buy the album.
- C. 250 girls who bought the album.
- D. A selection of 3,294 people who bought the album



Review

A gaming website wanted to find out which console its visitors owned. Which choice best represents a population?

A. Visitors to the 3DS section.

B. All of the website visitors.

C. Visitors to the PS4 section.

D. Visitors who are on the website for more than 5 minutes

What might this frequency table tell us?

Size	Tally marks	Frequency
4		2
5	 	5
6		4
7		4
8	 	6
9	 	7
total		28

- What do you notice about how it's organized?
- What do the tally marks tell us?
- What are the purpose of each number?



Frequency Table

- First, why must we track data?
- What is frequency? What does frequent mean?
- So, why might we try and gather a frequency table?

Ms. Tiffany rolled dice 10 times and she got the following results:

8, 2, 12, 3, 5, 9, 12, 10, 4, 5, 8, 3, 6, 8, 10

1	2	3	4	5	6	7	8	9	10

How did you decide organize the data?

Find the median and mode of the data set.


Challenge: Find the mean of the data set.



Let's try this out:

What's the groups favorite flavor of ice cream? (Draw this table in your journal)

Flavor	Tally	Frequency
Vanilla		
Chocolate		
Cookies and Cream		
Rainbow Sherbet		
Chocolate Chip		
Cookie Dough		
Other		



If I had the following data, how would you organize it?

5, 9, 10, 16, 16, 20, 25, 30, 86, 90, 100, 105, 108



Intervals

An interval is the distance between one number and the next on the scale of a graph.



Interval Expectations

- Must include the lowest data point and largest data point
- Must include a range that is repeated
 - By 5's, 10's, 20's, etc.
- Must not share data
- Will be used for large data sets
- Will be used in graphing: frequency tables, dot plots, bar graphs, etc.



Now let's create a statistical question you can test!

- Becoming a statistician means asking the right questions!
- A research question needs to be carefully planned.
 - What am I interested in, and what is a good research question?
 - Given some data, what is a good research question?
 - Start with “I wonder if there are differences between...”
 - Example “I wonder if there are differences in cell phone use between boys and girls in 6th grade at HTM”
- Notice:
 - 1) the population is specified (6th grade students from HTM)
 - 2) the possible answers are numbers



Let's think small, first!

We will test our question with at least 6 people but no more than 15.

You will need to create a frequency table, organize your data, and find the mean, median, mode, and range.