Stats Vocab

the question

statistical question vs. not.

- statistical question → many pieces of data
- not. → one answer

what type

categorical variable vs. quantitative vs. controlled

- categorical variable → qualitative, categories — favorite sport?
- quantitative → numbers — hrs of sleep?
- controlled → stays the same

who/answer

population vs. sample

- population → everyone → answer is a parameter
- sample → small group → answer is a statistic

do the experiment/question

sample survey vs. experiment vs. observation

- sample survey → ask question(s)
- experiment → groups testing
- observation → look & count

how to ask?

- stratified: seperate into groups, some from each group
- cluster: seperate into groups, one whole group
- systematic: pattern
- convenience: closest to you
- self select: volunteers

Chapter 11 Lab Notes – 1 Variable Stats

Vocabulary

- Measures of Center
  - Mean: average
  - Median: least → greatest then find the middle
  - Mode: most common :(

  middle
- IQR: inner quartile range ($Q_3 - Q_1$)
- Spread: (range) higest − lowest
- Standard Deviation:
- Histogram:

Five Number Summary

1. min
2. quartile 1 (Q1)
3. median
4. quartile 3 (Q3)
5. max

Types of Skew

Example 1 - Find all the descriptors for the following set of numbers: 12,11,9,8,16,18,19,21,12

Example 2 – Make a histogram out of the following set of data and then decide which measures of center would be best to describe the data: 32,33,35,36,48,42,45,47,46,47,47,45,43,42,4147,36,48,42,44