## 9.19.23

Topic: Distributions

**Distributions:** graphs that tell us about some characteristic of a population.

- Tells about shape and spread of data
- ullet Normal distribution ullet mean, median, and mode the same. Symmetric and unimodal.
  - o Empirical rule:
    - 68% of data within 1 standard deviation from mean
    - 95% of data within 2 standard deviations from mean
    - 99.7% of data within 3 standard deviations from mean
- ullet Standard deviation ullet average distance between points and the mean
- Bimodal or multimodal → multiple modes
- Uniform distribution → same chance for each value (flat)