

Observational Study vs Experiment

A sample is a subset of the population

Prospective vs Retrospective Study

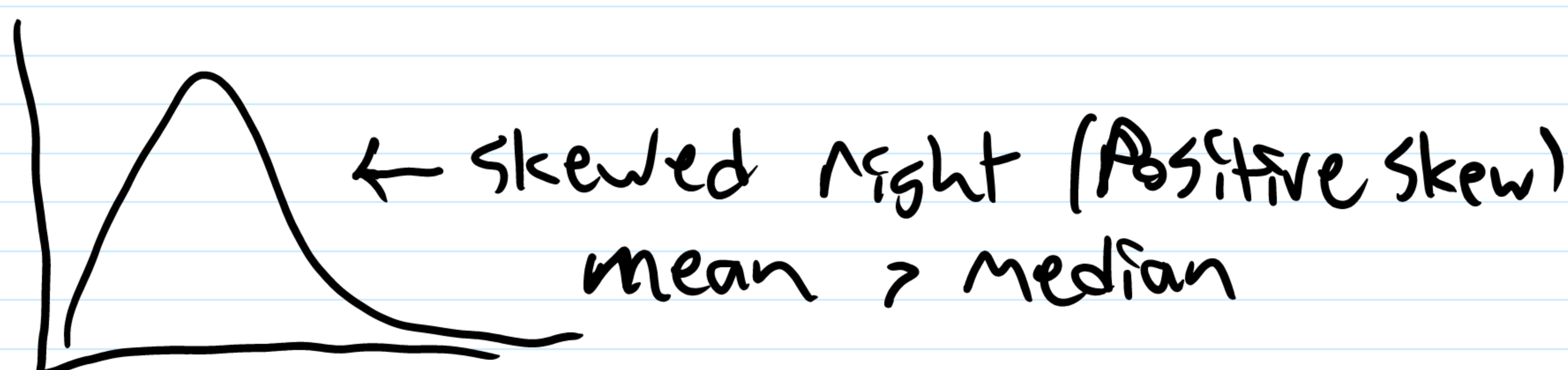
Convenience vs Random vs Stratified vs Cluster
or Multi-stage

Principals of experimental design:

- Controlling
- Randomization
- Replication
- Blocking

Dot Plot is a one variable Scatter Plot

↳ stacked dot plot is basically a histogram

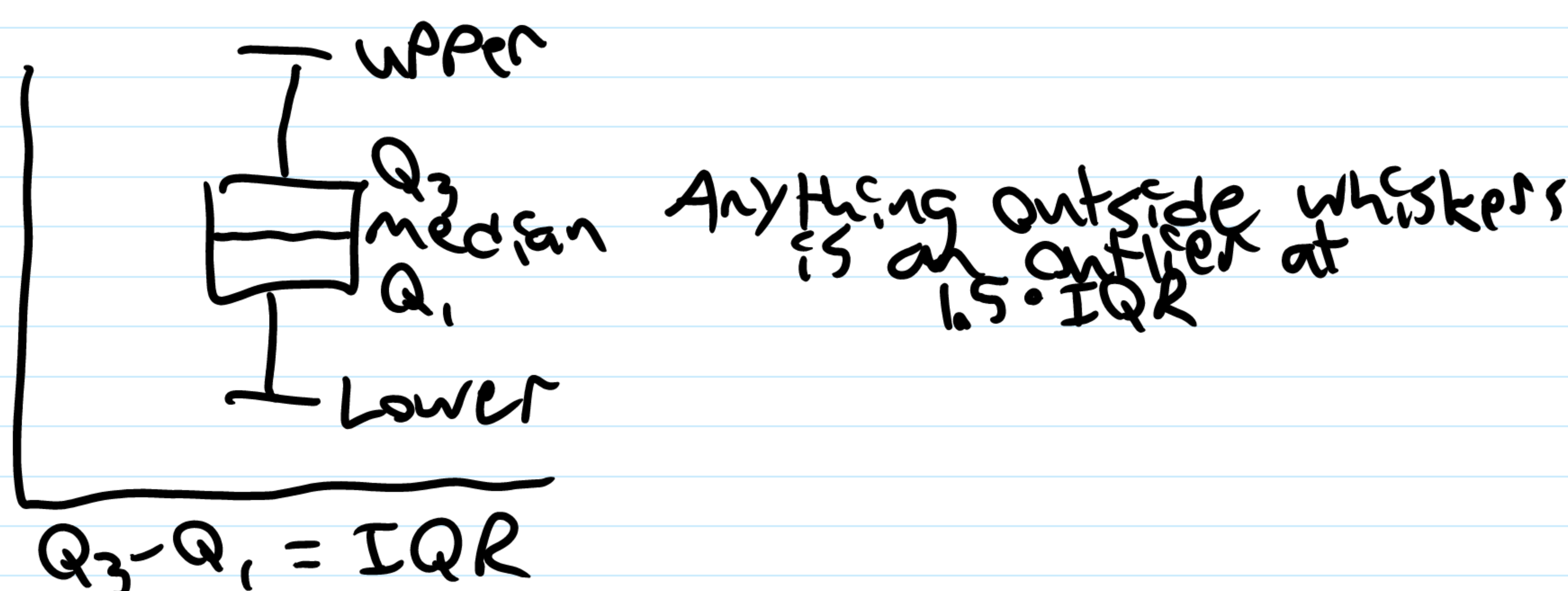


of Peaks = Unimodal₁, bimodal₂, multimodal_{Peak > 2}

$$\text{Variance} = s^2 = \frac{\text{Sum deviation}}{\text{Count} - 1}$$

Standard deviation is $\sqrt{s^2}$
↳ = σ (Sigma)

Box Plots



Contingency tables

Stacked vs side-by-side bar plots

Mosaic Plot is a Filled bar Plot to show %

H₀ = Independence model

H_A = Alternative model