

Chapter 1: Categorical Vs. Quantitative Variables

Chapter 2: Bar Graphs (Pie Charts)

Contingency Tables $\left\{ \begin{array}{l} \text{Marginal Distributions} \\ \text{Conditional} \end{array} \right.$

Chapter 3: Histogram, Stem + Leaf Plots, Dot Plots

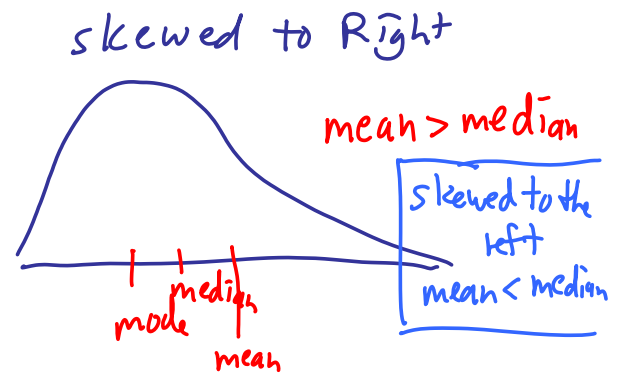
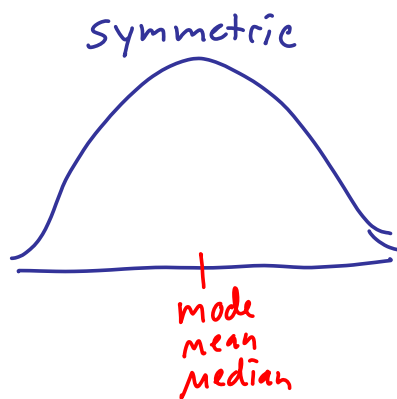
Distribution: shape - symmetric, skewed, uniform
unimodal, bimodal, etc
Gaps, Clusters, outliers

center - midrange, mean (\bar{x}), median (M)

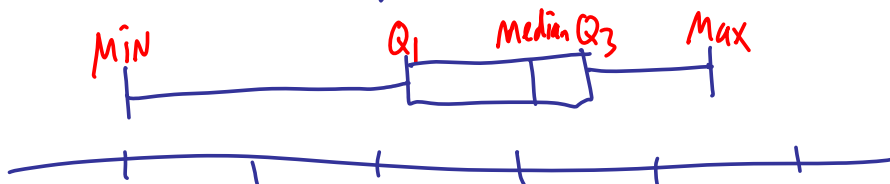
spread - range, Quartiles + IQR, Standard Deviation (s)

Symmetric - use mean + standard Deviation

skewed or has outliers - use median + IQR



Boxplots and 5 Number Summary



use Fences to determine outliers

Chapter 4: Comparing Distributions

Chapter 5: Normal Distribution
 $z = \frac{x - \bar{x}}{s}$
z-score $\Rightarrow z = \frac{x - \mu}{\sigma}$
68-95-99.7 Rule

$N(\mu, \sigma)$
 μ - mean
 σ - standard deviation

Normalcdf & InvNorm Functions

Normalcdf (Left endpt, Right endpt, μ, σ)

InvNorm (Percent to left, μ, σ)