

Name: _____




Chapters 1 & 2

Key: _____ .jpg



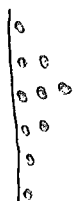
Is about...

Describing Distributions & Types of Graphs

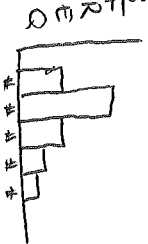
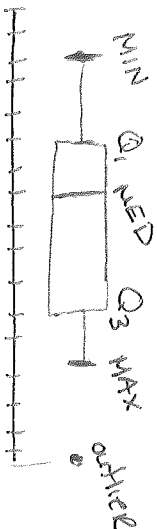
Main Idea
Describe a Distribution

Shape: Left  $\text{mean} < \text{median}$
 * Single Peak
 * Bimodal
Right:  $\text{mean} > \text{median}$
Symm:  $\text{mean} \approx \text{median}$
Outliers:
 $Q_1 - 1.5(IQR)$ - Low Bound
 $Q_3 + 1.5(IQR)$ - High Bound
Center:
 mean - average
 use w/ symmetric distributions
 median - middle
 use w/ skewed data
Spread: Range = Max - Min
 St. deviations: "Typically (use w/ symmetric data) varies"
 IQR: "middle 50%"
 (use w/ skewed data)
 $IQR = Q_3 - Q_1$

Main Idea
Types of Graphs

Bar Chart  F_r
 CATEGORIES
 Pie Graph 
 Dotplot 
 Stemplots

0	1
1	0 2 5
2	0 3 4 8
3	3 6 9

 Key: 3|3 means 33.
 * Histograms 
 * Boxplots 
 MIN, Q1, MED, Q3, MAX, outlier
 5 # Summary

Main Idea
Place in Distribution

z-score $Z = \frac{x - \mu}{\sigma}$
 Negative: Left of the mean
 Positive: Right of the mean
 Interpret
 The # of standard deviations above or below the mean.
 Percentile - % of data that is below a value
 "NOT EQUAL"
 Interpret % of the scores are less/below than _____
 Normalcdf (low, upper, μ , σ)