Inferential statistics is very important so Fred and I made up this special review. Use it with the formula review beginning on the next page. Don't forget to look at cumulative review chapters 25 - 27.




## Executive Summary of Inferential Statistics

| Being Tested | Sampling Distribution is Known | | | Sampling Distribution is Unknown |
|---|---|---|---|---|
| | **Parametric Tests of the Mean and Proportion Using Interval and Ratio Data** use with | | | **Nonparametric Tests of the Median Using Ordinal Data** use with |
| | Normal Population | | Skewed Population | Skewed Populations |
| | Large Sample σ is known or unknown | Small Sample σ is unknown[1] | Large Sample σ is known or unknown | Small Sample |
| One Sample | z | t | z | Sign Test |
| Two Independent Samples | z | t | z | Mann-Whitney Test |
| Two Dependent Samples (paired difference test) | z | t | z | Sign Test |
| 3 or More Independent Samples (ANOVA) | F | F | Not Applicable | Kruskal-Wallis Test |
| 1. If σ is known, z may be used in place of t. | | | | **Nonparametric Tests of Nominal Data Using $\chi^2$** |
| One Categorical Variable | | | | Goodness of Fit Test |
| Two Categorical Variables (Statistical Dependency) | | | | Contingency Tables |