

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								
	<b>Parametric Tests of the Mean and Proportion Using Interval and Ratio Data</b>  use with  <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;"><u>Normal Population</u></td> <td></td> <td style="text-align: center;"><u>Skewed Population</u></td> <td></td> </tr> <tr> <td style="text-align: center;">Large Sample <math>\sigma</math> is known or unknown</td> <td style="text-align: center;">Small Sample <math>\sigma</math> is unknown<sup>1</sup></td> <td style="text-align: center;">Large Sample <math>\sigma</math> is known or unknown</td> <td></td> </tr> </table>			<u>Normal Population</u>		<u>Skewed Population</u>		Large Sample $\sigma$ is known or unknown	Small Sample $\sigma$ is unknown <sup>1</sup>	Large Sample $\sigma$ is known or unknown		<b>Nonparametric Tests of the Median Using Ordinal Data</b>  use with  Skewed Populations Small Sample
<u>Normal Population</u>		<u>Skewed Population</u>										
Large Sample $\sigma$ is known or unknown	Small Sample $\sigma$ is unknown <sup>1</sup>	Large Sample $\sigma$ is known or unknown										
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 $\sigma$ is known, z may be used in place of t.				<b>Nonparametric Tests of Nominal Data Using <math>\chi^2</math></b>								
One Categorical Variable				Goodness of Fit Test								
Two Categorical Variables (Statistical Dependency)				Contingency Tables								