## Statistics: Hypothesis Tests: When to use Which Test?

This handout will work as a basic reference sheet for Statistics Tutors and/or students to decide which statistical test is appropriate for use in a particular scenario and the purpose for conducting the tests.

Drawing Inferences About Two Population Means				
Situation	Assumptions	Test	Notes	



--Independent random samples

distributions are identical

--The population

f. Wilcoxon Rank Sum Test (i) When  $n_1$  ,  $n_2$  are 10 -



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*Remember*. If the variability between the sample means is large in comparison to the withinsample variation, we may conclude intuitively that the corresponding population means are different.

## Procedures To Perform Pairwise Comparison Among 3 or More Population Means

As a result of ANOVA if we find that there is a significant difference among the groups, then we may use one of the following procedures to find which among the groups are significantly different and which are not.



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Situation	Conditions to be met	Test	Notes
Inferences About 1 Population Proportion ( )	n <sub>0</sub> should be 5 and n(1- rem)s.162366663265.855t renc.623666633w When these conditions are met only then one can compute the large sample "z" test statistic.	One Proportion Test	[ Minitab > Stat > Basic Statistics > 1 Proportion ]
Inferences About Difference Between 2		I	I

Population Proportions 1

