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 --The population distributions are identical	f.	Wilcoxon Rank Sum Test	(i) When n_1 , n_2 are ≤ 10 –

Remember: If the variability between the sample means is large in comparison to the within-sample 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.

Situation	Conditions to be met	Test	Notes
Inferences About 1 Population Proportion (π)	-- $n\pi_0$ should be ≥ 5 and -- n(1- π_0) should be ≥ 5 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 Population Proportions π_1			