Subject: Statistics Created by: Marija Stanojcic Revised: 07/16/2018



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**Unequal Variances:** 

Check assumptions and drawn conclusion.



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Calculate the difference between the two observations for each pair: =

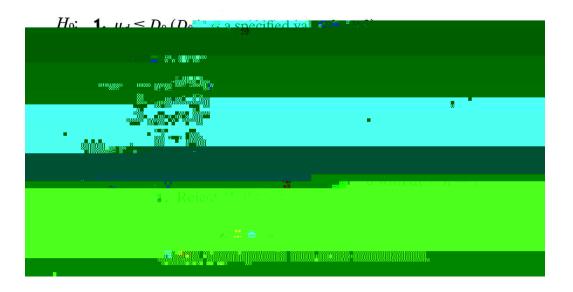
Calculate the mean difference:  $= \frac{1+2+...+1}{2}$ 

Calculate the standard deviation difference: =

$$\frac{(d_1 - d)^2 + (d_2 - d)^2 + \dots + (d_n - d)^2}{n}$$

- 0

Now, calculate t-test for sample differences:



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Wilcoxon Signed Rank Test..

: The following works were referred to during the creation of this handout: *Statistics: T*-Tests SCAA handout by Farzaneh Roostaeigrailoo, An Introduction to Statistical Methods and Data *Analysis, 6 th edition, Ott Longnecker; <u>MiniTab's "Why Should I Use a Paired T-Test?</u>", <u>Statistics</u> <u>Solutions "Paired T-Test Sample"</u>, and <u>Wikipedia's "One Sample T-Test" Article.</u>* 



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