Conducting an Independent Samples t-test in Vassar Stats

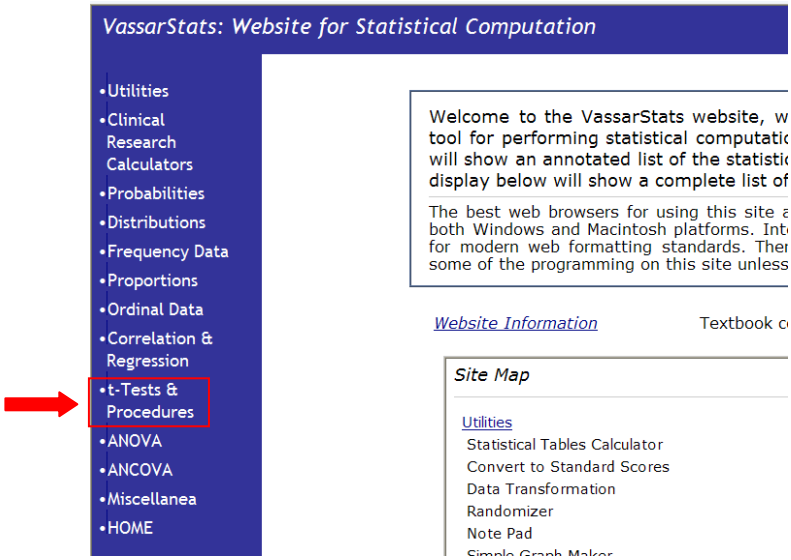
A. Key terms:

t-test: compares the means of two groups to see if the results are more likely due to chance or the effect of the IV on DV

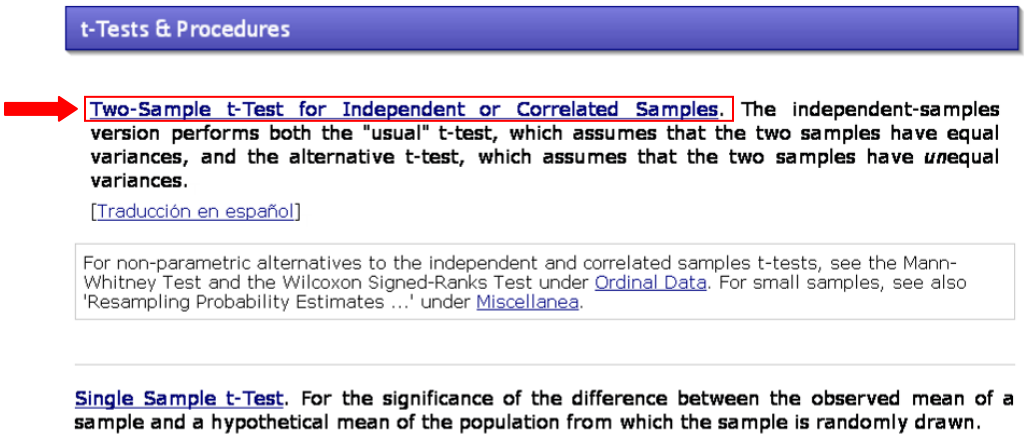
Independent samples t-test: participants in two groups are different

B. Running the analysis:

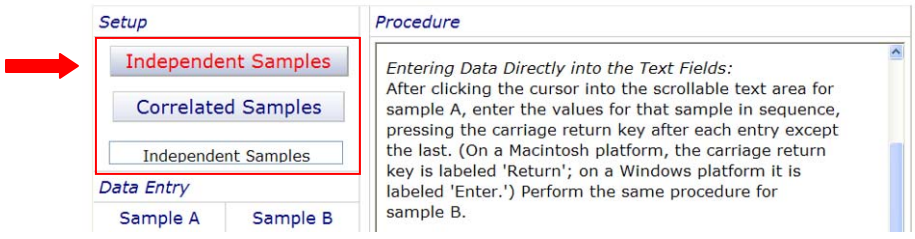
1. Go to Vassarstats: http://faculty.vassar.edu/lowry/VassarStats.html
2. In the left-hand column, click **t-test & Procedures**



3. At the top of the page, click **Two-Sample t-Test for Independent or Correlated Samples**

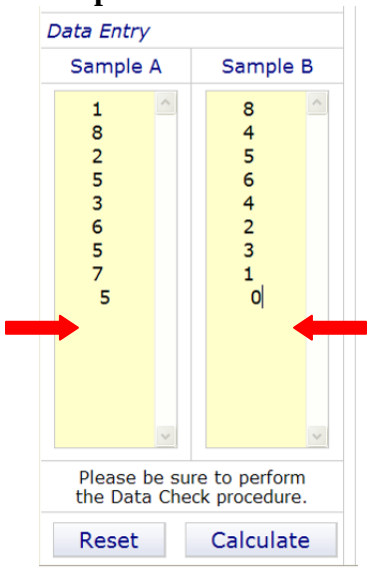


4. Select **Independent Samples**

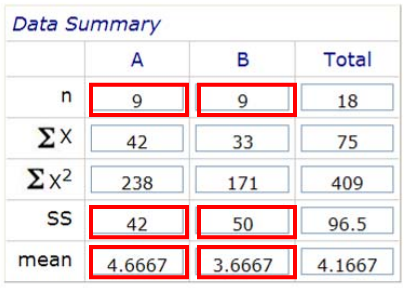


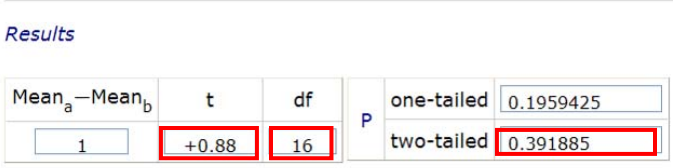
5. Enter data for your first group in **Sample A column**
6. Enter data for your first group in **Sample B column**

*** Ensure there is <u>not</u> an extra space below either data set**



7. Click the **calculate** button
8. Scroll down to review your results
9. Record the following values (2-3 decimal places) on a separate piece of paper: **mean**, **SS**, and **n** for each group, and the ***t*-value**, ***p*-value** (two-tailed) and ***df***.





C. Calculating SD from SS:

$$SD = \sqrt{\frac{SS}{n-1}}$$

Example:

If, SS = 8 and n = 3

Then, $SD = \sqrt{\frac{8}{(3-1)}} = 2$