# Lab 6

T-test: When the population variance is unknown, t-test is used. The t-test statistic is the following:

It has a t distribution with n-1 degrees of freedom.

P value for a two-sided test:

For one-sided test with hypothesis:

P-value will be the following:

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Use JMP for all the questions today.

Use this link for a tutorial on using JMP for t tests:

<http://web.utk.edu/~cwiek/201Tutorials/OneSampleTtest/>

Q.1 Download dataset from chapter 4. Use Ex 4-61 data. Find the P value for the mean to be > 4.

Q.2 Use Ex 4-63 data to find the P value for the mean to be = 1.0.

Q.3 Use any 3 datasets from this online database and perform t-tests:

<https://ww2.amstat.org/publications/jse/jse_data_archive.htm>