Connexions module: m17072

F DISTRIBUTION AND ONE-WAY ANOVA: SUMMARY*

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Abstract

This module provides a summary of F Distribution and One-Way ANOVA as a part of Collaborative Statistics collection (col10522) by Barbara Illowsky and Susan Dean.

• A One-Way ANOVA hypothesis test determines if several population means are equal. The distribution for the test is the F distribution with 2 different degrees of freedom.

Assumptions:

- a. Each population from which a sample is taken is assumed to be normal.
- b. Each sample is randomly selected and independent.
- c. The populations are assumed to have equal standard deviations (or variances)
- A **Test of Two Variances** hypothesis test determines if two variances are the same. The distribution for the hypothesis test is the F distribution with 2 different degrees of freedom.

Assumptions:

- a. The populations from which the two samples are drawn are normally distributed.
- b. The two populations are independent of each other.

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