

What the hypotheses are for all S3 tests

1 Estimation, confidence intervals and tests

1.1 The difference between means

$$H_0 : \mu_a = \mu_b$$

$$H_1 : \mu_a > \mu_b \text{ or } \mu_a < \mu_b \text{ or } \mu_a \neq \mu_b$$

2 Goodness of fit and contingency tables

2.1 Goodness of fit of distributions

H_0 : The distribution is suitable for the results

H_1 : The distribution is not suitable for the results

2.2 Contingency tables

H_0 : The two data sets are independent

H_1 : The two data sets are not independent

3 Regression and correlation

3.1 Spearman's rank

$$H_0: \rho_s = 0$$

$$H_1: \rho_s < 0 \text{ or } \rho_s > 0 \text{ or } \rho_s \neq 0$$