

Command	Explanation	Notes
<code>anova()</code>	calculates $p$ -value for joint test	
<code>linearHypothesis()</code>	tests a linear (joint) hypothesis	requires “car”
<code>resettest()</code>	performs reset test	requires “lmtest”
<code>jarque.bera.test()</code>	performs Jarque-Bera test	requires “tseries”
<code>vcovHC()</code>	heteroskedasticity-robust calculations	requires “sandwich”
<code>coeftest()</code>	tests regression coefficients	requires “lmtest”
<code>waldtest()</code>	tests overall significance	requires “lmtest”
<code>dwtest()</code>	tests for first-order autocorrelation	requires “lmtest”
<code>bgtest()</code>	tests for higher-order autocorrelation	requires “lmtest”

## Example Code

For unrestricted regression `olsu` and restricted regression `olsr` with the same dependent variable (e.g. all zero hypotheses), find  $p$ -value for restrictions with `anova(olsu, olsr)`.

For unrestricted regression `olsu` and restrictions  $H_0 : \beta_2 = -3$  and  $\beta_3 = 100$ , find the  $p$ -value for restrictions with `linearHypothesis(olsu, c("x2 = -3", "x3 = 100"))`.

For unrestricted regression `olsu`, test for the relevance of  $\hat{y}^2$  and  $\hat{y}^3$  nonlinear terms with `resettest(ols1)`.

For regression `ols1`, test for heteroskedasticity with `jarque.bera.test(ols1$residuals)`.

To see heteroskedasticity-robust standard errors for regression `ols1`, use the command `coeftest(ols1, vcov = vcovHC(ols1, type = "HC0"))`.

To see the heteroskedasticity-robust  $F$ -statistic for regression `ols1`, use the command `waldtest(ols1, vcov = vcovHC(ols1, type = "HC0"))`.

For regression `ols1`, test for 3rd-order autocorrelation with `bgtest(ols1, order=3, type="F")`.