

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

```
anova(olsu, olsr)
```

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

```
linearHypothesis(olsu, c("x2 = -3", "x3 = 100"))
```

Find the  $p$ -value for restrictions with unrestricted regression `olsu` and restrictions  $H_0 : \beta_2 = -3$  and  $\beta_3 = 100$ .

```
resettest(ols1)
```

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

```
jarque.bera.test(ols1$residuals)
```

To test for heteroskedasticity of `ols1`.

```
coeftest(ols1, vcov = vcovHC(ols1, type = "HC0"))
```

To see heteroskedasticity-robust standard errors of `ols1`.

```
waldtest(ols1, vcov = vcovHC(ols1, type = "HC0"))
```

To see the heteroskedasticity-robust  $F$ -statistic of `ols1`.

```
bgtest(ols1, order=3, type="F")
```

Test for third-order autocorrelation of `ols1`.