

## Examples 1-5 & 1-6

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```
[ ]: # install the following packages and libraries (if not already installed)
install.packages("pder")
install.packages("plm")
library("plm")
library("car")

# import the data (if not already imported)
data("Tileries", package = "pder")
```

```
[2]: ##-----Block 1-----

#### Example 1-5 ####

## -----

# pooled linear model specification
til.fm <- log(output) ~ log(labor) + log(machine)
lm.mod <- lm(til.fm, data = Tileries, subset = area == "fayoum")

## -----

# the lht() function is the linear hypothesis test. (Wald Test)
lht(lm.mod, "log(labor) + log(machine) = 1")

## -----

# here the lht() function allows for heteroskedasticity
lht(lm.mod, "log(labor) + log(machine) = 1", vcov=vcovHC)
```

Res.Df	RSS	Df	Sum of Sq	F	Pr(>F)
175	0.6015366	NA	NA	NA	NA
174	0.6004922	1	0.001044413	0.3026315	0.5829429

  

Res.Df	Df	F	Pr(>F)
175	NA	NA	NA
174	1	0.2303341	0.631879

```
[3]: ##-----Block 2-----

#### Example 1-6 ####

## -----

# pooled linear model specification
plm.mod <- plm(til.fm, data = Tileries, subset = area == "fayoum")

## -----

# linear hypothesis test for the pooled linear model specification
# allowing for heteroskedasticity
lht(plm.mod, "log(labor) + log(machine) = 1", vcov = vcovHC)
```

Res.Df	Df	Chisq	Pr(>Chisq)
167	NA	NA	NA
166	1	0.757917	0.3839812