

表題

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フレームタイトル I

```
example(step)
```

```
##
```

```
## step> ## No test:
```

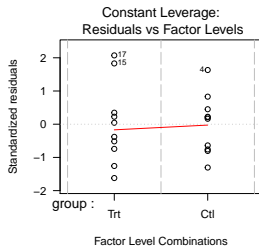
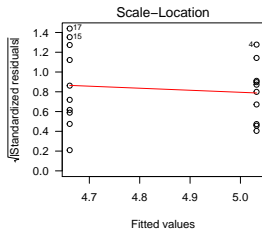
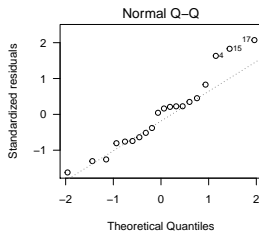
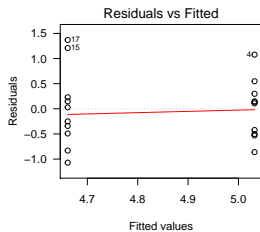
```
## step> ## following on from example(lm)
```

```
## step> ## Don't show:
```

```
## step> utils::example("lm", echo = FALSE)
```

フレームタイトル II

lm(weight ~ group)



フレームタイトル III

```
##
## step> ## End Don't show
## step> step(lm.D9)
## Start:  AIC=-12.58
## weight ~ group
##
##           Df Sum of Sq  RSS   AIC
## - group    1      0.688 9.42 -13.1
## <none>                8.73 -12.6
##
## Step:  AIC=-13.06
## weight ~ 1
##
##
## Call:
## lm(formula = weight ~ 1)
##
## Coefficients:
## (Intercept)
##           4.85
```

フレームタイトル IV

```
##
##
## step> summary(lm1 <- lm(Fertility ~ ., data = swiss))
##
## Call:
## lm(formula = Fertility ~ ., data = swiss)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -15.274  -5.262   0.503   4.120  15.321
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    66.9152    10.7060     6.25 1.9e-07 ***
## Agriculture    -0.1721     0.0703    -2.45 0.0187 *
## Examination    -0.2580     0.2539    -1.02 0.3155
## Education      -0.8709     0.1830    -4.76 2.4e-05 ***
## Catholic        0.1041     0.0353     2.95 0.0052 **
## Infant.Mortality 1.0770     0.3817     2.82 0.0073 **
## ---
```

フレームタイトル V

```
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 7.17 on 41 degrees of freedom
## Multiple R-squared:  0.707, Adjusted R-squared:  0.671
## F-statistic: 19.8 on 5 and 41 DF,  p-value: 5.59e-10
##
##
## step> slm1 <- step(lm1)
## Start:  AIC=190.7
## Fertility ~ Agriculture + Examination + Education + Catholic +
##      Infant.Mortality
##
##              Df Sum of Sq  RSS AIC
## - Examination      1      53 2158 190
## <none>              2105 191
## - Agriculture      1     308 2413 195
## - Infant.Mortality  1     409 2514 197
## - Catholic          1     448 2553 198
## - Education         1    1163 3268 209
##
```

フレームタイトル VI

```
## Step:  AIC=189.9
## Fertility ~ Agriculture + Education + Catholic + Infant.Mortality
##
##              Df Sum of Sq  RSS AIC
## <none>                2158 190
## - Agriculture          1      264 2422 193
## - Infant.Mortality      1      410 2568 196
## - Catholic              1      957 3115 205
## - Education             1     2250 4408 221
##
## step> summary(slm1)
##
## Call:
## lm(formula = Fertility ~ Agriculture + Education + Catholic +
##      Infant.Mortality, data = swiss)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -14.676  -6.052   0.751   3.166  16.142
##
```

フレームタイトル VII

```
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    62.1013     9.6049   6.47 8.5e-08 ***
## Agriculture    -0.1546     0.0682  -2.27  0.0286 *
## Education      -0.9803     0.1481  -6.62 5.1e-08 ***
## Catholic        0.1247     0.0289   4.31 9.5e-05 ***
## Infant.Mortality 1.0784     0.3819   2.82  0.0072 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 7.17 on 42 degrees of freedom
## Multiple R-squared:  0.699, Adjusted R-squared:  0.671
## F-statistic: 24.4 on 4 and 42 DF,  p-value: 1.72e-10
##
##
## step> slm1$anova
##           Step Df Deviance Resid. Df Resid. Dev    AIC
## 1              NA      NA         41      2105 190.7
## 2 - Examination  1    53.03         42      2158 189.9
##
```


フレームタイトル VIII

```
## step> ## End(No test)
## step>
## step>
```