```
data new;
      input TRT minutes;
cards;
0 4.52
0 4.79
0 4.04
0 9.01
0 10.67
0 9.06
0 10.21
1 11.11
1 8.11
1 10.26
1 11.53
1 11.52
1 10.52
run;
title1 'Comparing Time to Headache Relief between Two Treatments';
proc ttest data=new;
      class trt;
      var minutes;
run;
proc reg data=new;
      model minutes=trt/p;
run;
```

OUTPUT:

```
Comparing Time to Headache Relief between Two Treatments

The TTEST Procedure
Variable:  minutes

TRT            N        Mean     Std Dev     Std Err     Minimum     Maximum

0              7      7.4714      2.8953      1.0943      4.0400     10.6700
1              6     10.5083      1.2840      0.5242      8.1100     11.5300
Diff (1-2)           -3.0369      2.3069      1.2834

TRT           Method               Mean       95% CL Mean        Std Dev      95% CL Std Dev

0                                 7.4714      4.7937  10.1491      2.8953      1.8657   6.3757
1                                10.5083      9.1609  11.8558      1.2840      0.8015   3.1491
Diff (1-2)    Pooled             -3.0369     -5.8618  -0.2121      2.3069      1.6342   3.9169
Diff (1-2)    Satterthwaite      -3.0369     -5.8050  -0.2688

Method           Variances        DF    t Value    Pr > |t|

Pooled           Equal            11      -2.37      0.0374
Satterthwaite    Unequal      8.5303      -2.50      0.0351

              Equality of Variances

Method      Num DF    Den DF    F Value    Pr > F
Folded F         6         5       5.08    0.0949
```

Comparing Time to Headache Relief between Two Treatments

The REG Procedure
Model: MODEL1
Dependent Variable: minutes

Number of Observations Read 13
Number of Observations Used 13

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	29.79671	29.79671	5.60	0.0374
Error	11	58.54017	5.32183		
Corrected Total	12	88.33688			

Root MSE	2.30691	R-Square	0.3373
Dependent Mean	8.87308	Adj R-Sq	0.2771
Coeff Var	25.99899		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	7.47143	0.87193	8.57	<.0001
TRT	1	3.03690	1.28345	2.37	0.0374

Output Statistics

Output Statistics

Obs	Dependent Variable	Predicted Value	Residual
1	4.5200	7.4714	-2.9514
2	4.7900	7.4714	-2.6814
3	4.0400	7.4714	-3.4314
4	9.0100	7.4714	1.5386
5	10.6700	7.4714	3.1986
6	9.0600	7.4714	1.5886
7	10.2100	7.4714	2.7386
8	11.1100	10.5083	0.6017
9	8.1100	10.5083	-2.3983
10	10.2600	10.5083	-0.2483
11	11.5300	10.5083	1.0217
12	11.5200	10.5083	1.0117
13	10.5200	10.5083	0.0117

Sum of Residuals	0
Sum of Squared Residuals	58.54017
Predicted Residual SS (PRESS)	80.32996

```
data new;
      input TRT minutes;
cards;
-1 4.52
-1 4.79
-1 4.04
-1 9.01
-1 10.67
-1 9.06
-1 10.21
1 11.11
1 8.11
1 10.26
1 11.53
1 11.52
1 10.52
run;
title1 'Comparing Time to Headache Relief between Two Treatments';
proc ttest data=new;
      class trt;
      var minutes;
run;
proc reg data=new lineprinter;
      model minutes=trt/p;
run;
```

OUTPUT:

```
Comparing Time to Headache Relief between Two Treatments

The TTEST Procedure

Variable:  minutes

TRT            N        Mean     Std Dev     Std Err     Minimum     Maximum

-1             7      7.4714      2.8953      1.0943      4.0400     10.6700
 1             6     10.5083      1.2840      0.5242      8.1100     11.5300
Diff (1-2)           -3.0369      2.3069      1.2834

TRT          Method               Mean       95% CL Mean        Std Dev      95% CL Std Dev

-1                             7.4714      4.7937  10.1491      2.8953      1.8657   6.3757
 1                            10.5083      9.1609  11.8558      1.2840      0.8015   3.1491
Diff (1-2)   Pooled           -3.0369     -5.8618  -0.2121      2.3069      1.6342   3.9169
Diff (1-2)   Satterthwaite    -3.0369     -5.8050  -0.2688

Method          Variances        DF    t Value    Pr > |t|

Pooled          Equal            11      -2.37      0.0374
Satterthwaite   Unequal      8.5303      -2.50      0.0351

             Equality of Variances

Method      Num DF    Den DF    F Value    Pr > F

Folded F         6         5       5.08    0.0949
```

Comparing Time to Headache Relief between Two Treatments

The REG Procedure
Model: MODEL1
Dependent Variable: minutes

Number of Observations Read 13
Number of Observations Used 13

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	29.79671	29.79671	5.60	0.0374
Error	11	58.54017	5.32183		
Corrected Total	12	88.33688			

Root MSE	2.30691	R-Square	0.3373
Dependent Mean	8.87308	Adj R-Sq	0.2771
Coeff Var	25.99899		

Parameter Estimates

Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	1	8.98988	0.64172	14.01	<.0001
TRT	1	1.51845	0.64172	2.37	0.0374

Output Statistics

Obs	Dependent Variable	Predicted Value	Residual
1	4.5200	7.4714	-2.9514
2	4.7900	7.4714	-2.6814
3	4.0400	7.4714	-3.4314
4	9.0100	7.4714	1.5386
5	10.6700	7.4714	3.1986
6	9.0600	7.4714	1.5886
7	10.2100	7.4714	2.7386
8	11.1100	10.5083	0.6017
9	8.1100	10.5083	-2.3983
10	10.2600	10.5083	-0.2483
11	11.5300	10.5083	1.0217
12	11.5200	10.5083	1.0117
13	10.5200	10.5083	0.0117

Sum of Residuals	0
Sum of Squared Residuals	58.54017
Predicted Residual SS (PRESS)	80.32996