

Obs	y	group1	group2	x1	x2	x3
1	7	1	1	1	1	1
2	5	1	1	1	1	1
3	3	1	1	1	1	1
4	5	1	2	1	-1	-1
5	9	2	1	-1	1	-1
6	6	2	2	-1	-1	1
7	9	2	2	-1	-1	1
8	12	2	2	-1	-1	1

The REG Procedure
Model: MODEL1
Dependent Variable: y

Number of Observations Read	8
Number of Observations Used	8

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	0	0	.	.	.
Error	7	58.00000	8.28571		
Corrected Total	7	58.00000			

Root MSE	2.87849	R-Square	0.0000
Dependent Mean	7.00000	Adj R-Sq	0.0000
Coeff Var	41.12131		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	7.00000	1.01770	6.88	0.0002

*The REG Procedure
Model: MODEL2
Dependent Variable: y*

Number of Observations Read	8
Number of Observations Used	8

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	32.00000	32.00000	7.38	0.0348
Error	6	26.00000	4.33333		
Corrected Total	7	58.00000			

Root MSE	2.08167	R-Square	0.5517
Dependent Mean	7.00000	Adj R-Sq	0.4770
Coeff Var	29.73809		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	7.00000	0.73598	9.51	<.0001
x1	1	-2.00000	0.73598	-2.72	0.0348

The REG Procedure
 Model: MODEL3
 Dependent Variable: y

Number of Observations Read	8
Number of Observations Used	8

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	8.00000	8.00000	0.96	0.3650
Error	6	50.00000	8.33333		
Corrected Total	7	58.00000			

Root MSE	2.88675	R-Square	0.1379
Dependent Mean	7.00000	Adj R-Sq	-0.0057
Coeff Var	41.23930		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	7.00000	1.02062	6.86	0.0005
x2	1	-1.00000	1.02062	-0.98	0.3650

The REG Procedure
Model: MODEL4
Dependent Variable: y

Number of Observations Read	8
Number of Observations Used	8

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	32.00000	16.00000	3.08	0.1345
Error	5	26.00000	5.20000		
Corrected Total	7	58.00000			

Root MSE	2.28035	R-Square	0.5517
Dependent Mean	7.00000	Adj R-Sq	0.3724
Coeff Var	32.57644		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	7.00000	0.80623	8.68	0.0003
x1	1	-2.00000	0.93095	-2.15	0.0844
x2	1	0	0.93095	0.00	1.0000

*The REG Procedure
Model: MODEL5
Dependent Variable: y*

Number of Observations Read	8
Number of Observations Used	8

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	8.00000	4.00000	0.40	0.6900
Error	5	50.00000	10.00000		
Corrected Total	7	58.00000			

Root MSE	3.16228	R-Square	0.1379
Dependent Mean	7.00000	Adj R-Sq	-0.2069
Coeff Var	45.17540		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	7.00000	1.29099	5.42	0.0029
x2	1	-1.00000	1.11803	-0.89	0.4121
x3	1	0	1.29099	0.00	1.0000

The REG Procedure
Model: MODEL6
Dependent Variable: y

Number of Observations Read	8
Number of Observations Used	8

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	32.00000	10.66667	1.64	0.3146
Error	4	26.00000	6.50000		
Corrected Total	7	58.00000			

Root MSE	2.54951	R-Square	0.5517
Dependent Mean	7.00000	Adj R-Sq	0.2155
Coeff Var	36.42157		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t
Intercept	1	7.00000	1.04083	6.73	0.0025
x1	1	-2.00000	1.04083	-1.92	0.1270
x2	1	0	1.04083	0.00	1.0000
x3	1	0	1.04083	0.00	1.0000

The GLM Procedure

Class Level Information		
Class	Levels	Values
group1	2	1 2
group2	2	1 2

Number of Observations Read	8
Number of Observations Used	8

The GLM Procedure

Dependent Variable: y

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	32.00000000	10.66666667	1.64	0.3146
Error	4	26.00000000	6.50000000		
Corrected Total	7	58.00000000			

R-Square	Coeff Var	Root MSE	y Mean
0.551724	36.42157	2.549510	7.000000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
group2	1	8.00000000	8.00000000	1.23	0.3295
group1	1	24.00000000	24.00000000	3.69	0.1270
group1*group2	1	0.00000000	0.00000000	0.00	1.0000

Source	DF	Type III SS	Mean Square	F Value	Pr > F
group2	1	0.00000000	0.00000000	0.00	1.0000
group1	1	24.00000000	24.00000000	3.69	0.1270
group1*group2	1	0.00000000	0.00000000	0.00	1.0000

The GLM Procedure

Class Level Information		
Class	Levels	Values
group1	2	1 2
group2	2	1 2

Number of Observations Read	8
Number of Observations Used	8

The GLM Procedure

Dependent Variable: y

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	32.00000000	10.66666667	1.64	0.3146
Error	4	26.00000000	6.50000000		
Corrected Total	7	58.00000000			

R-Square	Coeff Var	Root MSE	y Mean
0.551724	36.42157	2.549510	7.000000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
group1	1	32.00000000	32.00000000	4.92	0.0907
group2	1	0.00000000	0.00000000	0.00	1.0000
group1*group2	1	0.00000000	0.00000000	0.00	1.0000

Source	DF	Type III SS	Mean Square	F Value	Pr > F
group1	1	24.00000000	24.00000000	3.69	0.1270
group2	1	0.00000000	0.00000000	0.00	1.0000
group1*group2	1	0.00000000	0.00000000	0.00	1.0000