

***The GLM Procedure***

<b>Class Level Information</b>		
<b>Class</b>	<b>Levels</b>	<b>Values</b>
<b>car</b>	5	1 2 3 4 5
<b>add</b>	5	1 2 3 4 5

<b>Number of Observations Read</b>	20
<b>Number of Observations Used</b>	20

**The GLM Procedure**

**Dependent Variable: mileage**

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	66.93333333	8.36666667	9.19	0.0007
Error	11	10.01666667	0.91060606		
Corrected Total	19	76.95000000			

R-Square	Coeff Var	Root MSE	mileage Mean
0.869829	7.919144	0.954257	12.05000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
add	4	31.70000000	7.92500000	8.70	0.0020
car	4	35.23333333	8.80833333	9.67	0.0013

Source	DF	Type III SS	Mean Square	F Value	Pr > F
add	4	35.73333333	8.93333333	9.81	0.0012
car	4	35.23333333	8.80833333	9.67	0.0013

Contrast	DF	Contrast SS	Mean Square	F Value	Pr > F
chemicals	1	23.34722222	23.34722222	25.64	0.0004
linear chem 1	1	10.80000000	10.80000000	11.86	0.0055
nonlinear chem 1	1	0.17777778	0.17777778	0.20	0.6672
doses chem 2	1	1.40833333	1.40833333	1.55	0.2395

***The GLM Procedure  
Least Squares Means***

<b>add</b>	<b>mileage LSMEAN</b>	<b>Standard Error</b>	<b>Pr &gt;  t </b>
<b>1</b>	14.2500000	0.4896866	<.0001
<b>2</b>	12.7833333	0.4896866	<.0001
<b>3</b>	11.8500000	0.4896866	<.0001
<b>4</b>	11.1166667	0.4896866	<.0001
<b>5</b>	10.2500000	0.4896866	<.0001

**The GLM Procedure**

Level of add	N	mileage	
		Mean	Std Dev
1	4	14.0000000	2.16024690
2	4	12.7500000	1.89296945
3	4	11.5000000	1.73205081
4	4	11.7500000	0.95742711
5	4	10.2500000	1.70782513

Level of car	N	mileage	
		Mean	Std Dev
1	4	12.5000000	1.29099445
2	4	13.5000000	2.64575131
3	4	12.0000000	1.82574186
4	4	12.5000000	0.57735027
5	4	9.7500000	1.70782513

## Estimated Treatment Means, MPG Example

