

The SAS System

Obs	driver	car	gas	mileage
1	1	1	4	15.5
2	1	2	2	33.9
3	1	3	3	13.2
4	1	4	1	29.1
5	2	1	2	16.3
6	2	2	3	26.6
7	2	3	1	19.4
8	2	4	4	22.8
9	3	1	3	10.8
10	3	2	1	31.1
11	3	3	4	17.1
12	3	4	2	30.3
13	4	1	1	14.7
14	4	2	4	34.0
15	4	3	2	19.7
16	4	4	3	21.6

The GLM Procedure

Class Level Information		
Class	Levels	Values
driver	4	1 2 3 4
car	4	1 2 3 4
gas	4	1 2 3 4

Number of Observations Read	16
Number of Observations Used	16

The GLM Procedure

Dependent Variable: mileage

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	9	851.7906250	94.6434028	23.85	0.0005
Error	6	23.8087500	3.9681250		
Corrected Total	15	875.5993750			

R-Square	Coeff Var	Root MSE	mileage Mean
0.972809	8.950364	1.992015	22.25625

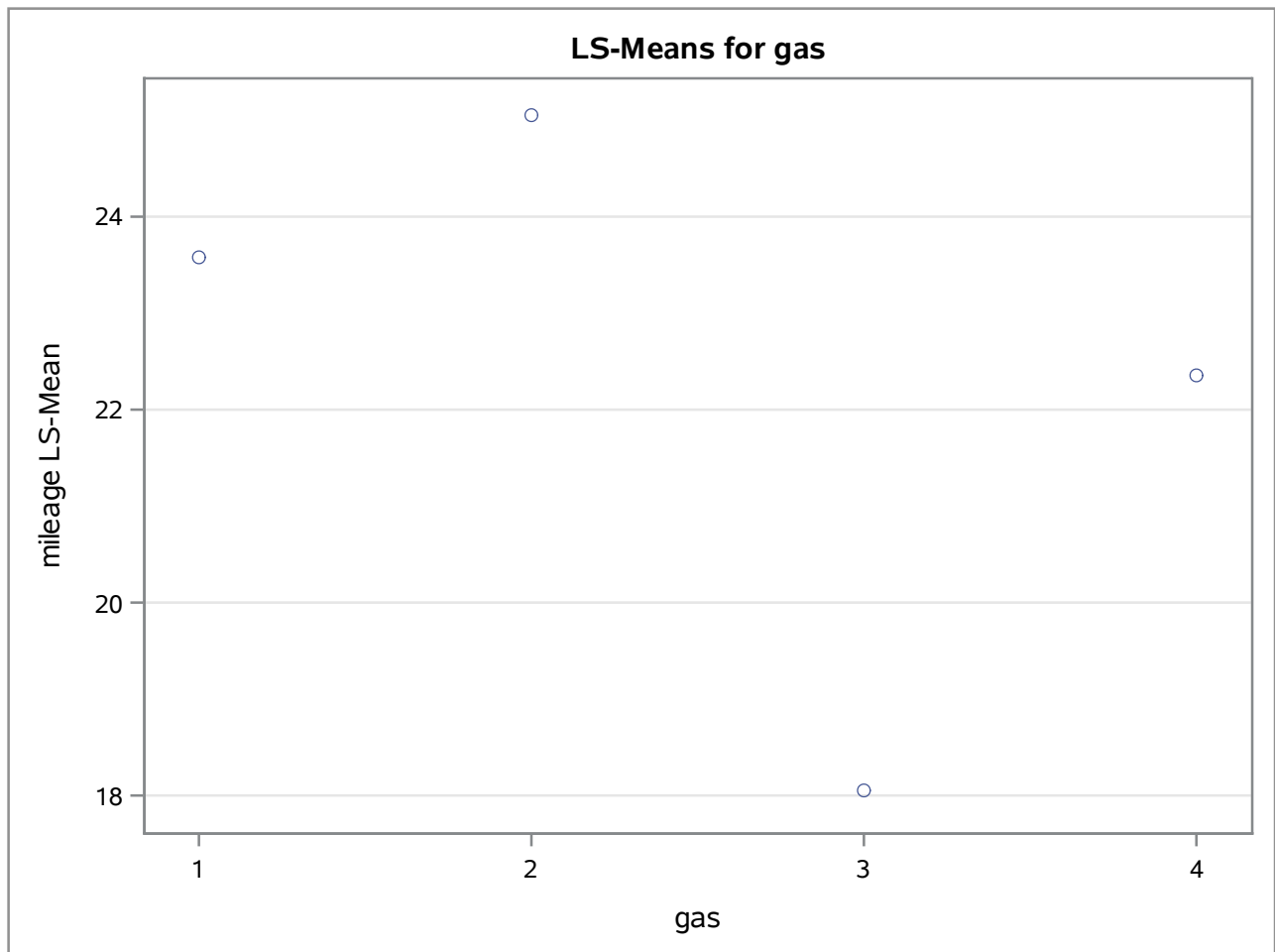
Source	DF	Type I SS	Mean Square	F Value	Pr > F
driver	3	5.8968750	1.9656250	0.50	0.6987
car	3	736.9118750	245.6372917	61.90	<.0001
gas	3	108.9818750	36.3272917	9.15	0.0117

Source	DF	Type III SS	Mean Square	F Value	Pr > F
driver	3	5.8968750	1.9656250	0.50	0.6987
car	3	736.9118750	245.6372917	61.90	<.0001
gas	3	108.9818750	36.3272917	9.15	0.0117

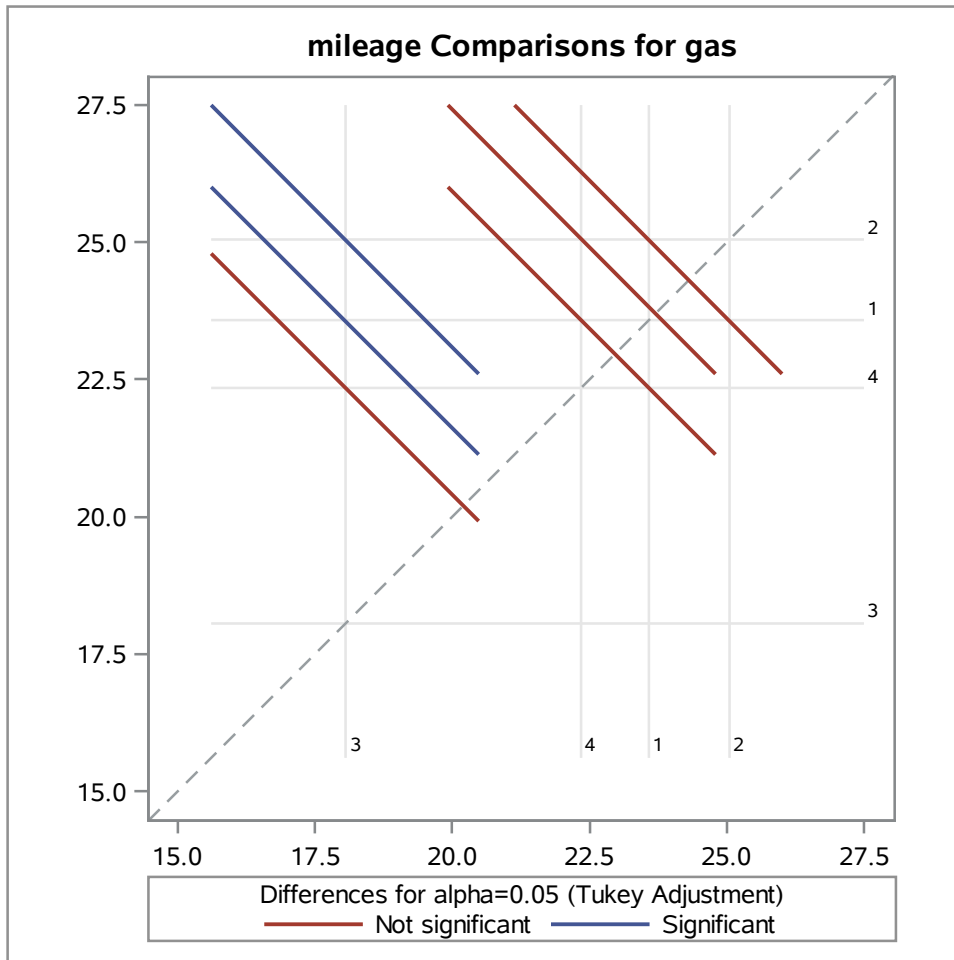
The GLM Procedure
 Least Squares Means
 Adjustment for Multiple Comparisons: Tukey

gas	mileage LSMEAN	LSMEAN Number
1	23.5750000	1
2	25.0500000	2
3	18.0500000	3
4	22.3500000	4

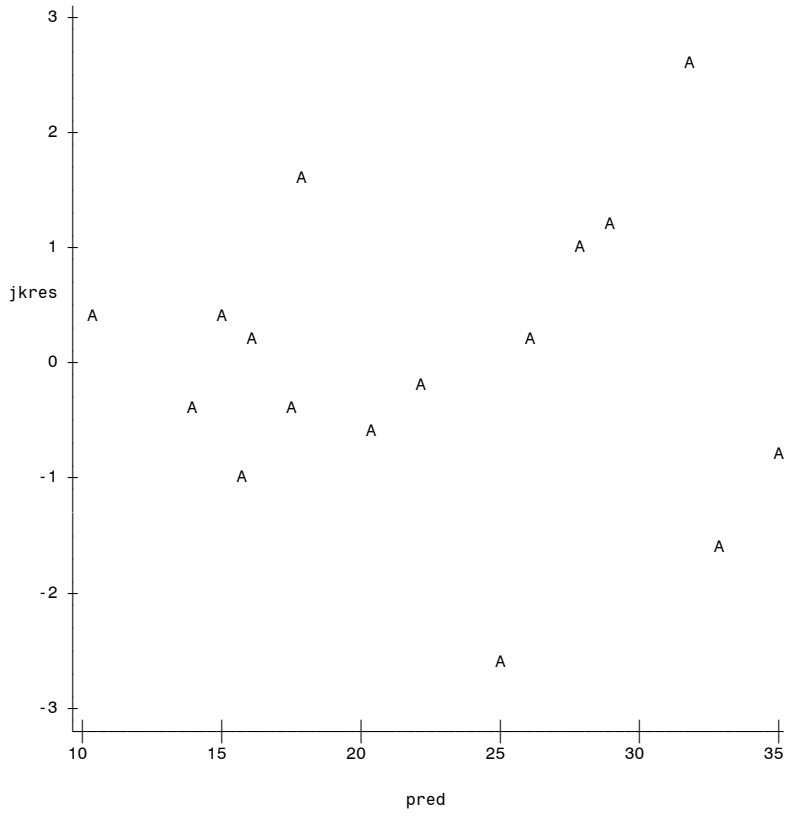
Least Squares Means for effect gas Pr > t for H0: LSMean(i)=LSMean(j)				
Dependent Variable: mileage				
i/j	1	2	3	4
1		0.7307	0.0297	0.8203
2	0.7307		0.0100	0.3136
3	0.0297	0.0100		0.0808
4	0.8203	0.3136	0.0808	

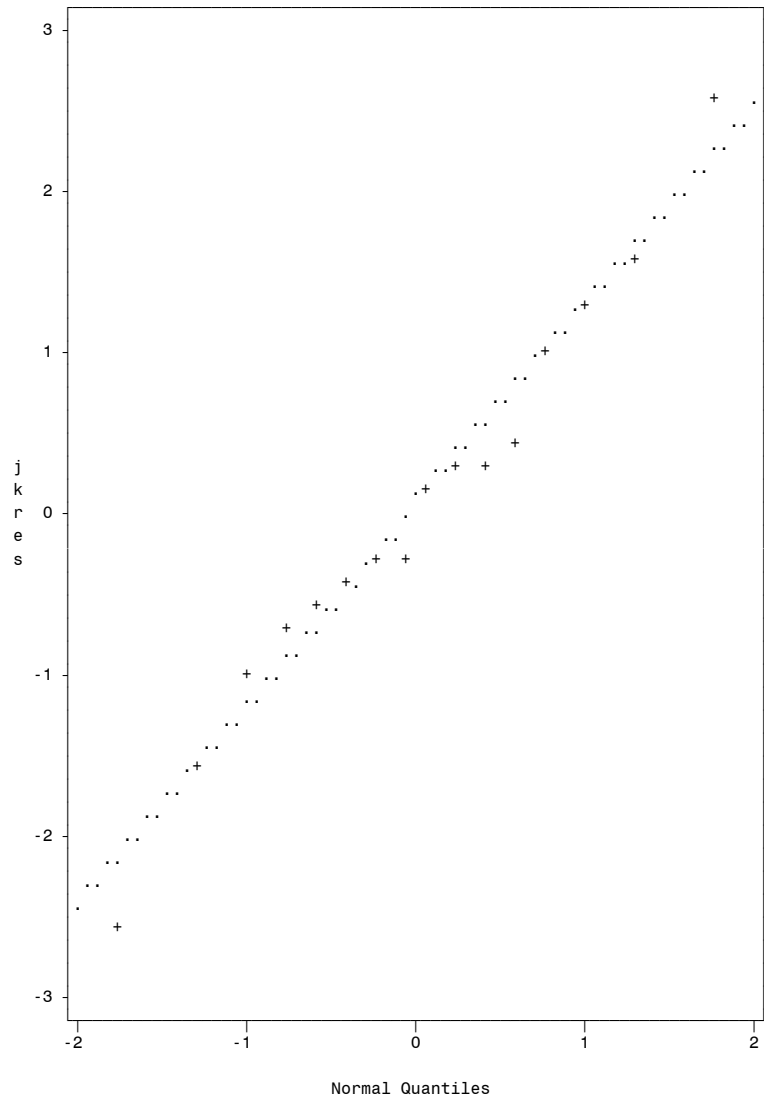


The GLM Procedure
Least Squares Means
Adjustment for Multiple Comparisons: Tukey



Plot of jkres*pred. Legend: A = 1 obs, B = 2 obs, etc.





Normal Line: ... Mu=0.0078, Sigma=1.2484