

Truck Tire Experiment

Response: mpg

Factor: Brand

Block: Day

Summary of Fit

RSquare	0.907281
RSquare Adj	0.845469
Root Mean Square Error	0.133521
Mean of Response	6.7825
Observations (or Sum Wgts)	16

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	6	1.5700500	0.261675	14.6779
Error	9	0.1604500	0.017828	Prob > F
C. Total	15	1.7305000		0.0003

Effect Tests

Source	Nparm	DF	Sum of Squares	F Ratio	Prob > F
Brand	3	3	1.3070500	24.4385	0.0001
Day	3	3	0.2630000	4.9174	0.0272

Effect Details

Brand

Least Squares Means Table

Level	Least Sq Mean	Std Error	Mean
B1	6.4550000	0.06676035	6.45500
B2	6.8325000	0.06676035	6.83250
B3	6.6225000	0.06676035	6.62250
B4	7.2200000	0.06676035	7.22000

LSMeans Differences Tukey HSD

$\alpha=0.050$ $Q=3.12182$

LSMean[i] By LSMean[j]

Mean[i]-Mean[j] Std Err Dif Lower CL Dif Upper CL Dif	B1	B2	B3	B4
B1	0	-0.3775	-0.1675	-0.765
	0	0.09441	0.09441	0.09441
	0	-0.6722	-0.4622	-1.0597
	0	-0.0828	0.12724	-0.4703
B2	0.3775	0	0.21	-0.3875
	0.09441	0	0.09441	0.09441
	0.08276	0	-0.0847	-0.6822
	0.67224	0	0.50474	-0.0928
B3	0.1675	-0.21	0	-0.5975
	0.09441	0.09441	0	0.09441
	-0.1272	-0.5047	0	-0.8922
	0.46224	0.08474	0	-0.3028
B4	0.765	0.3875	0.5975	0
	0.09441	0.09441	0.09441	0
	0.47026	0.09276	0.30276	0
	1.05974	0.68224	0.89224	0

Level		Least Sq Mean
B4	A	7.220000
B2	B	6.832500
B3	B C	6.622500
B1	C	6.455000

Levels not connected by same letter are significantly different.

Day
Least Squares Means Table

Level	Least Sq Mean	Std Error	Mean
1	6.637500	0.06676035	6.63750
2	6.677500	0.06676035	6.67750
3	6.872500	0.06676035	6.87250
4	6.942500	0.06676035	6.94250

Analysis of Residuals (Brand and Day in Model)

