

## Correct Analysis of Reaction Time Data

**Response: Reaction Time**

**Factor: Alcohol**

**Block: Individual**

### Summary of Fit

RSquare	0.990557
RSquare Adj	0.984787
Root Mean Square Error	0.11611
Mean of Response	2.226667
Observations (or Sum Wgts)	30

### Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	11	25.456000	2.31418	171.6563
Error	18	0.242667	0.01348	Prob > F
C. Total	29	25.698667		<.0001

### Effect Tests

Source	Nparm	DF	Sum of Squares	F Ratio	Prob > F
Alcohol	2	2	2.690667	99.7912	<.0001
Individual	9	9	22.765333	187.6264	<.0001

### Effect Details

#### Alcohol

#### Least Squares Means Table

Level	Least Sq Mean	Std Error	Mean
0	1.9400000	0.03671714	1.94000
2	2.1000000	0.03671714	2.10000
4	2.6400000	0.03671714	2.64000

**LSMeans Differences Student's t**

$\alpha=0.050$   $t=2.10092$

LSMean[i] By LSMean[j]

Mean[i]-Mean[j]	0	2	4
Std Err Dif			
Lower CL Dif			
Upper CL Dif			
0	0	-0.16	-0.7
	0	0.05193	0.05193
	0	-0.2691	-0.8091
	0	-0.0509	-0.5909
2	0.16	0	-0.54
	0.05193	0	0.05193
	0.05091	0	-0.6491
	0.26909	0	-0.4309
4	0.7	0.54	0
	0.05193	0.05193	0
	0.59091	0.43091	0
	0.80909	0.64909	0

Level		Least Sq Mean
4	A	2.6400000
2	B	2.1000000
0	C	1.9400000

Levels not connected by same letter are significantly different.

