The GLM Procedure

Class Level Information		
Class	**Levels**	**Values**
replicate	4	1 2 3 4
treatment	6	1 2 3 4 5 6
number	6	5 6 7 8 9 10

Number of Observations Read	144
Number of Observations Used	144

The GLM Procedure

Dependent Variable: assessment

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	53	93487.72008	1763.91925	1745.33	<.0001
Error	90	90.95836	1.01065		
Corrected Total	143	93578.67845			

R-Square	Coeff Var	Root MSE	assessment Mean
0.999028	3.445957	1.005310	29.17361

Source	DF	Type I SS	Mean Square	F Value	Pr > F
replicate	3	25.96528	8.65509	8.56	<.0001
treatment	5	92771.05324	18554.21065	18358.7	<.0001
replicate*treatment	15	158.82644	10.58843	10.48	<.0001
number	5	468.45149	93.69030	92.70	<.0001
treatment*number	25	63.42362	2.53694	2.51	0.0008

Source	DF	Type III SS	Mean Square	F Value	Pr > F
replicate	3	25.96528	8.65509	8.56	<.0001
treatment	5	92771.05324	18554.21065	18358.7	<.0001
replicate*treatment	15	158.82644	10.58843	10.48	<.0001
number	5	468.45149	93.69030	92.70	<.0001
treatment*number	25	63.42362	2.53694	2.51	0.0008

The GLM Procedure

Source	Type III Expected Mean Square
replicate	Var(Error) + 6 Var(replicate*treatment) + 36 Var(replicate)
treatment	Var(Error) + 6 Var(replicate*treatment) + Q(treatment,treatment*number)
replicate*treatment	Var(Error) + 6 Var(replicate*treatment)
number	Var(Error) + Q(number,treatment*number)
treatment*number	Var(Error) + Q(treatment*number)

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

Standard Errors and Probabilities Calculated Using the Type III MS for replicate*treatment as an Error Term

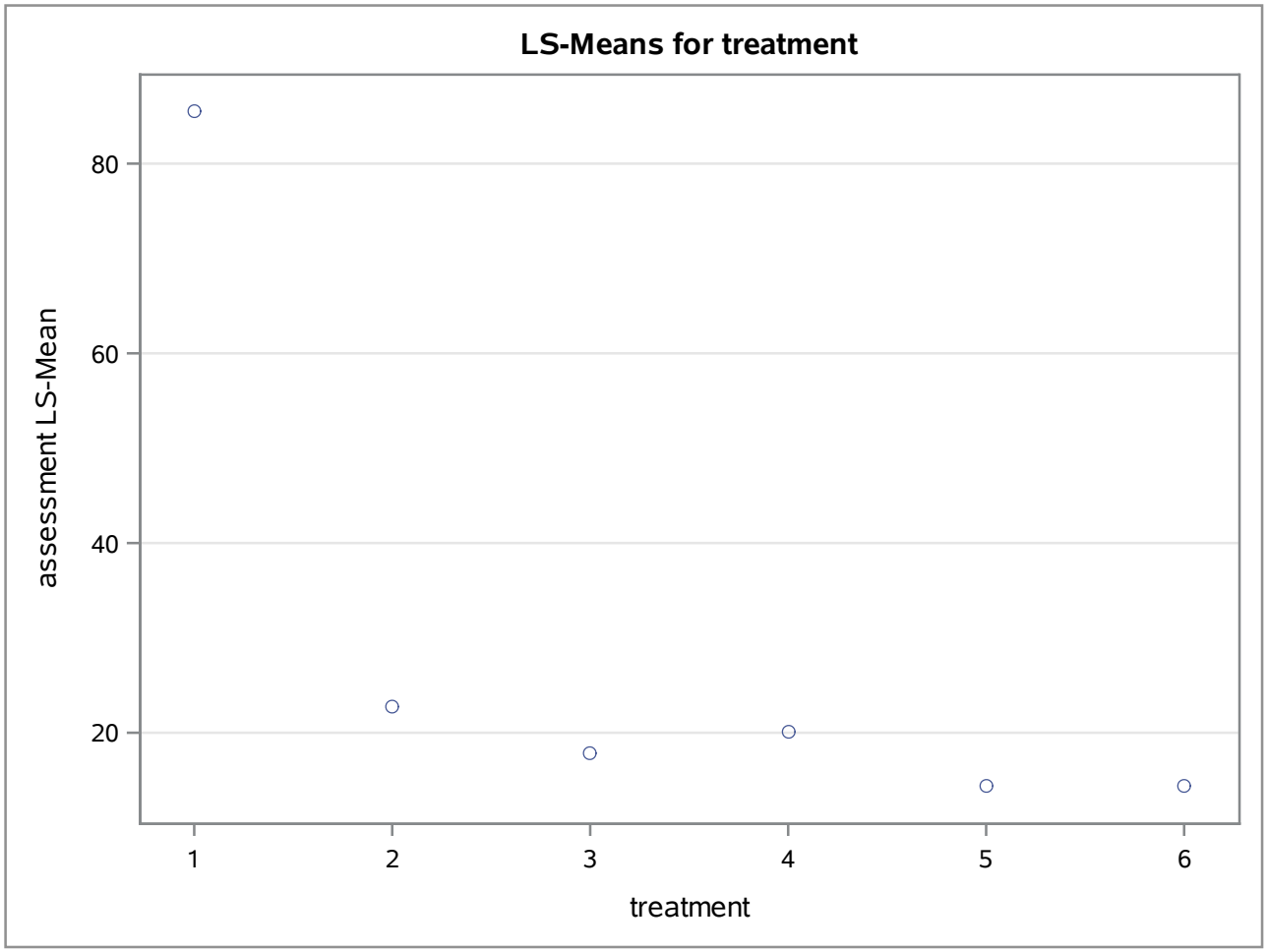
treatment	assessment LSMEAN	Standard Error	Pr > |t|	LSMEAN Number
1	85.5416753	0.6642173	<.0001	1
2	22.7083355	0.6642173	<.0001	2
3	17.8750019	0.6642173	<.0001	3
4	20.1250020	0.6642173	<.0001	4
5	14.3750014	0.6642173	<.0001	5
6	14.4166683	0.6642173	<.0001	6

Least Squares Means for effect treatment
Pr > |t| for H0: LSMean(i)=LSMean(j)

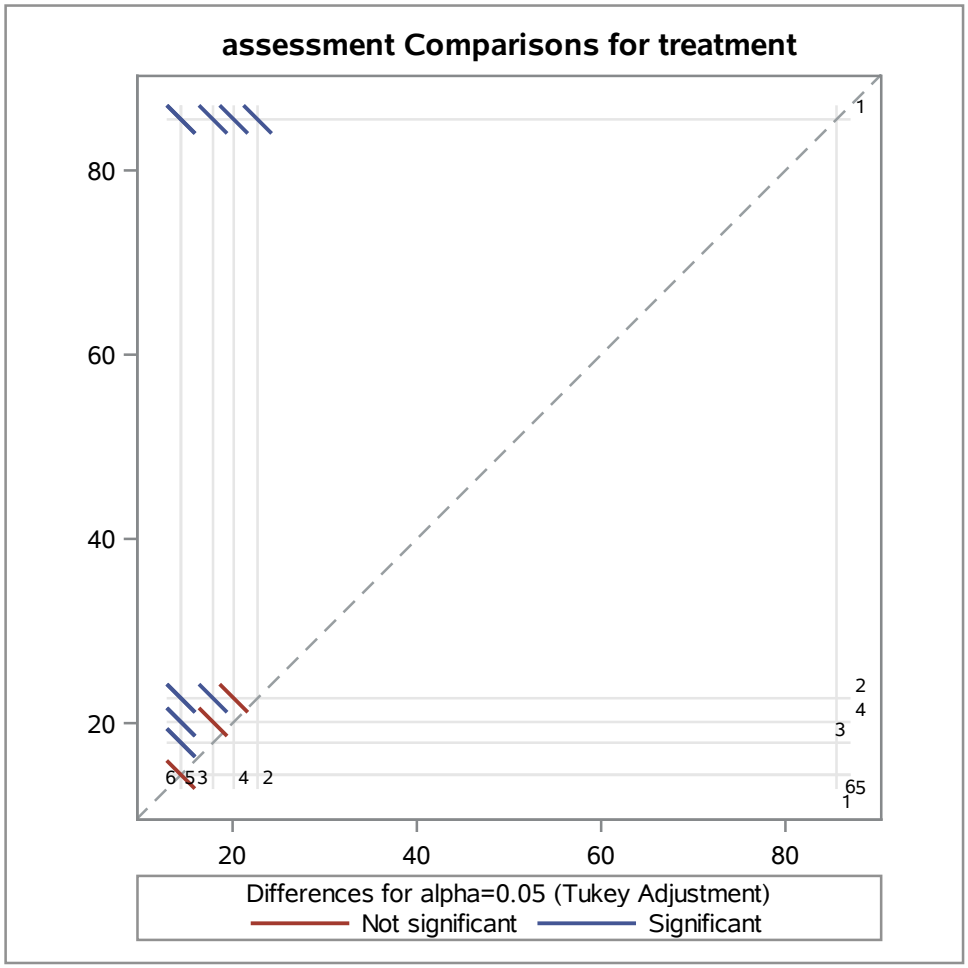
Dependent Variable: assessment

i/j	1	2	3	4	5	6
1		<.0001	<.0001	<.0001	<.0001	<.0001
2	<.0001		0.0014	0.1220	<.0001	<.0001
3	<.0001	0.0014		0.2185	0.0204	0.0222
4	<.0001	0.1220	0.2185		0.0002	0.0003
5	<.0001	<.0001	0.0204	0.0002		1.0000
6	<.0001	<.0001	0.0222	0.0003	1.0000	

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



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



Tukey Comparison Lines for Least Squares Means of treatment				
LS-means with the same letter are not significantly different.				
		assessment LSMEAN	treatment	LSMEAN Number
	A	85.54168	**1**	1
	B	22.70834	**2**	2
	B			
C	B	20.12500	**4**	4
C				
C		17.87500	**3**	3
	D	14.41667	**6**	6
	D			
	D	14.37500	**5**	5

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

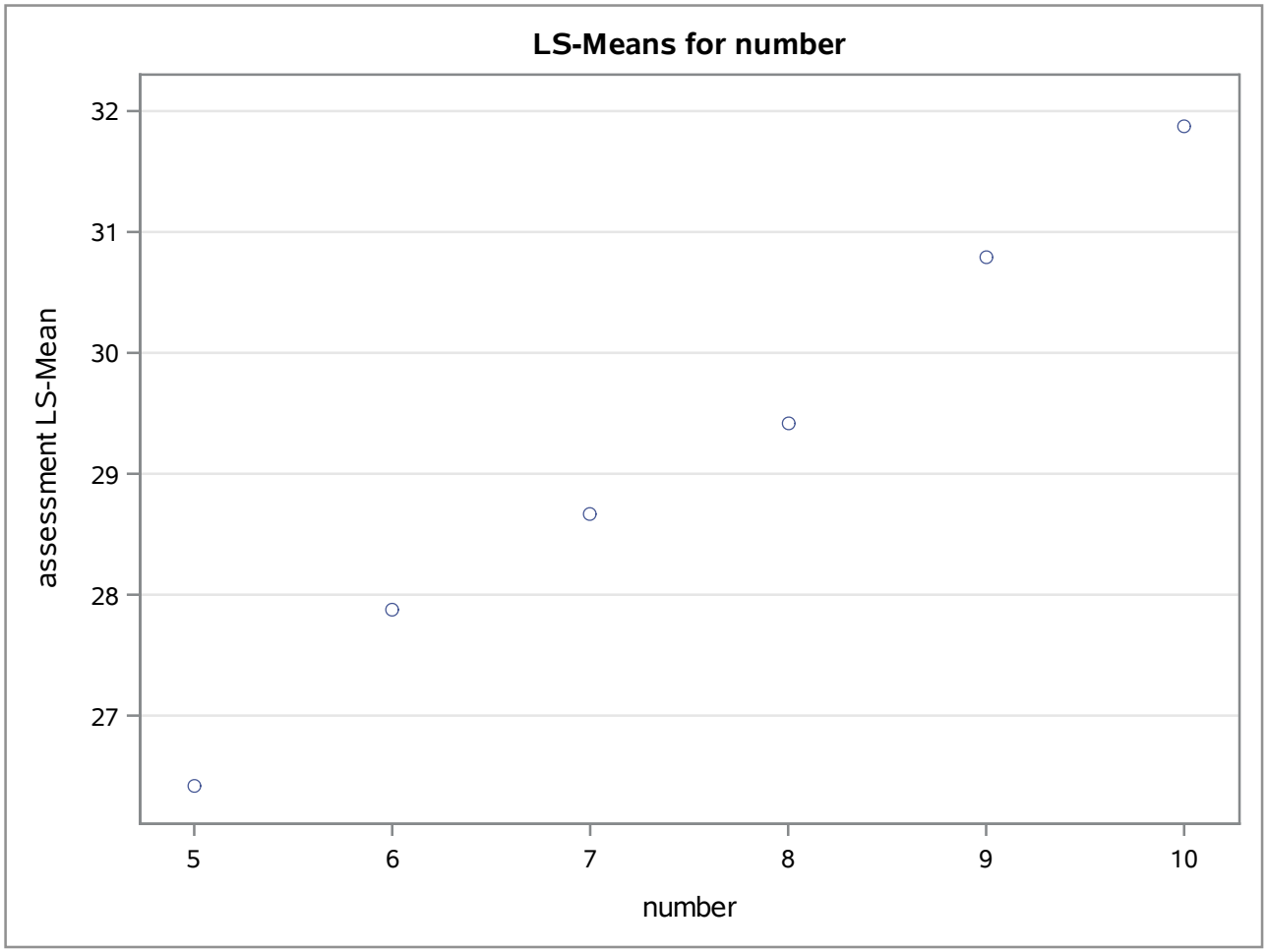
number	assessment LSMEAN	Standard Error	Pr > |t|	LSMEAN Number
5	26.4166693	0.2052081	<.0001	1
6	27.8750027	0.2052081	<.0001	2
7	28.6666695	0.2052081	<.0001	3
8	29.4166697	0.2052081	<.0001	4
9	30.7916698	0.2052081	<.0001	5
10	31.8750032	0.2052081	<.0001	6

Least Squares Means for effect number
Pr > |t| for H0: LSMean(i)=LSMean(j)

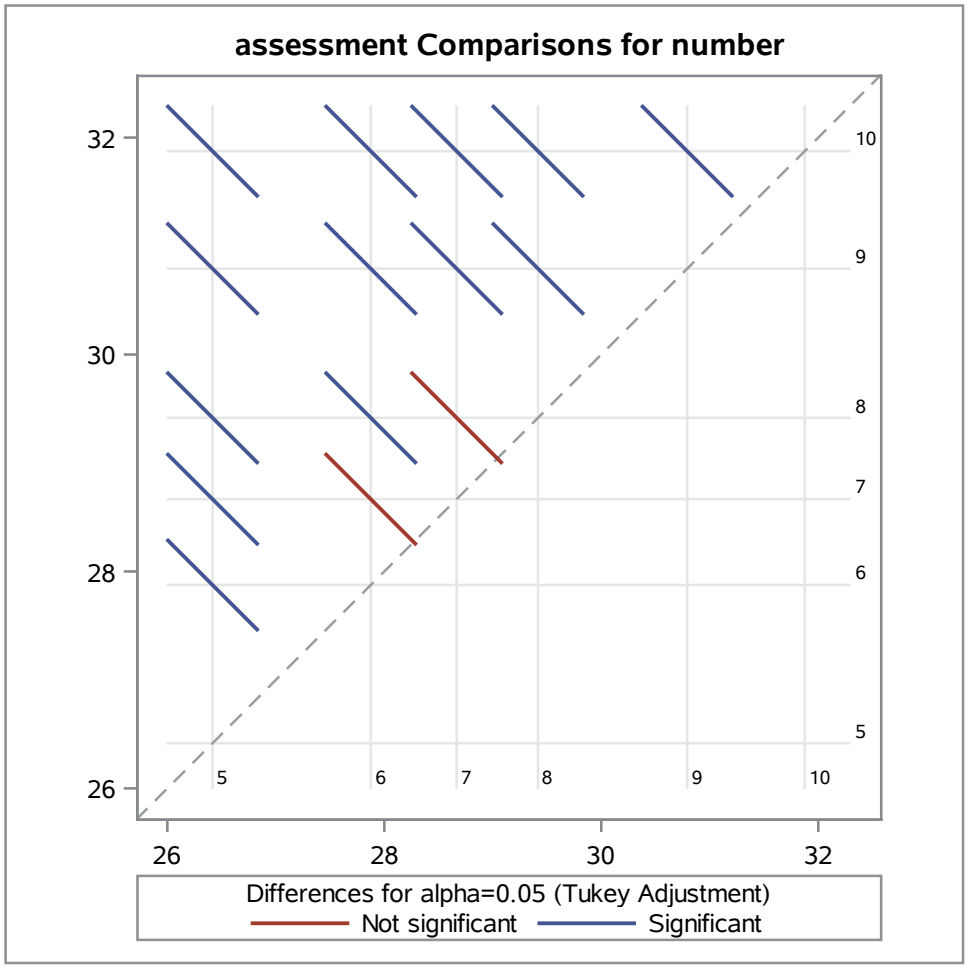
Dependent Variable: assessment

i/j	1	2	3	4	5	6
1		<.0001	<.0001	<.0001	<.0001	<.0001
2	<.0001		0.0796	<.0001	<.0001	<.0001
3	<.0001	0.0796		0.1118	<.0001	<.0001
4	<.0001	<.0001	0.1118		0.0001	<.0001
5	<.0001	<.0001	<.0001	0.0001		0.0043
6	<.0001	<.0001	<.0001	<.0001	0.0043	

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



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



Tukey Comparison Lines for Least Squares Means of number				
LS-means with the same letter are not significantly different.				
		assessment LSMEAN	number	LSMEAN Number
	A	31.87500	**10**	6
	B	30.79167	**9**	5
	C	29.41667	**8**	4
	C			
D	C	28.66667	**7**	3
D				
D		27.87500	**6**	2
	E	26.41667	**5**	1

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

treatment	number	assessment LSMEAN	Standard Error	Pr > |t|	LSMEAN Number
1	5	81.5000080	0.5026551	<.0001	1
1	6	83.2500083	0.5026551	<.0001	2
1	7	85.0000085	0.5026551	<.0001	3
1	8	85.7500088	0.5026551	<.0001	4
1	9	88.2500090	0.5026551	<.0001	5
1	10	89.5000090	0.5026551	<.0001	6
2	5	21.0000020	0.5026551	<.0001	7
2	6	22.0000020	0.5026551	<.0001	8
2	7	22.2500020	0.5026551	<.0001	9
2	8	22.7500022	0.5026551	<.0001	10
2	9	23.5000022	0.5026551	<.0001	11
2	10	24.7500025	0.5026551	<.0001	12
3	5	15.2500017	0.5026551	<.0001	13
3	6	16.7500017	0.5026551	<.0001	14
3	7	17.2500017	0.5026551	<.0001	15
3	8	18.0000020	0.5026551	<.0001	16
3	9	19.2500020	0.5026551	<.0001	17
3	10	20.7500020	0.5026551	<.0001	18
4	5	16.7500020	0.5026551	<.0001	19
4	6	18.2500020	0.5026551	<.0001	20
4	7	19.2500020	0.5026551	<.0001	21
4	8	21.0000020	0.5026551	<.0001	22
4	9	22.7500022	0.5026551	<.0001	23
4	10	22.7500020	0.5026551	<.0001	24
5	5	11.7500010	0.5026551	<.0001	25
5	6	13.0000010	0.5026551	<.0001	26
5	7	13.7500010	0.5026551	<.0001	27
5	8	14.0000015	0.5026551	<.0001	28
5	9	16.0000017	0.5026551	<.0001	29
5	10	17.7500020	0.5026551	<.0001	30
6	5	12.2500012	0.5026551	<.0001	31
6	6	14.0000015	0.5026551	<.0001	32
6	7	14.5000018	0.5026551	<.0001	33
6	8	15.0000018	0.5026551	<.0001	34

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

treatment	number	assessment LSMEAN	Standard Error	Pr > |t|	LSMEAN Number
6	**9**	15.0000018	0.5026551	<.0001	35
6	**10**	15.7500017	0.5026551	<.0001	36

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

Least Squares Means for effect treatment*number
Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: assessment

i/j	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1		0.8583	0.0019	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
2	0.8583		0.8583	0.1710	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
3	0.0019	0.8583		1.0000	0.0069	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
4	<.0001	0.1710	1.0000		0.1710	0.0005	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
5	<.0001	<.0001	0.0069	0.1710		0.9983	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
6	<.0001	<.0001	<.0001	0.0005	0.9983		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
7	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		1.0000	0.9983	0.8583	0.1710	0.0005	<.0001	<.0001
8	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	1.0000		1.0000	1.0000	0.9734	0.0673	<.0001	<.0001
9	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.9983	1.0000		1.0000	0.9983	0.1710	<.0001	<.0001
10	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.8583	1.0000	1.0000		1.0000	0.6253	<.0001	<.0001
11	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.1710	0.9734	0.9983	1.0000		0.9983	<.0001	<.0001
12	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0005	0.0673	0.1710	0.6253	0.9983		<.0001	<.0001
13	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		0.9734
14	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.9734	
15	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0005	<.0001	<.0001	<.0001	<.0001	<.0001	0.6253	1.0000
16	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0229	0.0001	<.0001	<.0001	<.0001	<.0001	0.0673	0.9983
17	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.8583	0.0673	0.0229	0.0019	<.0001	<.0001	0.0001	0.1710
18	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	1.0000	0.9983	0.9734	0.6253	0.0673	0.0001	<.0001	0.0001
19	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.9734	1.0000
20	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0673	0.0005	0.0001	<.0001	<.0001	<.0001	0.0229	0.9734
21	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.8583	0.0673	0.0229	0.0019	<.0001	<.0001	0.0001	0.1710
22	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	1.0000	1.0000	0.9983	0.8583	0.1710	0.0005	<.0001	<.0001
23	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.8583	1.0000	1.0000	1.0000	1.0000	0.6253	<.0001	<.0001
24	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.8583	1.0000	1.0000	1.0000	1.0000	0.6253	<.0001	<.0001
25	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0019	<.0001
26	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.3634	0.0005
27	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.9734	0.0229
28	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.9983	0.0673
29	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	1.0000	1.0000
30	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0069	<.0001	<.0001	<.0001	<.0001	<.0001	0.1710	1.0000
31	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.0229	<.0001
32	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	0.9983	0.0673
33	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	1.0000	0.3634

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

Least Squares Means for effect treatment*number
Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: assessment

i/j	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
2	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
3	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
4	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
5	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
6	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
7	0.0005	0.0229	0.8583	1.0000	<.0001	0.0673	0.8583	1.0000	0.8583	0.8583	<.0001	<.0001	<.0001	<.0001
8	<.0001	0.0001	0.0673	0.9983	<.0001	0.0005	0.0673	1.0000	1.0000	1.0000	<.0001	<.0001	<.0001	<.0001
9	<.0001	<.0001	0.0229	0.9734	<.0001	0.0001	0.0229	0.9983	1.0000	1.0000	<.0001	<.0001	<.0001	<.0001
10	<.0001	<.0001	0.0019	0.6253	<.0001	<.0001	0.0019	0.8583	1.0000	1.0000	<.0001	<.0001	<.0001	<.0001
11	<.0001	<.0001	<.0001	0.0673	<.0001	<.0001	<.0001	0.1710	1.0000	1.0000	<.0001	<.0001	<.0001	<.0001
12	<.0001	<.0001	<.0001	0.0001	<.0001	<.0001	<.0001	0.0005	0.6253	0.6253	<.0001	<.0001	<.0001	<.0001
13	0.6253	0.0673	0.0001	<.0001	0.9734	0.0229	0.0001	<.0001	<.0001	<.0001	0.0019	0.3634	0.9734	0.9983
14	1.0000	0.9983	0.1710	0.0001	1.0000	0.9734	0.1710	<.0001	<.0001	<.0001	<.0001	0.0005	0.0229	0.0673
15		1.0000	0.6253	0.0019	1.0000	1.0000	0.6253	0.0005	<.0001	<.0001	<.0001	<.0001	0.0019	0.0069
16	1.0000		0.9983	0.0673	0.9983	1.0000	0.9983	0.0229	<.0001	<.0001	<.0001	<.0001	<.0001	0.0001
17	0.6253	0.9983		0.9734	0.1710	1.0000	1.0000	0.8583	0.0019	0.0019	<.0001	<.0001	<.0001	<.0001
18	0.0019	0.0673	0.9734		0.0001	0.1710	0.9734	1.0000	0.6253	0.6253	<.0001	<.0001	<.0001	<.0001
19	1.0000	0.9983	0.1710	0.0001		0.9734	0.1710	<.0001	<.0001	<.0001	<.0001	0.0005	0.0229	0.0673
20	1.0000	1.0000	1.0000	0.1710	0.9734		1.0000	0.0673	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
21	0.6253	0.9983	1.0000	0.9734	0.1710	1.0000		0.8583	0.0019	0.0019	<.0001	<.0001	<.0001	<.0001
22	0.0005	0.0229	0.8583	1.0000	<.0001	0.0673	0.8583		0.8583	0.8583	<.0001	<.0001	<.0001	<.0001
23	<.0001	<.0001	0.0019	0.6253	<.0001	<.0001	0.0019	0.8583		1.0000	<.0001	<.0001	<.0001	<.0001
24	<.0001	<.0001	0.0019	0.6253	<.0001	<.0001	0.0019	0.8583	1.0000		<.0001	<.0001	<.0001	<.0001
25	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		0.9983	0.6253	0.3634
26	<.0001	<.0001	<.0001	<.0001	0.0005	<.0001	<.0001	<.0001	<.0001	<.0001	0.9983		1.0000	1.0000
27	0.0019	<.0001	<.0001	<.0001	0.0229	<.0001	<.0001	<.0001	<.0001	<.0001	0.6253	1.0000		1.0000
28	0.0069	0.0001	<.0001	<.0001	0.0673	<.0001	<.0001	<.0001	<.0001	<.0001	0.3634	1.0000	1.0000	
29	0.9983	0.6253	0.0069	<.0001	1.0000	0.3634	0.0069	<.0001	<.0001	<.0001	<.0001	0.0229	0.3634	0.6253
30	1.0000	1.0000	0.9734	0.0229	1.0000	1.0000	0.9734	0.0069	<.0001	<.0001	<.0001	<.0001	0.0001	0.0005
31	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	1.0000	1.0000	0.9734	0.8583
32	0.0069	0.0001	<.0001	<.0001	0.0673	<.0001	<.0001	<.0001	<.0001	<.0001	0.3634	1.0000	1.0000	1.0000
33	0.0673	0.0019	<.0001	<.0001	0.3634	0.0005	<.0001	<.0001	<.0001	<.0001	0.0673	0.9734	1.0000	1.0000

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

Least Squares Means for effect treatment*number
Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: assessment

i/j	29	30	31	32	33	34	35	36
1	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
2	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
3	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
4	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
5	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
6	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
7	<.0001	0.0069	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
8	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
9	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
10	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
11	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
12	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
13	1.0000	0.1710	0.0229	0.9983	1.0000	1.0000	1.0000	1.0000
14	1.0000	1.0000	<.0001	0.0673	0.3634	0.8583	0.8583	1.0000
15	0.9983	1.0000	<.0001	0.0069	0.0673	0.3634	0.3634	0.9734
16	0.6253	1.0000	<.0001	0.0001	0.0019	0.0229	0.0229	0.3634
17	0.0069	0.9734	<.0001	<.0001	<.0001	<.0001	<.0001	0.0019
18	<.0001	0.0229	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
19	1.0000	1.0000	<.0001	0.0673	0.3634	0.8583	0.8583	1.0000
20	0.3634	1.0000	<.0001	<.0001	0.0005	0.0069	0.0069	0.1710
21	0.0069	0.9734	<.0001	<.0001	<.0001	<.0001	<.0001	0.0019
22	<.0001	0.0069	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
23	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
24	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
25	<.0001	<.0001	1.0000	0.3634	0.0673	0.0069	0.0069	0.0001
26	0.0229	<.0001	1.0000	1.0000	0.9734	0.6253	0.6253	0.0673
27	0.3634	0.0001	0.9734	1.0000	1.0000	0.9983	0.9983	0.6253
28	0.6253	0.0005	0.8583	1.0000	1.0000	1.0000	1.0000	0.8583
29		0.8583	0.0005	0.6253	0.9734	1.0000	1.0000	1.0000
30	0.8583		<.0001	0.0005	0.0069	0.0673	0.0673	0.6253
31	0.0005	<.0001		0.8583	0.3634	0.0673	0.0673	0.0019
32	0.6253	0.0005	0.8583		1.0000	1.0000	1.0000	0.8583
33	0.9734	0.0069	0.3634	1.0000		1.0000	1.0000	0.9983

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

Least Squares Means for effect treatment*number
Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: assessment

i/j	1	2	3	4	5	6	7	8	9	10	11	12	13	14
34	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	1.0000	0.8583
35	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	1.0000	0.8583
36	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	1.0000	1.0000

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

Least Squares Means for effect treatment*number
Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: assessment

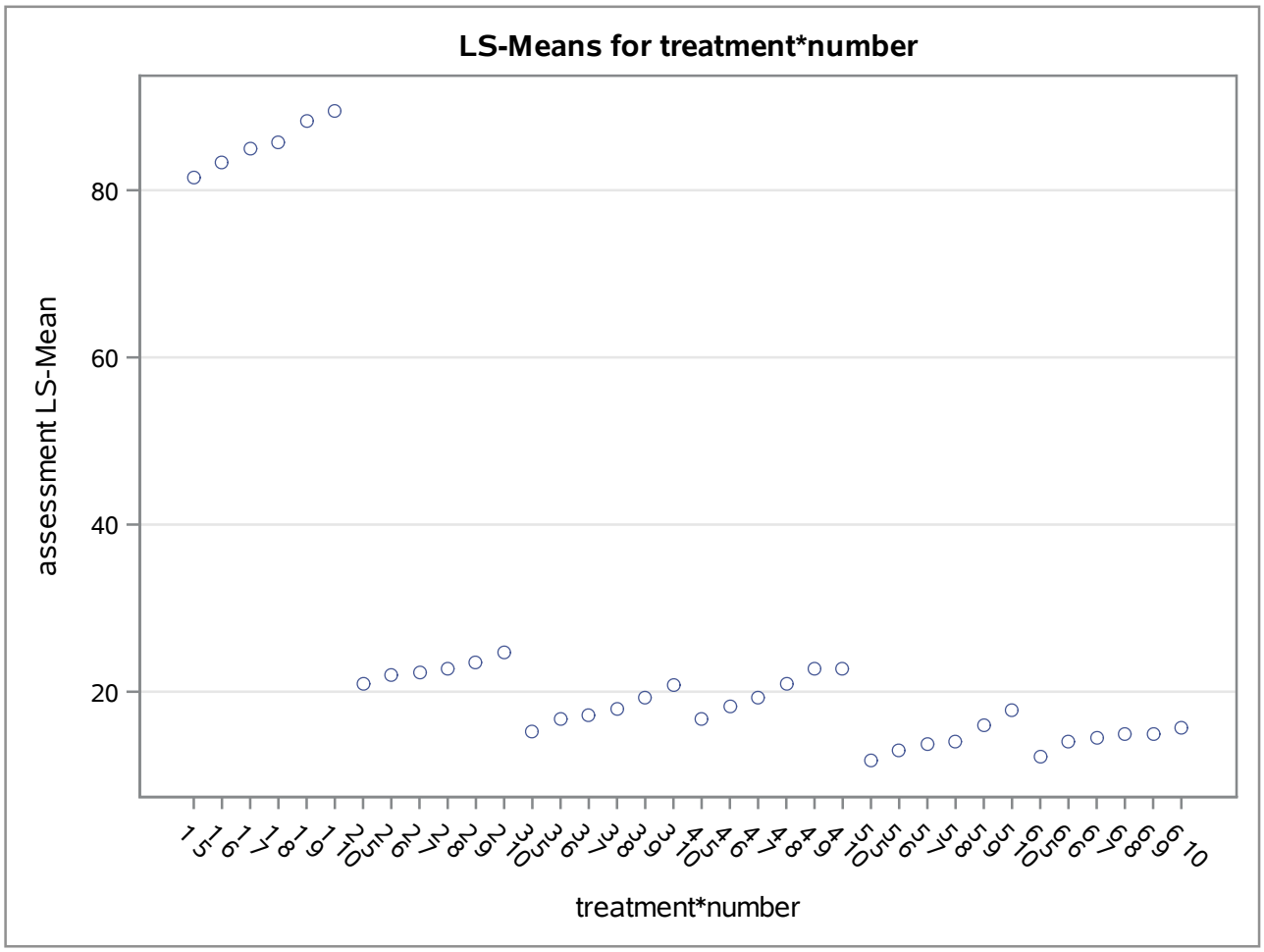
i/j	15	16	17	18	19	20	21	22	23	24	25	26	27	28
34	0.3634	0.0229	<.0001	<.0001	0.8583	0.0069	<.0001	<.0001	<.0001	<.0001	0.0069	0.6253	0.9983	1.0000
35	0.3634	0.0229	<.0001	<.0001	0.8583	0.0069	<.0001	<.0001	<.0001	<.0001	0.0069	0.6253	0.9983	1.0000
36	0.9734	0.3634	0.0019	<.0001	1.0000	0.1710	0.0019	<.0001	<.0001	<.0001	0.0001	0.0673	0.6253	0.8583

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

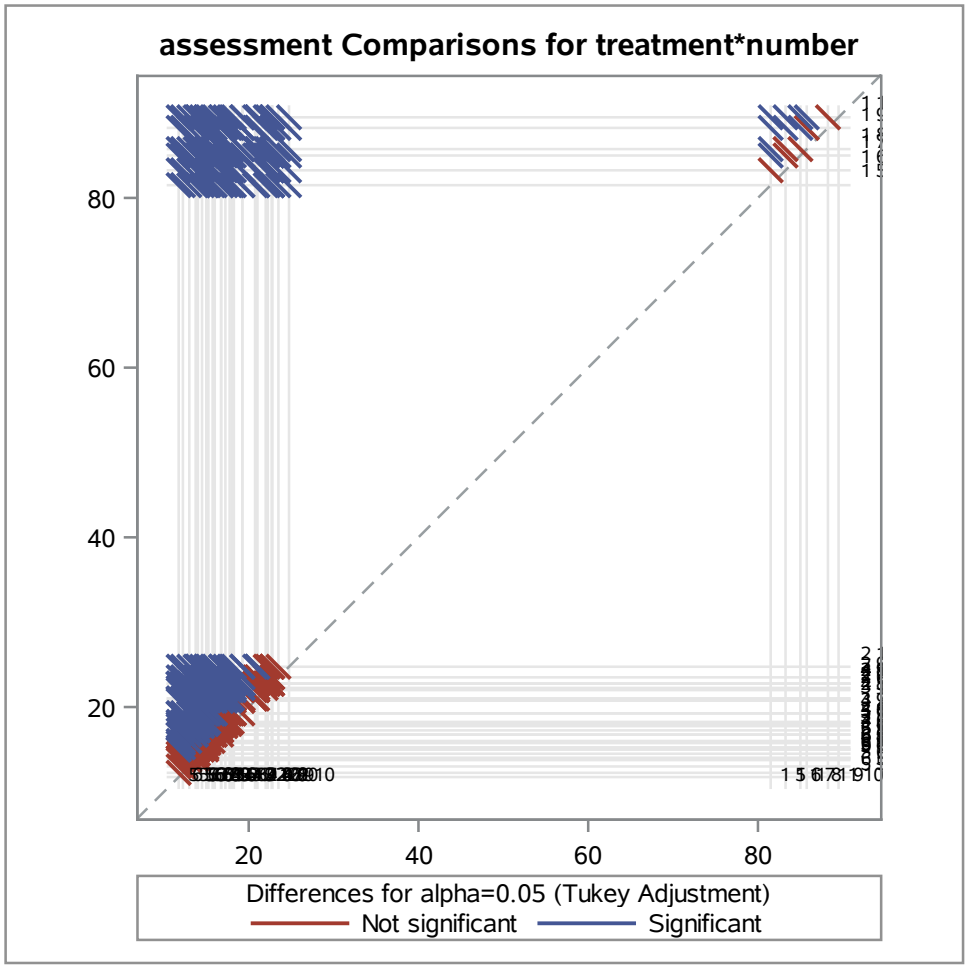
Least Squares Means for effect treatment*number
Pr > |t| for H0: LSMean(i)=LSMean(j)

Dependent Variable: assessment

i/j	29	30	31	32	33	34	35	36
34	1.0000	0.0673	0.0673	1.0000	1.0000		1.0000	1.0000
35	1.0000	0.0673	0.0673	1.0000	1.0000	1.0000		1.0000
36	1.0000	0.6253	0.0019	0.8583	0.9983	1.0000	1.0000	



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



Tukey Comparison Lines for Least Squares Means of treatment*number										
LS-means with the same letter are not significantly different.										
							assessment LSMEAN	treatment	number	LSMEAN Number
			A				89.50001	1	10	6
			A							
	B		A				88.25001	1	9	5
	B									
	B		C				85.75001	1	8	4
			C							
			C				85.00001	1	7	3
			C							
	D		C				83.25001	1	6	2
	D									
	D						81.50001	1	5	1

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

Tukey Comparison Lines for Least Squares Means of treatment*number

LS-means with the same letter are not significantly different.

							assessment LSMEAN	treatment	number	LSMEAN Number
			E				24.75000	2	10	12
			E							
	F		E				23.50000	2	9	11
	F		E							
	F		E				22.75000	2	8	10
	F		E							
	F		E				22.75000	4	9	23
	F		E							
	F		E				22.75000	4	10	24
	F		E							
	F		E				22.25000	2	7	9
	F		E							
	F		E		G		22.00000	2	6	8
	F				G					
	F		H		G		21.00000	2	5	7
	F		H		G					
	F		H		G		21.00000	4	8	22
	F		H		G					
	F	I	H		G		20.75000	3	10	18
		I	H		G					
	J	I	H		G		19.25000	3	9	17
	J	I	H		G					
	J	I	H		G		19.25000	4	7	21
	J	I	H							
	J	I	H		K		18.25000	4	6	20
	J	I			K					
	J	I	L		K		18.00000	3	8	16
	J		L		K					
	J	M	L		K		17.75000	5	10	30
	J	M	L		K					
N	J	M	L		K		17.25000	3	7	15
N	J	M	L		K					
N	J	M	L		K	O	16.75000	4	5	19

Mean comparison letters are consistent until we get to three means of 22.750. ARM marks these means with efg, while SAS only marks ef. SAS marks only the mean 22.00 with efg. This inconsistency can be explained if we note that these values come from two different treatments. From the Descriptive Statistics table, we see that HSD for means from the same treatment is 2.822055, while means from two different treatments

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

Tukey Comparison Lines for Least Squares Means of treatment*number										
LS-means with the same letter are not significantly different.										
							assessment LSMEAN	treatment	number	LSMEAN Number
N	J	M	L		K	O				
N	J	M	L		K	O	16.75000	**3**	**6**	14
N		M	L		K	O				
N	P	M	L		K	O	16.00000	**5**	**9**	29
N	P	M	L		K	O				
N	P	M	L	Q	K	O	15.75000	**6**	**10**	36
N	P	M	L	Q		O				
N	P	M	L	Q		O	15.25000	**3**	**5**	13
N	P	M		Q		O				
N	P	M	R	Q		O	15.00000	**6**	**9**	35
N	P	M	R	Q		O				
N	P	M	R	Q		O	15.00000	**6**	**8**	34
N	P		R	Q		O				
N	P		R	Q	S	O	14.50000	**6**	**7**	33
	P		R	Q	S	O				
	P		R	Q	S	O	14.00000	**6**	**6**	32
	P		R	Q	S	O				
	P		R	Q	S	O	14.00000	**5**	**8**	28
	P		R	Q	S					
	P		R	Q	S		13.75000	**5**	**7**	27
			R	Q	S					
			R	Q	S		13.00000	**5**	**6**	26
			R		S					
			R		S		12.25000	**6**	**5**	31
					S					
					S		11.75000	**5**	**5**	25

The GLM Procedure

Dependent Variable: assessment

Tests of Hypotheses Using the Type III MS for replicate*treatment as an Error Term					
Source	DF	Type III SS	Mean Square	F Value	Pr > F
treatment	5	92771.05324	18554.21065	1752.31	<.0001
replicate	3	25.96528	8.65509	0.82	0.5041

Obs	_NAME_	treatment	LSMEAN	STDERR	NUMBER	COV1	COV2	COV3	COV4	COV5	COV6
1	assessment	1	85.5417	0.66422	1	0.44118	0.00000	0.00000	0.00000	0.00000	0.00000
2	assessment	2	22.7083	0.66422	2	0.00000	0.44118	0.00000	0.00000	0.00000	0.00000
3	assessment	3	17.8750	0.66422	3	0.00000	0.00000	0.44118	0.00000	0.00000	0.00000
4	assessment	4	20.1250	0.66422	4	0.00000	0.00000	0.00000	0.44118	0.00000	0.00000
5	assessment	5	14.3750	0.66422	5	0.00000	0.00000	0.00000	0.00000	0.44118	0.00000
6	assessment	6	14.4167	0.66422	6	0.00000	0.00000	0.00000	0.00000	0.00000	0.44118

Obs	_NAME_	number	LSMEAN	STDERR	NUMBER2	COV1	COV2	COV3	COV4	COV5	COV6
1	assessment	5	26.4167	0.20521	1	0.042110	0.000000	0.000000	0.000000	0.000000	0.000000
2	assessment	6	27.8750	0.20521	2	0.000000	0.042110	0.000000	0.000000	0.000000	0.000000
3	assessment	7	28.6667	0.20521	3	0.000000	0.000000	0.042110	0.000000	0.000000	0.000000
4	assessment	8	29.4167	0.20521	4	0.000000	0.000000	0.000000	0.042110	0.000000	0.000000
5	assessment	9	30.7917	0.20521	5	0.000000	0.000000	0.000000	0.000000	0.042110	0.000000
6	assessment	10	31.8750	0.20521	6	0.000000	0.000000	0.000000	0.000000	0.000000	0.042110

Obs	_NAME_	treatment	number	LSMEAN	STDERR	NUMBER2	COV1	COV2	COV3	COV4	COV5
1	assessment	1	5	81.5000	0.50266	1	0.25266	0.00000	0.00000	0.00000	0.00000
2	assessment	1	6	83.2500	0.50266	2	0.00000	0.25266	0.00000	0.00000	0.00000
3	assessment	1	7	85.0000	0.50266	3	0.00000	0.00000	0.25266	0.00000	0.00000
4	assessment	1	8	85.7500	0.50266	4	0.00000	0.00000	0.00000	0.25266	0.00000
5	assessment	1	9	88.2500	0.50266	5	0.00000	0.00000	0.00000	0.00000	0.25266
6	assessment	1	10	89.5000	0.50266	6	0.00000	0.00000	0.00000	0.00000	0.00000
7	assessment	2	5	21.0000	0.50266	7	0.00000	0.00000	0.00000	0.00000	0.00000
8	assessment	2	6	22.0000	0.50266	8	0.00000	0.00000	0.00000	0.00000	0.00000

Obs	COV6	COV7	COV8	COV9	COV10	COV11	COV12	COV13	COV14	COV15	COV16	COV17
1	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
3	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
6	0.25266	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
7	0.00000	0.25266	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
8	0.00000	0.00000	0.25266	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Obs	COV18	COV19	COV20	COV21	COV22	COV23	COV24	COV25	COV26	COV27	COV28	COV29
1	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
3	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
7	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Obs	COV30	COV31	COV32	COV33	COV34	COV35	COV36
1	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
2	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
3	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
4	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
5	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
6	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
7	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
8	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Obs	_NAME_	treatment	number	LSMEAN	STDERR	NUMBER2	COV1	COV2	COV3	COV4	COV5
9	assessment	2	7	22.2500	0.50266	9	0.00000	0.00000	0.00000	0.00000	0.00000
10	assessment	2	8	22.7500	0.50266	10	0.00000	0.00000	0.00000	0.00000	0.00000
11	assessment	2	9	23.5000	0.50266	11	0.00000	0.00000	0.00000	0.00000	0.00000
12	assessment	2	10	24.7500	0.50266	12	0.00000	0.00000	0.00000	0.00000	0.00000
13	assessment	3	5	15.2500	0.50266	13	0.00000	0.00000	0.00000	0.00000	0.00000
14	assessment	3	6	16.7500	0.50266	14	0.00000	0.00000	0.00000	0.00000	0.00000
15	assessment	3	7	17.2500	0.50266	15	0.00000	0.00000	0.00000	0.00000	0.00000
16	assessment	3	8	18.0000	0.50266	16	0.00000	0.00000	0.00000	0.00000	0.00000

Obs	COV6	COV7	COV8	COV9	COV10	COV11	COV12	COV13	COV14	COV15	COV16	COV17
9	0.00000	0.00000	0.00000	0.25266	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
10	0.00000	0.00000	0.00000	0.00000	0.25266	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
11	0.00000	0.00000	0.00000	0.00000	0.00000	0.25266	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
12	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.25266	0.00000	0.00000	0.00000	0.00000	0.00000
13	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.25266	0.00000	0.00000	0.00000	0.00000
14	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.25266	0.00000	0.00000	0.00000
15	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.25266	0.00000	0.00000
16	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.25266	0.00000

Obs	COV18	COV19	COV20	COV21	COV22	COV23	COV24	COV25	COV26	COV27	COV28	COV29
9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
10	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
11	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
12	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
13	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
14	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
15	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
16	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Obs	COV30	COV31	COV32	COV33	COV34	COV35	COV36
9	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
10	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
11	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
12	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
13	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
14	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
15	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
16	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Obs	_NAME_	treatment	number	LSMEAN	STDERR	NUMBER2	COV1	COV2	COV3	COV4	COV5
17	assessment	3	9	19.2500	0.50266	17	0.00000	0.00000	0.00000	0.00000	0.00000
18	assessment	3	10	20.7500	0.50266	18	0.00000	0.00000	0.00000	0.00000	0.00000
19	assessment	4	5	16.7500	0.50266	19	0.00000	0.00000	0.00000	0.00000	0.00000
20	assessment	4	6	18.2500	0.50266	20	0.00000	0.00000	0.00000	0.00000	0.00000
21	assessment	4	7	19.2500	0.50266	21	0.00000	0.00000	0.00000	0.00000	0.00000
22	assessment	4	8	21.0000	0.50266	22	0.00000	0.00000	0.00000	0.00000	0.00000
23	assessment	4	9	22.7500	0.50266	23	0.00000	0.00000	0.00000	0.00000	0.00000
24	assessment	4	10	22.7500	0.50266	24	0.00000	0.00000	0.00000	0.00000	0.00000

Obs	COV6	COV7	COV8	COV9	COV10	COV11	COV12	COV13	COV14	COV15	COV16	COV17
17	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.25266
18	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
19	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
20	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
21	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
22	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
23	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
24	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Obs	COV18	COV19	COV20	COV21	COV22	COV23	COV24	COV25	COV26	COV27	COV28	COV29
17	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
18	0.25266	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
19	0.00000	0.25266	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
20	0.00000	0.00000	0.25266	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
21	0.00000	0.00000	0.00000	0.25266	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
22	0.00000	0.00000	0.00000	0.00000	0.25266	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
23	0.00000	0.00000	0.00000	0.00000	0.00000	0.25266	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
24	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.25266	0.00000	0.00000	0.00000	0.00000	0.00000

Obs	COV30	COV31	COV32	COV33	COV34	COV35	COV36
17	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
18	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
19	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
20	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
21	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
22	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
23	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
24	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Obs	_NAME_	treatment	number	LSMEAN	STDERR	NUMBER2	COV1	COV2	COV3	COV4	COV5
25	assessment	5	5	11.7500	0.50266	25	0.00000	0.00000	0.00000	0.00000	0.00000
26	assessment	5	6	13.0000	0.50266	26	0.00000	0.00000	0.00000	0.00000	0.00000
27	assessment	5	7	13.7500	0.50266	27	0.00000	0.00000	0.00000	0.00000	0.00000
28	assessment	5	8	14.0000	0.50266	28	0.00000	0.00000	0.00000	0.00000	0.00000
29	assessment	5	9	16.0000	0.50266	29	0.00000	0.00000	0.00000	0.00000	0.00000
30	assessment	5	10	17.7500	0.50266	30	0.00000	0.00000	0.00000	0.00000	0.00000
31	assessment	6	5	12.2500	0.50266	31	0.00000	0.00000	0.00000	0.00000	0.00000
32	assessment	6	6	14.0000	0.50266	32	0.00000	0.00000	0.00000	0.00000	0.00000

Obs	COV6	COV7	COV8	COV9	COV10	COV11	COV12	COV13	COV14	COV15	COV16	COV17
25	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
26	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
27	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
28	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
29	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
30	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
31	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
32	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Obs	COV18	COV19	COV20	COV21	COV22	COV23	COV24	COV25	COV26	COV27	COV28	COV29
25	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.25266	0.00000	0.00000	0.00000	0.00000
26	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.25266	0.00000	0.00000	0.00000
27	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.25266	0.00000	0.00000
28	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.25266	0.00000
29	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.25266
30	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
31	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
32	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Obs	COV30	COV31	COV32	COV33	COV34	COV35	COV36
25	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
26	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
27	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
28	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
29	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
30	0.25266	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
31	0.00000	0.25266	0.00000	0.00000	0.00000	0.00000	0.00000
32	0.00000	0.00000	0.25266	0.00000	0.00000	0.00000	0.00000

Obs	_NAME_	treatment	number	LSMEAN	STDERR	NUMBER2	COV1	COV2	COV3	COV4	COV5
33	assessment	6	7	14.5000	0.50266	33	0.00000	0.00000	0.00000	0.00000	0.00000
34	assessment	6	8	15.0000	0.50266	34	0.00000	0.00000	0.00000	0.00000	0.00000
35	assessment	6	9	15.0000	0.50266	35	0.00000	0.00000	0.00000	0.00000	0.00000
36	assessment	6	10	15.7500	0.50266	36	0.00000	0.00000	0.00000	0.00000	0.00000

Obs	COV6	COV7	COV8	COV9	COV10	COV11	COV12	COV13	COV14	COV15	COV16	COV17
33	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
34	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
35	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
36	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Obs	COV18	COV19	COV20	COV21	COV22	COV23	COV24	COV25	COV26	COV27	COV28	COV29
33	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
34	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
35	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
36	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Obs	COV30	COV31	COV32	COV33	COV34	COV35	COV36
33	0.00000	0.00000	0.00000	0.25266	0.00000	0.00000	0.00000
34	0.00000	0.00000	0.00000	0.00000	0.25266	0.00000	0.00000
35	0.00000	0.00000	0.00000	0.00000	0.00000	0.25266	0.00000
36	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.25266

The Mixed Procedure

Model Information	
Data Set	WORK.STACKED
Dependent Variable	assessment
Covariance Structure	Variance Components
Estimation Method	REML
Residual Variance Method	Profile
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Containment

Class Level Information		
Class	**Levels**	**Values**
replicate	4	1 2 3 4
treatment	6	1 2 3 4 5 6
number	6	5 6 7 8 9 10

Dimensions	
Covariance Parameters	3
Columns in X	49
Columns in Z	28
Subjects	1
Max Obs per Subject	144

Number of Observations	
Number of Observations Read	144
Number of Observations Used	144
Number of Observations Not Used	0

Iteration History			
Iteration	**Evaluations**	**-2 Res Log Like**	**Criterion**
0	1	457.63260460	
1	2	399.27007862	0.00000026
2	1	399.27005264	0.00000000

Convergence criteria met.

The Mixed Procedure

Covariance Parameter Estimates	
Cov Parm	**Estimate**
replicate	0
replicate*treatment	1.5426
Residual	1.0106

Fit Statistics	
-2 Res Log Likelihood	399.3
AIC (Smaller is Better)	403.3
AICC (Smaller is Better)	403.4
BIC (Smaller is Better)	402.0

Solution for Random Effects

Effect	replicate	treatment	Estimate	Std Err Pred	DF	t Value	Pr > |t|
replicate	1		0	.	.	.	.
replicate	2		0	.	.	.	.
replicate	3		0	.	.	.	.
replicate	4		0	.	.	.	.
replicate*treatment	1	1	-0.7889	0.7068	90	-1.12	0.2673
replicate*treatment	1	2	1.0142	0.7068	90	1.44	0.1547
replicate*treatment	1	3	1.4650	0.7068	90	2.07	0.0410
replicate*treatment	1	4	-0.7137	0.7068	90	-1.01	0.3153
replicate*treatment	1	5	0.1127	0.7068	90	0.16	0.8737
replicate*treatment	1	6	-2.1788	0.7068	90	-3.08	0.0027
replicate*treatment	2	1	0.5635	0.7068	90	0.80	0.4274
replicate*treatment	2	2	0.4132	0.7068	90	0.58	0.5603
replicate*treatment	2	3	0.7137	0.7068	90	1.01	0.3153
replicate*treatment	2	4	0.03756	0.7068	90	0.05	0.9577
replicate*treatment	2	5	0.4132	0.7068	90	0.58	0.5603
replicate*treatment	2	6	0.5259	0.7068	90	0.74	0.4588
replicate*treatment	3	1	1.7655	0.7068	90	2.50	0.0143
replicate*treatment	3	2	-0.9391	0.7068	90	-1.33	0.1873
replicate*treatment	3	3	-0.3381	0.7068	90	-0.48	0.6336
replicate*treatment	3	4	0.1878	0.7068	90	0.27	0.7910
replicate*treatment	3	5	0.7137	0.7068	90	1.01	0.3153
replicate*treatment	3	6	0.2254	0.7068	90	0.32	0.7505

The Mixed Procedure

Solution for Random Effects

Effect	replicate	treatment	Estimate	Std Err Pred	DF	t Value	Pr > |t|
replicate*treatment	4	1	-1.5402	0.7068	90	-2.18	0.0319
replicate*treatment	4	2	-0.4883	0.7068	90	-0.69	0.4914
replicate*treatment	4	3	-1.8407	0.7068	90	-2.60	0.0108
replicate*treatment	4	4	0.4883	0.7068	90	0.69	0.4914
replicate*treatment	4	5	-1.2396	0.7068	90	-1.75	0.0828
replicate*treatment	4	6	1.4275	0.7068	90	2.02	0.0464

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
number	5	90	92.70	<.0001
treatment	5	15	1807.32	<.0001
treatment*number	25	90	2.51	0.0008

The PLM Procedure

Store Information	
Item Store	WORK.SPLITMIXED
Data Set Created From	WORK.STACKED
Created By	PROC MIXED
Date Created	02NOV18:11:18:14
Response Variable	assessment
Distribution	Normal
Class Variables	replicate treatment number
Model Effects	Intercept number treatment treatment*number

Class Level Information		
Class	**Levels**	**Values**
replicate	4	1 2 3 4
treatment	6	1 2 3 4 5 6
number	6	5 6 7 8 9 10

number Least Squares Means

number	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper	Cov1	Cov2	Cov3	Cov4	Cov5	Cov6
5	26.4167	0.3262	90	80.99	<.0001	0.05	25.7687	27.0647	0.1064	0.06427	0.06427	0.06427	0.06427	0.06427
6	27.8750	0.3262	90	85.46	<.0001	0.05	27.2270	28.5230	0.06427	0.1064	0.06427	0.06427	0.06427	0.06427
7	28.6667	0.3262	90	87.89	<.0001	0.05	28.0187	29.3147	0.06427	0.06427	0.1064	0.06427	0.06427	0.06427
8	29.4167	0.3262	90	90.19	<.0001	0.05	28.7687	30.0647	0.06427	0.06427	0.06427	0.1064	0.06427	0.06427
9	30.7917	0.3262	90	94.40	<.0001	0.05	30.1437	31.4397	0.06427	0.06427	0.06427	0.06427	0.1064	0.06427
10	31.8750	0.3262	90	97.73	<.0001	0.05	31.2270	32.5230	0.06427	0.06427	0.06427	0.06427	0.06427	0.1064

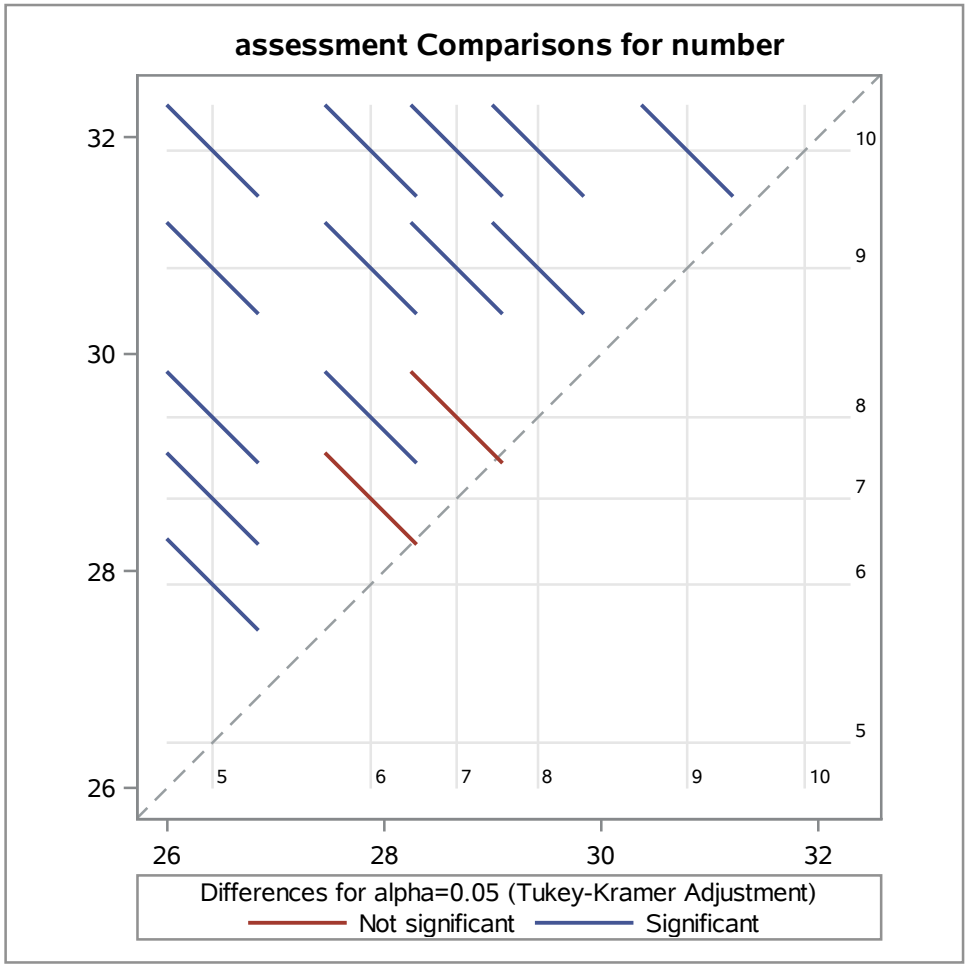
number Least Squares Means

number	Corr1	Corr2	Corr3	Corr4	Corr5	Corr6
5	1.0000	0.6042	0.6042	0.6042	0.6042	0.6042
6	0.6042	1.0000	0.6042	0.6042	0.6042	0.6042
7	0.6042	0.6042	1.0000	0.6042	0.6042	0.6042
8	0.6042	0.6042	0.6042	1.0000	0.6042	0.6042
9	0.6042	0.6042	0.6042	0.6042	1.0000	0.6042
10	0.6042	0.6042	0.6042	0.6042	0.6042	1.0000

The PLM Procedure

Differences of number Least Squares Means
Adjustment for Multiple Comparisons: Tukey-Kramer

number	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper	Adj Lower	Adj Upper
5	6	-1.4583	0.2902	90	-5.03	<.0001	<.0001	0.05	-2.0349	-0.8818	-2.3034	-0.6132
5	7	-2.2500	0.2902	90	-7.75	<.0001	<.0001	0.05	-2.8265	-1.6735	-3.0951	-1.4049
5	8	-3.0000	0.2902	90	-10.34	<.0001	<.0001	0.05	-3.5765	-2.4235	-3.8451	-2.1549
5	9	-4.3750	0.2902	90	-15.08	<.0001	<.0001	0.05	-4.9515	-3.7985	-5.2201	-3.5299
5	10	-5.4583	0.2902	90	-18.81	<.0001	<.0001	0.05	-6.0349	-4.8818	-6.3034	-4.6132
6	7	-0.7917	0.2902	90	-2.73	0.0077	0.0796	0.05	-1.3682	-0.2151	-1.6368	0.05343
6	8	-1.5417	0.2902	90	-5.31	<.0001	<.0001	0.05	-2.1182	-0.9651	-2.3868	-0.6966
6	9	-2.9167	0.2902	90	-10.05	<.0001	<.0001	0.05	-3.4932	-2.3401	-3.7618	-2.0716
6	10	-4.0000	0.2902	90	-13.78	<.0001	<.0001	0.05	-4.5765	-3.4235	-4.8451	-3.1549
7	8	-0.7500	0.2902	90	-2.58	0.0114	0.1118	0.05	-1.3265	-0.1735	-1.5951	0.09510
7	9	-2.1250	0.2902	90	-7.32	<.0001	<.0001	0.05	-2.7015	-1.5485	-2.9701	-1.2799
7	10	-3.2083	0.2902	90	-11.06	<.0001	<.0001	0.05	-3.7849	-2.6318	-4.0534	-2.3632
8	9	-1.3750	0.2902	90	-4.74	<.0001	0.0001	0.05	-1.9515	-0.7985	-2.2201	-0.5299
8	10	-2.4583	0.2902	90	-8.47	<.0001	<.0001	0.05	-3.0349	-1.8818	-3.3034	-1.6132
9	10	-1.0833	0.2902	90	-3.73	0.0003	0.0043	0.05	-1.6599	-0.5068	-1.9284	-0.2382



The PLM Procedure

Tukey-Kramer Grouping for number Least Squares Means (Alpha=0.05)			
LS-means with the same letter are not significantly different.			
number	Estimate		
10	31.8750		A
9	30.7917		B
8	29.4167		C
			C
7	28.6667	D	C
		D	
6	27.8750	D	
5	26.4167		E

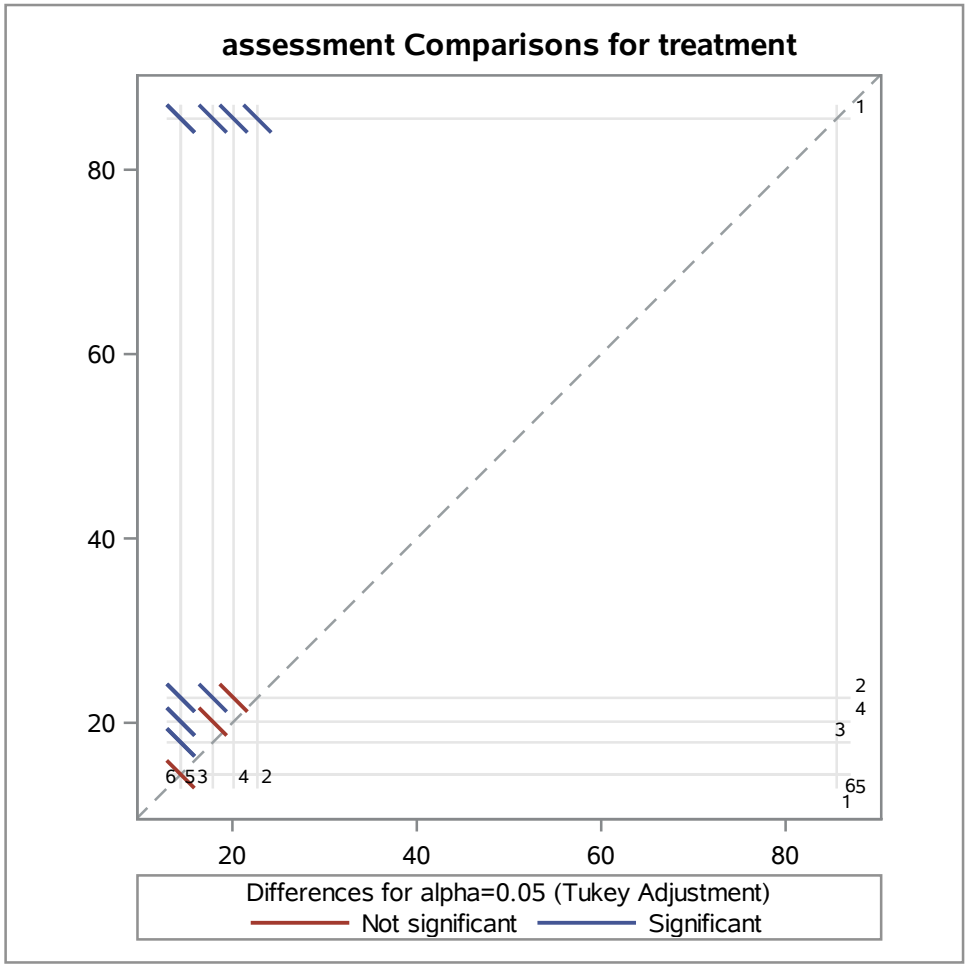
treatment Least Squares Means														
treatment	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper	Cov1	Cov2	Cov3	Cov4	Cov5	Cov6	Corr1
1	85.5417	0.6540	15	130.79	<.0001	0.05	84.1476	86.9357	0.4278						1.0000
2	22.7083	0.6540	15	34.72	<.0001	0.05	21.3143	24.1024		0.4278					
3	17.8750	0.6540	15	27.33	<.0001	0.05	16.4810	19.2690			0.4278				
4	20.1250	0.6540	15	30.77	<.0001	0.05	18.7310	21.5190				0.4278			
5	14.3750	0.6540	15	21.98	<.0001	0.05	12.9810	15.7690					0.4278		
6	14.4167	0.6540	15	22.04	<.0001	0.05	13.0226	15.8107						0.4278	

treatment Least Squares Means					
treatment	Corr2	Corr3	Corr4	Corr5	Corr6
1					
2	1.0000				
3		1.0000			
4			1.0000		
5				1.0000	
6					1.0000

The PLM Procedure

Differences of treatment Least Squares Means
Adjustment for Multiple Comparisons: Tukey

treatment	_treatment	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper	Adj Lower	Adj Upper
1	2	62.8333	0.9249	15	67.93	<.0001	<.0001	0.05	60.8619	64.8048	59.8283	65.8384
1	3	67.6667	0.9249	15	73.16	<.0001	<.0001	0.05	65.6952	69.6381	64.6616	70.6717
1	4	65.4167	0.9249	15	70.73	<.0001	<.0001	0.05	63.4452	67.3881	62.4116	68.4217
1	5	71.1667	0.9249	15	76.94	<.0001	<.0001	0.05	69.1952	73.1381	68.1616	74.1717
1	6	71.1250	0.9249	15	76.90	<.0001	<.0001	0.05	69.1535	73.0965	68.1200	74.1301
2	3	4.8333	0.9249	15	5.23	0.0001	0.0012	0.05	2.8619	6.8048	1.8283	7.8384
2	4	2.5833	0.9249	15	2.79	0.0137	0.1134	0.05	0.6119	4.5548	-0.4217	5.5884
2	5	8.3333	0.9249	15	9.01	<.0001	<.0001	0.05	6.3619	10.3048	5.3283	11.3384
2	6	8.2917	0.9249	15	8.96	<.0001	<.0001	0.05	6.3202	10.2631	5.2866	11.2967
3	4	-2.2500	0.9249	15	-2.43	0.0280	0.2061	0.05	-4.2215	-0.2785	-5.2550	0.7550
3	5	3.5000	0.9249	15	3.78	0.0018	0.0182	0.05	1.5285	5.4715	0.4950	6.5050
3	6	3.4583	0.9249	15	3.74	0.0020	0.0199	0.05	1.4869	5.4298	0.4533	6.4634
4	5	5.7500	0.9249	15	6.22	<.0001	0.0002	0.05	3.7785	7.7215	2.7450	8.7550
4	6	5.7083	0.9249	15	6.17	<.0001	0.0002	0.05	3.7369	7.6798	2.7033	8.7134
5	6	-0.04167	0.9249	15	-0.05	0.9647	1.0000	0.05	-2.0131	1.9298	-3.0467	2.9634



The PLM Procedure

Tukey Grouping for treatment Least Squares Means (Alpha=0.05)			
LS-means with the same letter are not significantly different.			
treatment	**Estimate**		
1	85.5417		A
2	22.7083		B
			B
4	20.1250	C	B
		C	
3	17.8750	C	
6	14.4167		D
			D
5	14.3750		D

The PLM Procedure

treatment*number Least Squares Means														
treatment	number	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper	Cov1	Cov2	Cov3	Cov4	Cov5
1	5	81.5000	0.7989	90	102.01	<.0001	0.05	79.9128	83.0872	0.6383	0.3856	0.3856	0.3856	0.3856
1	6	83.2500	0.7989	90	104.20	<.0001	0.05	81.6628	84.8372	0.3856	0.6383	0.3856	0.3856	0.3856
1	7	85.0000	0.7989	90	106.39	<.0001	0.05	83.4128	86.5872	0.3856	0.3856	0.6383	0.3856	0.3856
1	8	85.7500	0.7989	90	107.33	<.0001	0.05	84.1628	87.3372	0.3856	0.3856	0.3856	0.6383	0.3856
1	9	88.2500	0.7989	90	110.46	<.0001	0.05	86.6628	89.8372	0.3856	0.3856	0.3856	0.3856	0.6383
1	10	89.5000	0.7989	90	112.02	<.0001	0.05	87.9128	91.0872	0.3856	0.3856	0.3856	0.3856	0.3856
2	5	21.0000	0.7989	90	26.28	<.0001	0.05	19.4128	22.5872					
2	6	22.0000	0.7989	90	27.54	<.0001	0.05	20.4128	23.5872					
2	7	22.2500	0.7989	90	27.85	<.0001	0.05	20.6628	23.8372					
2	8	22.7500	0.7989	90	28.48	<.0001	0.05	21.1628	24.3372					
2	9	23.5000	0.7989	90	29.41	<.0001	0.05	21.9128	25.0872					
2	10	24.7500	0.7989	90	30.98	<.0001	0.05	23.1628	26.3372					
3	5	15.2500	0.7989	90	19.09	<.0001	0.05	13.6628	16.8372					
3	6	16.7500	0.7989	90	20.97	<.0001	0.05	15.1628	18.3372					
3	7	17.2500	0.7989	90	21.59	<.0001	0.05	15.6628	18.8372					
3	8	18.0000	0.7989	90	22.53	<.0001	0.05	16.4128	19.5872					
3	9	19.2500	0.7989	90	24.09	<.0001	0.05	17.6628	20.8372					
3	10	20.7500	0.7989	90	25.97	<.0001	0.05	19.1628	22.3372					
4	5	16.7500	0.7989	90	20.97	<.0001	0.05	15.1628	18.3372					
4	6	18.2500	0.7989	90	22.84	<.0001	0.05	16.6628	19.8372					
4	7	19.2500	0.7989	90	24.09	<.0001	0.05	17.6628	20.8372					
4	8	21.0000	0.7989	90	26.28	<.0001	0.05	19.4128	22.5872					
4	9	22.7500	0.7989	90	28.48	<.0001	0.05	21.1628	24.3372					
4	10	22.7500	0.7989	90	28.48	<.0001	0.05	21.1628	24.3372					
5	5	11.7500	0.7989	90	14.71	<.0001	0.05	10.1628	13.3372					
5	6	13.0000	0.7989	90	16.27	<.0001	0.05	11.4128	14.5872					
5	7	13.7500	0.7989	90	17.21	<.0001	0.05	12.1628	15.3372					
5	8	14.0000	0.7989	90	17.52	<.0001	0.05	12.4128	15.5872					
5	9	16.0000	0.7989	90	20.03	<.0001	0.05	14.4128	17.5872					
5	10	17.7500	0.7989	90	22.22	<.0001	0.05	16.1628	19.3372					
6	5	12.2500	0.7989	90	15.33	<.0001	0.05	10.6628	13.8372					
6	6	14.0000	0.7989	90	17.52	<.0001	0.05	12.4128	15.5872					
6	7	14.5000	0.7989	90	18.15	<.0001	0.05	12.9128	16.0872					
6	8	15.0000	0.7989	90	18.77	<.0001	0.05	13.4128	16.5872					

The PLM Procedure

treatment*number Least Squares Means															
treatment	number	Cov6	Cov7	Cov8	Cov9	Cov10	Cov11	Cov12	Cov13	Cov14	Cov15	Cov16	Cov17	Cov18	Cov19
1	5	0.3856													
1	6	0.3856													
1	7	0.3856													
1	8	0.3856													
1	9	0.3856													
1	10	0.6383													
2	5		0.6383	0.3856	0.3856	0.3856	0.3856	0.3856							
2	6		0.3856	0.6383	0.3856	0.3856	0.3856	0.3856							
2	7		0.3856	0.3856	0.6383	0.3856	0.3856	0.3856							
2	8		0.3856	0.3856	0.3856	0.6383	0.3856	0.3856							
2	9		0.3856	0.3856	0.3856	0.3856	0.6383	0.3856							
2	10		0.3856	0.3856	0.3856	0.3856	0.3856	0.6383							
3	5								0.6383	0.3856	0.3856	0.3856	0.3856	0.3856	
3	6								0.3856	0.6383	0.3856	0.3856	0.3856	0.3856	
3	7								0.3856	0.3856	0.6383	0.3856	0.3856	0.3856	
3	8								0.3856	0.3856	0.3856	0.6383	0.3856	0.3856	
3	9								0.3856	0.3856	0.3856	0.3856	0.6383	0.3856	
3	10								0.3856	0.3856	0.3856	0.3856	0.3856	0.6383	
4	5														0.6383
4	6														0.3856
4	7														0.3856
4	8														0.3856
4	9														0.3856
4	10														0.3856
5	5														
5	6														
5	7														
5	8														
5	9														
5	10														
6	5														
6	6														
6	7														
6	8														

The PLM Procedure

treatment*number Least Squares Means															
treatment	number	Cov20	Cov21	Cov22	Cov23	Cov24	Cov25	Cov26	Cov27	Cov28	Cov29	Cov30	Cov31	Cov32	Cov33
1	5														
1	6														
1	7														
1	8														
1	9														
1	10														
2	5														
2	6														
2	7														
2	8														
2	9														
2	10														
3	5														
3	6														
3	7														
3	8														
3	9														
3	10														
4	5	0.3856	0.3856	0.3856	0.3856	0.3856									
4	6	0.6383	0.3856	0.3856	0.3856	0.3856									
4	7	0.3856	0.6383	0.3856	0.3856	0.3856									
4	8	0.3856	0.3856	0.6383	0.3856	0.3856									
4	9	0.3856	0.3856	0.3856	0.6383	0.3856									
4	10	0.3856	0.3856	0.3856	0.3856	0.6383									
5	5						0.6383	0.3856	0.3856	0.3856	0.3856	0.3856			
5	6						0.3856	0.6383	0.3856	0.3856	0.3856	0.3856			
5	7						0.3856	0.3856	0.6383	0.3856	0.3856	0.3856			
5	8						0.3856	0.3856	0.3856	0.6383	0.3856	0.3856			
5	9						0.3856	0.3856	0.3856	0.3856	0.6383	0.3856			
5	10						0.3856	0.3856	0.3856	0.3856	0.3856	0.6383			
6	5												0.6383	0.3856	0.3856
6	6												0.3856	0.6383	0.3856
6	7												0.3856	0.3856	0.6383
6	8												0.3856	0.3856	0.3856

The PLM Procedure

treatment*number Least Squares Means															
treatment	number	Cov34	Cov35	Cov36	Corr1	Corr2	Corr3	Corr4	Corr5	Corr6	Corr7	Corr8	Corr9	Corr10	Corr11
1	5				1.0000	0.6042	0.6042	0.6042	0.6042	0.6042					
1	6				0.6042	1.0000	0.6042	0.6042	0.6042	0.6042					
1	7				0.6042	0.6042	1.0000	0.6042	0.6042	0.6042					
1	8				0.6042	0.6042	0.6042	1.0000	0.6042	0.6042					
1	9				0.6042	0.6042	0.6042	0.6042	1.0000	0.6042					
1	10				0.6042	0.6042	0.6042	0.6042	0.6042	1.0000					
2	5										1.0000	0.6042	0.6042	0.6042	0.6042
2	6										0.6042	1.0000	0.6042	0.6042	0.6042
2	7										0.6042	0.6042	1.0000	0.6042	0.6042
2	8										0.6042	0.6042	0.6042	1.0000	0.6042
2	9										0.6042	0.6042	0.6042	0.6042	1.0000
2	10										0.6042	0.6042	0.6042	0.6042	0.6042
3	5														
3	6														
3	7														
3	8														
3	9														
3	10														
4	5														
4	6														
4	7														
4	8														
4	9														
4	10														
5	5														
5	6														
5	7														
5	8														
5	9														
5	10														
6	5	0.3856	0.3856	0.3856											
6	6	0.3856	0.3856	0.3856											
6	7	0.3856	0.3856	0.3856											
6	8	0.6383	0.3856	0.3856											

The PLM Procedure

treatment*number Least Squares Means														
treatment	number	Corr12	Corr13	Corr14	Corr15	Corr16	Corr17	Corr18	Corr19	Corr20	Corr21	Corr22	Corr23	Corr24
1	5													
1	6													
1	7													
1	8													
1	9													
1	10													
2	5	0.6042												
2	6	0.6042												
2	7	0.6042												
2	8	0.6042												
2	9	0.6042												
2	10	1.0000												
3	5		1.0000	0.6042	0.6042	0.6042	0.6042	0.6042						
3	6		0.6042	1.0000	0.6042	0.6042	0.6042	0.6042						
3	7		0.6042	0.6042	1.0000	0.6042	0.6042	0.6042						
3	8		0.6042	0.6042	0.6042	1.0000	0.6042	0.6042						
3	9		0.6042	0.6042	0.6042	0.6042	1.0000	0.6042						
3	10		0.6042	0.6042	0.6042	0.6042	0.6042	1.0000						
4	5								1.0000	0.6042	0.6042	0.6042	0.6042	0.6042
4	6								0.6042	1.0000	0.6042	0.6042	0.6042	0.6042
4	7								0.6042	0.6042	1.0000	0.6042	0.6042	0.6042
4	8								0.6042	0.6042	0.6042	1.0000	0.6042	0.6042
4	9								0.6042	0.6042	0.6042	0.6042	1.0000	0.6042
4	10								0.6042	0.6042	0.6042	0.6042	0.6042	1.0000
5	5													
5	6													
5	7													
5	8													
5	9													
5	10													
6	5													
6	6													
6	7													
6	8													

The PLM Procedure

treatment*number Least Squares Means													
treatment	number	Corr25	Corr26	Corr27	Corr28	Corr29	Corr30	Corr31	Corr32	Corr33	Corr34	Corr35	Corr36
1	5												
1	6												
1	7												
1	8												
1	9												
1	10												
2	5												
2	6												
2	7												
2	8												
2	9												
2	10												
3	5												
3	6												
3	7												
3	8												
3	9												
3	10												
4	5												
4	6												
4	7												
4	8												
4	9												
4	10												
5	5	1.0000	0.6042	0.6042	0.6042	0.6042	0.6042						
5	6	0.6042	1.0000	0.6042	0.6042	0.6042	0.6042						
5	7	0.6042	0.6042	1.0000	0.6042	0.6042	0.6042						
5	8	0.6042	0.6042	0.6042	1.0000	0.6042	0.6042						
5	9	0.6042	0.6042	0.6042	0.6042	1.0000	0.6042						
5	10	0.6042	0.6042	0.6042	0.6042	0.6042	1.0000						
6	5							1.0000	0.6042	0.6042	0.6042	0.6042	0.6042
6	6							0.6042	1.0000	0.6042	0.6042	0.6042	0.6042
6	7							0.6042	0.6042	1.0000	0.6042	0.6042	0.6042
6	8							0.6042	0.6042	0.6042	1.0000	0.6042	0.6042

The PLM Procedure

treatment*number Least Squares Means

treatment	number	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper	Cov1	Cov2	Cov3	Cov4	Cov5
6	9	15.0000	0.7989	90	18.77	<.0001	0.05	13.4128	16.5872					
6	10	15.7500	0.7989	90	19.71	<.0001	0.05	14.1628	17.3372					

The PLM Procedure

treatment*number Least Squares Means															
treatment	number	Cov6	Cov7	Cov8	Cov9	Cov10	Cov11	Cov12	Cov13	Cov14	Cov15	Cov16	Cov17	Cov18	Cov19
6	9														
6	10														

The PLM Procedure

treatment*number Least Squares Means															
treatment	number	Cov20	Cov21	Cov22	Cov23	Cov24	Cov25	Cov26	Cov27	Cov28	Cov29	Cov30	Cov31	Cov32	Cov33
6	9												0.3856	0.3856	0.3856
6	10												0.3856	0.3856	0.3856

The PLM Procedure

treatment*number Least Squares Means															
treatment	number	Cov34	Cov35	Cov36	Corr1	Corr2	Corr3	Corr4	Corr5	Corr6	Corr7	Corr8	Corr9	Corr10	Corr11
6	9	0.3856	0.6383	0.3856											
6	10	0.3856	0.3856	0.6383											

The PLM Procedure

treatment*number Least Squares Means														
treatment	number	Corr12	Corr13	Corr14	Corr15	Corr16	Corr17	Corr18	Corr19	Corr20	Corr21	Corr22	Corr23	Corr24
6	9													
6	10													

The PLM Procedure

treatment*number Least Squares Means													
treatment	number	Corr25	Corr26	Corr27	Corr28	Corr29	Corr30	Corr31	Corr32	Corr33	Corr34	Corr35	Corr36
6	9							0.6042	0.6042	0.6042	0.6042	1.0000	0.6042
6	10							0.6042	0.6042	0.6042	0.6042	0.6042	1.0000

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer												
treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
1	5	1	6	-1.7500	0.7109	90	-2.46	0.0157	0.8583	0.05	-3.1623	-0.3377
1	5	1	7	-3.5000	0.7109	90	-4.92	<.0001	0.0019	0.05	-4.9123	-2.0877
1	5	1	8	-4.2500	0.7109	90	-5.98	<.0001	<.0001	0.05	-5.6623	-2.8377
1	5	1	9	-6.7500	0.7109	90	-9.50	<.0001	<.0001	0.05	-8.1623	-5.3377
1	5	1	10	-8.0000	0.7109	90	-11.25	<.0001	<.0001	0.05	-9.4123	-6.5877
1	5	2	5	60.5000	1.1299	90	53.55	<.0001	<.0001	0.05	58.2553	62.7447
1	5	2	6	59.5000	1.1299	90	52.66	<.0001	<.0001	0.05	57.2553	61.7447
1	5	2	7	59.2500	1.1299	90	52.44	<.0001	<.0001	0.05	57.0053	61.4947
1	5	2	8	58.7500	1.1299	90	52.00	<.0001	<.0001	0.05	56.5053	60.9947
1	5	2	9	58.0000	1.1299	90	51.33	<.0001	<.0001	0.05	55.7553	60.2447
1	5	2	10	56.7500	1.1299	90	50.23	<.0001	<.0001	0.05	54.5053	58.9947
1	5	3	5	66.2500	1.1299	90	58.63	<.0001	<.0001	0.05	64.0053	68.4947
1	5	3	6	64.7500	1.1299	90	57.31	<.0001	<.0001	0.05	62.5053	66.9947
1	5	3	7	64.2500	1.1299	90	56.86	<.0001	<.0001	0.05	62.0053	66.4947
1	5	3	8	63.5000	1.1299	90	56.20	<.0001	<.0001	0.05	61.2553	65.7447
1	5	3	9	62.2500	1.1299	90	55.09	<.0001	<.0001	0.05	60.0053	64.4947
1	5	3	10	60.7500	1.1299	90	53.77	<.0001	<.0001	0.05	58.5053	62.9947
1	5	4	5	64.7500	1.1299	90	57.31	<.0001	<.0001	0.05	62.5053	66.9947
1	5	4	6	63.2500	1.1299	90	55.98	<.0001	<.0001	0.05	61.0053	65.4947
1	5	4	7	62.2500	1.1299	90	55.09	<.0001	<.0001	0.05	60.0053	64.4947
1	5	4	8	60.5000	1.1299	90	53.55	<.0001	<.0001	0.05	58.2553	62.7447
1	5	4	9	58.7500	1.1299	90	52.00	<.0001	<.0001	0.05	56.5053	60.9947
1	5	4	10	58.7500	1.1299	90	52.00	<.0001	<.0001	0.05	56.5053	60.9947
1	5	5	5	69.7500	1.1299	90	61.73	<.0001	<.0001	0.05	67.5053	71.9947
1	5	5	6	68.5000	1.1299	90	60.63	<.0001	<.0001	0.05	66.2553	70.7447
1	5	5	7	67.7500	1.1299	90	59.96	<.0001	<.0001	0.05	65.5053	69.9947
1	5	5	8	67.5000	1.1299	90	59.74	<.0001	<.0001	0.05	65.2553	69.7447
1	5	5	9	65.5000	1.1299	90	57.97	<.0001	<.0001	0.05	63.2553	67.7447
1	5	5	10	63.7500	1.1299	90	56.42	<.0001	<.0001	0.05	61.5053	65.9947
1	5	6	5	69.2500	1.1299	90	61.29	<.0001	<.0001	0.05	67.0053	71.4947
1	5	6	6	67.5000	1.1299	90	59.74	<.0001	<.0001	0.05	65.2553	69.7447
1	5	6	7	67.0000	1.1299	90	59.30	<.0001	<.0001	0.05	64.7553	69.2447
1	5	6	8	66.5000	1.1299	90	58.86	<.0001	<.0001	0.05	64.2553	68.7447
1	5	6	9	66.5000	1.1299	90	58.86	<.0001	<.0001	0.05	64.2553	68.7447

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
1	5	1	6	-4.5721	1.0721
1	5	1	7	-6.3221	-0.6779
1	5	1	8	-7.0721	-1.4279
1	5	1	9	-9.5721	-3.9279
1	5	1	10	-10.8221	-5.1779
1	5	2	5	56.0145	64.9855
1	5	2	6	55.0145	63.9855
1	5	2	7	54.7645	63.7355
1	5	2	8	54.2645	63.2355
1	5	2	9	53.5145	62.4855
1	5	2	10	52.2645	61.2355
1	5	3	5	61.7645	70.7355
1	5	3	6	60.2645	69.2355
1	5	3	7	59.7645	68.7355
1	5	3	8	59.0145	67.9855
1	5	3	9	57.7645	66.7355
1	5	3	10	56.2645	65.2355
1	5	4	5	60.2645	69.2355
1	5	4	6	58.7645	67.7355
1	5	4	7	57.7645	66.7355
1	5	4	8	56.0145	64.9855
1	5	4	9	54.2645	63.2355
1	5	4	10	54.2645	63.2355
1	5	5	5	65.2645	74.2355
1	5	5	6	64.0145	72.9855
1	5	5	7	63.2645	72.2355
1	5	5	8	63.0145	71.9855
1	5	5	9	61.0145	69.9855
1	5	5	10	59.2645	68.2355
1	5	6	5	64.7645	73.7355
1	5	6	6	63.0145	71.9855
1	5	6	7	62.5145	71.4855
1	5	6	8	62.0145	70.9855
1	5	6	9	62.0145	70.9855

The PLM Procedure

Differences of treatment*number Least Squares Means
Adjustment for Multiple Comparisons: Tukey-Kramer

treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
1	5	6	10	65.7500	1.1299	90	58.19	<.0001	<.0001	0.05	63.5053	67.9947
1	6	1	7	-1.7500	0.7109	90	-2.46	0.0157	0.8583	0.05	-3.1623	-0.3377
1	6	1	8	-2.5000	0.7109	90	-3.52	0.0007	0.1710	0.05	-3.9123	-1.0877
1	6	1	9	-5.0000	0.7109	90	-7.03	<.0001	<.0001	0.05	-6.4123	-3.5877
1	6	1	10	-6.2500	0.7109	90	-8.79	<.0001	<.0001	0.05	-7.6623	-4.8377
1	6	2	5	62.2500	1.1299	90	55.09	<.0001	<.0001	0.05	60.0053	64.4947
1	6	2	6	61.2500	1.1299	90	54.21	<.0001	<.0001	0.05	59.0053	63.4947
1	6	2	7	61.0000	1.1299	90	53.99	<.0001	<.0001	0.05	58.7553	63.2447
1	6	2	8	60.5000	1.1299	90	53.55	<.0001	<.0001	0.05	58.2553	62.7447
1	6	2	9	59.7500	1.1299	90	52.88	<.0001	<.0001	0.05	57.5053	61.9947
1	6	2	10	58.5000	1.1299	90	51.78	<.0001	<.0001	0.05	56.2553	60.7447
1	6	3	5	68.0000	1.1299	90	60.18	<.0001	<.0001	0.05	65.7553	70.2447
1	6	3	6	66.5000	1.1299	90	58.86	<.0001	<.0001	0.05	64.2553	68.7447
1	6	3	7	66.0000	1.1299	90	58.41	<.0001	<.0001	0.05	63.7553	68.2447
1	6	3	8	65.2500	1.1299	90	57.75	<.0001	<.0001	0.05	63.0053	67.4947
1	6	3	9	64.0000	1.1299	90	56.64	<.0001	<.0001	0.05	61.7553	66.2447
1	6	3	10	62.5000	1.1299	90	55.32	<.0001	<.0001	0.05	60.2553	64.7447
1	6	4	5	66.5000	1.1299	90	58.86	<.0001	<.0001	0.05	64.2553	68.7447
1	6	4	6	65.0000	1.1299	90	57.53	<.0001	<.0001	0.05	62.7553	67.2447
1	6	4	7	64.0000	1.1299	90	56.64	<.0001	<.0001	0.05	61.7553	66.2447
1	6	4	8	62.2500	1.1299	90	55.09	<.0001	<.0001	0.05	60.0053	64.4947
1	6	4	9	60.5000	1.1299	90	53.55	<.0001	<.0001	0.05	58.2553	62.7447
1	6	4	10	60.5000	1.1299	90	53.55	<.0001	<.0001	0.05	58.2553	62.7447
1	6	5	5	71.5000	1.1299	90	63.28	<.0001	<.0001	0.05	69.2553	73.7447
1	6	5	6	70.2500	1.1299	90	62.18	<.0001	<.0001	0.05	68.0053	72.4947
1	6	5	7	69.5000	1.1299	90	61.51	<.0001	<.0001	0.05	67.2553	71.7447
1	6	5	8	69.2500	1.1299	90	61.29	<.0001	<.0001	0.05	67.0053	71.4947
1	6	5	9	67.2500	1.1299	90	59.52	<.0001	<.0001	0.05	65.0053	69.4947
1	6	5	10	65.5000	1.1299	90	57.97	<.0001	<.0001	0.05	63.2553	67.7447
1	6	6	5	71.0000	1.1299	90	62.84	<.0001	<.0001	0.05	68.7553	73.2447
1	6	6	6	69.2500	1.1299	90	61.29	<.0001	<.0001	0.05	67.0053	71.4947
1	6	6	7	68.7500	1.1299	90	60.85	<.0001	<.0001	0.05	66.5053	70.9947
1	6	6	8	68.2500	1.1299	90	60.40	<.0001	<.0001	0.05	66.0053	70.4947
1	6	6	9	68.2500	1.1299	90	60.40	<.0001	<.0001	0.05	66.0053	70.4947

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
1	5	6	10	61.2645	70.2355
1	6	1	7	-4.5721	1.0721
1	6	1	8	-5.3221	0.3221
1	6	1	9	-7.8221	-2.1779
1	6	1	10	-9.0721	-3.4279
1	6	2	5	57.7645	66.7355
1	6	2	6	56.7645	65.7355
1	6	2	7	56.5145	65.4855
1	6	2	8	56.0145	64.9855
1	6	2	9	55.2645	64.2355
1	6	2	10	54.0145	62.9855
1	6	3	5	63.5145	72.4855
1	6	3	6	62.0145	70.9855
1	6	3	7	61.5145	70.4855
1	6	3	8	60.7645	69.7355
1	6	3	9	59.5145	68.4855
1	6	3	10	58.0145	66.9855
1	6	4	5	62.0145	70.9855
1	6	4	6	60.5145	69.4855
1	6	4	7	59.5145	68.4855
1	6	4	8	57.7645	66.7355
1	6	4	9	56.0145	64.9855
1	6	4	10	56.0145	64.9855
1	6	5	5	67.0145	75.9855
1	6	5	6	65.7645	74.7355
1	6	5	7	65.0145	73.9855
1	6	5	8	64.7645	73.7355
1	6	5	9	62.7645	71.7355
1	6	5	10	61.0145	69.9855
1	6	6	5	66.5145	75.4855
1	6	6	6	64.7645	73.7355
1	6	6	7	64.2645	73.2355
1	6	6	8	63.7645	72.7355
1	6	6	9	63.7645	72.7355

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer												
treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
1	6	6	10	67.5000	1.1299	90	59.74	<.0001	<.0001	0.05	65.2553	69.7447
1	7	1	8	-0.7500	0.7109	90	-1.06	0.2942	1.0000	0.05	-2.1623	0.6623
1	7	1	9	-3.2500	0.7109	90	-4.57	<.0001	0.0069	0.05	-4.6623	-1.8377
1	7	1	10	-4.5000	0.7109	90	-6.33	<.0001	<.0001	0.05	-5.9123	-3.0877
1	7	2	5	64.0000	1.1299	90	56.64	<.0001	<.0001	0.05	61.7553	66.2447
1	7	2	6	63.0000	1.1299	90	55.76	<.0001	<.0001	0.05	60.7553	65.2447
1	7	2	7	62.7500	1.1299	90	55.54	<.0001	<.0001	0.05	60.5053	64.9947
1	7	2	8	62.2500	1.1299	90	55.09	<.0001	<.0001	0.05	60.0053	64.4947
1	7	2	9	61.5000	1.1299	90	54.43	<.0001	<.0001	0.05	59.2553	63.7447
1	7	2	10	60.2500	1.1299	90	53.32	<.0001	<.0001	0.05	58.0053	62.4947
1	7	3	5	69.7500	1.1299	90	61.73	<.0001	<.0001	0.05	67.5053	71.9947
1	7	3	6	68.2500	1.1299	90	60.40	<.0001	<.0001	0.05	66.0053	70.4947
1	7	3	7	67.7500	1.1299	90	59.96	<.0001	<.0001	0.05	65.5053	69.9947
1	7	3	8	67.0000	1.1299	90	59.30	<.0001	<.0001	0.05	64.7553	69.2447
1	7	3	9	65.7500	1.1299	90	58.19	<.0001	<.0001	0.05	63.5053	67.9947
1	7	3	10	64.2500	1.1299	90	56.86	<.0001	<.0001	0.05	62.0053	66.4947
1	7	4	5	68.2500	1.1299	90	60.40	<.0001	<.0001	0.05	66.0053	70.4947
1	7	4	6	66.7500	1.1299	90	59.08	<.0001	<.0001	0.05	64.5053	68.9947
1	7	4	7	65.7500	1.1299	90	58.19	<.0001	<.0001	0.05	63.5053	67.9947
1	7	4	8	64.0000	1.1299	90	56.64	<.0001	<.0001	0.05	61.7553	66.2447
1	7	4	9	62.2500	1.1299	90	55.09	<.0001	<.0001	0.05	60.0053	64.4947
1	7	4	10	62.2500	1.1299	90	55.09	<.0001	<.0001	0.05	60.0053	64.4947
1	7	5	5	73.2500	1.1299	90	64.83	<.0001	<.0001	0.05	71.0053	75.4947
1	7	5	6	72.0000	1.1299	90	63.72	<.0001	<.0001	0.05	69.7553	74.2447
1	7	5	7	71.2500	1.1299	90	63.06	<.0001	<.0001	0.05	69.0053	73.4947
1	7	5	8	71.0000	1.1299	90	62.84	<.0001	<.0001	0.05	68.7553	73.2447
1	7	5	9	69.0000	1.1299	90	61.07	<.0001	<.0001	0.05	66.7553	71.2447
1	7	5	10	67.2500	1.1299	90	59.52	<.0001	<.0001	0.05	65.0053	69.4947
1	7	6	5	72.7500	1.1299	90	64.39	<.0001	<.0001	0.05	70.5053	74.9947
1	7	6	6	71.0000	1.1299	90	62.84	<.0001	<.0001	0.05	68.7553	73.2447
1	7	6	7	70.5000	1.1299	90	62.40	<.0001	<.0001	0.05	68.2553	72.7447
1	7	6	8	70.0000	1.1299	90	61.95	<.0001	<.0001	0.05	67.7553	72.2447
1	7	6	9	70.0000	1.1299	90	61.95	<.0001	<.0001	0.05	67.7553	72.2447
1	7	6	10	69.2500	1.1299	90	61.29	<.0001	<.0001	0.05	67.0053	71.4947

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
1	6	6	10	63.0145	71.9855
1	7	1	8	-3.5721	2.0721
1	7	1	9	-6.0721	-0.4279
1	7	1	10	-7.3221	-1.6779
1	7	2	5	59.5145	68.4855
1	7	2	6	58.5145	67.4855
1	7	2	7	58.2645	67.2355
1	7	2	8	57.7645	66.7355
1	7	2	9	57.0145	65.9855
1	7	2	10	55.7645	64.7355
1	7	3	5	65.2645	74.2355
1	7	3	6	63.7645	72.7355
1	7	3	7	63.2645	72.2355
1	7	3	8	62.5145	71.4855
1	7	3	9	61.2645	70.2355
1	7	3	10	59.7645	68.7355
1	7	4	5	63.7645	72.7355
1	7	4	6	62.2645	71.2355
1	7	4	7	61.2645	70.2355
1	7	4	8	59.5145	68.4855
1	7	4	9	57.7645	66.7355
1	7	4	10	57.7645	66.7355
1	7	5	5	68.7645	77.7355
1	7	5	6	67.5145	76.4855
1	7	5	7	66.7645	75.7355
1	7	5	8	66.5145	75.4855
1	7	5	9	64.5145	73.4855
1	7	5	10	62.7645	71.7355
1	7	6	5	68.2645	77.2355
1	7	6	6	66.5145	75.4855
1	7	6	7	66.0145	74.9855
1	7	6	8	65.5145	74.4855
1	7	6	9	65.5145	74.4855
1	7	6	10	64.7645	73.7355

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer												
treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
1	8	1	9	-2.5000	0.7109	90	-3.52	0.0007	0.1710	0.05	-3.9123	-1.0877
1	8	1	10	-3.7500	0.7109	90	-5.28	<.0001	0.0005	0.05	-5.1623	-2.3377
1	8	2	5	64.7500	1.1299	90	57.31	<.0001	<.0001	0.05	62.5053	66.9947
1	8	2	6	63.7500	1.1299	90	56.42	<.0001	<.0001	0.05	61.5053	65.9947
1	8	2	7	63.5000	1.1299	90	56.20	<.0001	<.0001	0.05	61.2553	65.7447
1	8	2	8	63.0000	1.1299	90	55.76	<.0001	<.0001	0.05	60.7553	65.2447
1	8	2	9	62.2500	1.1299	90	55.09	<.0001	<.0001	0.05	60.0053	64.4947
1	8	2	10	61.0000	1.1299	90	53.99	<.0001	<.0001	0.05	58.7553	63.2447
1	8	3	5	70.5000	1.1299	90	62.40	<.0001	<.0001	0.05	68.2553	72.7447
1	8	3	6	69.0000	1.1299	90	61.07	<.0001	<.0001	0.05	66.7553	71.2447
1	8	3	7	68.5000	1.1299	90	60.63	<.0001	<.0001	0.05	66.2553	70.7447
1	8	3	8	67.7500	1.1299	90	59.96	<.0001	<.0001	0.05	65.5053	69.9947
1	8	3	9	66.5000	1.1299	90	58.86	<.0001	<.0001	0.05	64.2553	68.7447
1	8	3	10	65.0000	1.1299	90	57.53	<.0001	<.0001	0.05	62.7553	67.2447
1	8	4	5	69.0000	1.1299	90	61.07	<.0001	<.0001	0.05	66.7553	71.2447
1	8	4	6	67.5000	1.1299	90	59.74	<.0001	<.0001	0.05	65.2553	69.7447
1	8	4	7	66.5000	1.1299	90	58.86	<.0001	<.0001	0.05	64.2553	68.7447
1	8	4	8	64.7500	1.1299	90	57.31	<.0001	<.0001	0.05	62.5053	66.9947
1	8	4	9	63.0000	1.1299	90	55.76	<.0001	<.0001	0.05	60.7553	65.2447
1	8	4	10	63.0000	1.1299	90	55.76	<.0001	<.0001	0.05	60.7553	65.2447
1	8	5	5	74.0000	1.1299	90	65.49	<.0001	<.0001	0.05	71.7553	76.2447
1	8	5	6	72.7500	1.1299	90	64.39	<.0001	<.0001	0.05	70.5053	74.9947
1	8	5	7	72.0000	1.1299	90	63.72	<.0001	<.0001	0.05	69.7553	74.2447
1	8	5	8	71.7500	1.1299	90	63.50	<.0001	<.0001	0.05	69.5053	73.9947
1	8	5	9	69.7500	1.1299	90	61.73	<.0001	<.0001	0.05	67.5053	71.9947
1	8	5	10	68.0000	1.1299	90	60.18	<.0001	<.0001	0.05	65.7553	70.2447
1	8	6	5	73.5000	1.1299	90	65.05	<.0001	<.0001	0.05	71.2553	75.7447
1	8	6	6	71.7500	1.1299	90	63.50	<.0001	<.0001	0.05	69.5053	73.9947
1	8	6	7	71.2500	1.1299	90	63.06	<.0001	<.0001	0.05	69.0053	73.4947
1	8	6	8	70.7500	1.1299	90	62.62	<.0001	<.0001	0.05	68.5053	72.9947
1	8	6	9	70.7500	1.1299	90	62.62	<.0001	<.0001	0.05	68.5053	72.9947
1	8	6	10	70.0000	1.1299	90	61.95	<.0001	<.0001	0.05	67.7553	72.2447
1	9	1	10	-1.2500	0.7109	90	-1.76	0.0821	0.9983	0.05	-2.6623	0.1623
1	9	2	5	67.2500	1.1299	90	59.52	<.0001	<.0001	0.05	65.0053	69.4947

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
1	8	1	9	-5.3221	0.3221
1	8	1	10	-6.5721	-0.9279
1	8	2	5	60.2645	69.2355
1	8	2	6	59.2645	68.2355
1	8	2	7	59.0145	67.9855
1	8	2	8	58.5145	67.4855
1	8	2	9	57.7645	66.7355
1	8	2	10	56.5145	65.4855
1	8	3	5	66.0145	74.9855
1	8	3	6	64.5145	73.4855
1	8	3	7	64.0145	72.9855
1	8	3	8	63.2645	72.2355
1	8	3	9	62.0145	70.9855
1	8	3	10	60.5145	69.4855
1	8	4	5	64.5145	73.4855
1	8	4	6	63.0145	71.9855
1	8	4	7	62.0145	70.9855
1	8	4	8	60.2645	69.2355
1	8	4	9	58.5145	67.4855
1	8	4	10	58.5145	67.4855
1	8	5	5	69.5145	78.4855
1	8	5	6	68.2645	77.2355
1	8	5	7	67.5145	76.4855
1	8	5	8	67.2645	76.2355
1	8	5	9	65.2645	74.2355
1	8	5	10	63.5145	72.4855
1	8	6	5	69.0145	77.9855
1	8	6	6	67.2645	76.2355
1	8	6	7	66.7645	75.7355
1	8	6	8	66.2645	75.2355
1	8	6	9	66.2645	75.2355
1	8	6	10	65.5145	74.4855
1	9	1	10	-4.0721	1.5721
1	9	2	5	62.7645	71.7355

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer												
treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
1	9	2	6	66.2500	1.1299	90	58.63	<.0001	<.0001	0.05	64.0053	68.4947
1	9	2	7	66.0000	1.1299	90	58.41	<.0001	<.0001	0.05	63.7553	68.2447
1	9	2	8	65.5000	1.1299	90	57.97	<.0001	<.0001	0.05	63.2553	67.7447
1	9	2	9	64.7500	1.1299	90	57.31	<.0001	<.0001	0.05	62.5053	66.9947
1	9	2	10	63.5000	1.1299	90	56.20	<.0001	<.0001	0.05	61.2553	65.7447
1	9	3	5	73.0000	1.1299	90	64.61	<.0001	<.0001	0.05	70.7553	75.2447
1	9	3	6	71.5000	1.1299	90	63.28	<.0001	<.0001	0.05	69.2553	73.7447
1	9	3	7	71.0000	1.1299	90	62.84	<.0001	<.0001	0.05	68.7553	73.2447
1	9	3	8	70.2500	1.1299	90	62.18	<.0001	<.0001	0.05	68.0053	72.4947
1	9	3	9	69.0000	1.1299	90	61.07	<.0001	<.0001	0.05	66.7553	71.2447
1	9	3	10	67.5000	1.1299	90	59.74	<.0001	<.0001	0.05	65.2553	69.7447
1	9	4	5	71.5000	1.1299	90	63.28	<.0001	<.0001	0.05	69.2553	73.7447
1	9	4	6	70.0000	1.1299	90	61.95	<.0001	<.0001	0.05	67.7553	72.2447
1	9	4	7	69.0000	1.1299	90	61.07	<.0001	<.0001	0.05	66.7553	71.2447
1	9	4	8	67.2500	1.1299	90	59.52	<.0001	<.0001	0.05	65.0053	69.4947
1	9	4	9	65.5000	1.1299	90	57.97	<.0001	<.0001	0.05	63.2553	67.7447
1	9	4	10	65.5000	1.1299	90	57.97	<.0001	<.0001	0.05	63.2553	67.7447
1	9	5	5	76.5000	1.1299	90	67.71	<.0001	<.0001	0.05	74.2553	78.7447
1	9	5	6	75.2500	1.1299	90	66.60	<.0001	<.0001	0.05	73.0053	77.4947
1	9	5	7	74.5000	1.1299	90	65.94	<.0001	<.0001	0.05	72.2553	76.7447
1	9	5	8	74.2500	1.1299	90	65.72	<.0001	<.0001	0.05	72.0053	76.4947
1	9	5	9	72.2500	1.1299	90	63.95	<.0001	<.0001	0.05	70.0053	74.4947
1	9	5	10	70.5000	1.1299	90	62.40	<.0001	<.0001	0.05	68.2553	72.7447
1	9	6	5	76.0000	1.1299	90	67.26	<.0001	<.0001	0.05	73.7553	78.2447
1	9	6	6	74.2500	1.1299	90	65.72	<.0001	<.0001	0.05	72.0053	76.4947
1	9	6	7	73.7500	1.1299	90	65.27	<.0001	<.0001	0.05	71.5053	75.9947
1	9	6	8	73.2500	1.1299	90	64.83	<.0001	<.0001	0.05	71.0053	75.4947
1	9	6	9	73.2500	1.1299	90	64.83	<.0001	<.0001	0.05	71.0053	75.4947
1	9	6	10	72.5000	1.1299	90	64.17	<.0001	<.0001	0.05	70.2553	74.7447
1	10	2	5	68.5000	1.1299	90	60.63	<.0001	<.0001	0.05	66.2553	70.7447
1	10	2	6	67.5000	1.1299	90	59.74	<.0001	<.0001	0.05	65.2553	69.7447
1	10	2	7	67.2500	1.1299	90	59.52	<.0001	<.0001	0.05	65.0053	69.4947
1	10	2	8	66.7500	1.1299	90	59.08	<.0001	<.0001	0.05	64.5053	68.9947
1	10	2	9	66.0000	1.1299	90	58.41	<.0001	<.0001	0.05	63.7553	68.2447

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
1	9	2	6	61.7645	70.7355
1	9	2	7	61.5145	70.4855
1	9	2	8	61.0145	69.9855
1	9	2	9	60.2645	69.2355
1	9	2	10	59.0145	67.9855
1	9	3	5	68.5145	77.4855
1	9	3	6	67.0145	75.9855
1	9	3	7	66.5145	75.4855
1	9	3	8	65.7645	74.7355
1	9	3	9	64.5145	73.4855
1	9	3	10	63.0145	71.9855
1	9	4	5	67.0145	75.9855
1	9	4	6	65.5145	74.4855
1	9	4	7	64.5145	73.4855
1	9	4	8	62.7645	71.7355
1	9	4	9	61.0145	69.9855
1	9	4	10	61.0145	69.9855
1	9	5	5	72.0145	80.9855
1	9	5	6	70.7645	79.7355
1	9	5	7	70.0145	78.9855
1	9	5	8	69.7645	78.7355
1	9	5	9	67.7645	76.7355
1	9	5	10	66.0145	74.9855
1	9	6	5	71.5145	80.4855
1	9	6	6	69.7645	78.7355
1	9	6	7	69.2645	78.2355
1	9	6	8	68.7645	77.7355
1	9	6	9	68.7645	77.7355
1	9	6	10	68.0145	76.9855
1	10	2	5	64.0145	72.9855
1	10	2	6	63.0145	71.9855
1	10	2	7	62.7645	71.7355
1	10	2	8	62.2645	71.2355
1	10	2	9	61.5145	70.4855

The PLM Procedure

Differences of treatment*number Least Squares Means
Adjustment for Multiple Comparisons: Tukey-Kramer

treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
1	10	2	10	64.7500	1.1299	90	57.31	<.0001	<.0001	0.05	62.5053	66.9947
1	10	3	5	74.2500	1.1299	90	65.72	<.0001	<.0001	0.05	72.0053	76.4947
1	10	3	6	72.7500	1.1299	90	64.39	<.0001	<.0001	0.05	70.5053	74.9947
1	10	3	7	72.2500	1.1299	90	63.95	<.0001	<.0001	0.05	70.0053	74.4947
1	10	3	8	71.5000	1.1299	90	63.28	<.0001	<.0001	0.05	69.2553	73.7447
1	10	3	9	70.2500	1.1299	90	62.18	<.0001	<.0001	0.05	68.0053	72.4947
1	10	3	10	68.7500	1.1299	90	60.85	<.0001	<.0001	0.05	66.5053	70.9947
1	10	4	5	72.7500	1.1299	90	64.39	<.0001	<.0001	0.05	70.5053	74.9947
1	10	4	6	71.2500	1.1299	90	63.06	<.0001	<.0001	0.05	69.0053	73.4947
1	10	4	7	70.2500	1.1299	90	62.18	<.0001	<.0001	0.05	68.0053	72.4947
1	10	4	8	68.5000	1.1299	90	60.63	<.0001	<.0001	0.05	66.2553	70.7447
1	10	4	9	66.7500	1.1299	90	59.08	<.0001	<.0001	0.05	64.5053	68.9947
1	10	4	10	66.7500	1.1299	90	59.08	<.0001	<.0001	0.05	64.5053	68.9947
1	10	5	5	77.7500	1.1299	90	68.81	<.0001	<.0001	0.05	75.5053	79.9947
1	10	5	6	76.5000	1.1299	90	67.71	<.0001	<.0001	0.05	74.2553	78.7447
1	10	5	7	75.7500	1.1299	90	67.04	<.0001	<.0001	0.05	73.5053	77.9947
1	10	5	8	75.5000	1.1299	90	66.82	<.0001	<.0001	0.05	73.2553	77.7447
1	10	5	9	73.5000	1.1299	90	65.05	<.0001	<.0001	0.05	71.2553	75.7447
1	10	5	10	71.7500	1.1299	90	63.50	<.0001	<.0001	0.05	69.5053	73.9947
1	10	6	5	77.2500	1.1299	90	68.37	<.0001	<.0001	0.05	75.0053	79.4947
1	10	6	6	75.5000	1.1299	90	66.82	<.0001	<.0001	0.05	73.2553	77.7447
1	10	6	7	75.0000	1.1299	90	66.38	<.0001	<.0001	0.05	72.7553	77.2447
1	10	6	8	74.5000	1.1299	90	65.94	<.0001	<.0001	0.05	72.2553	76.7447
1	10	6	9	74.5000	1.1299	90	65.94	<.0001	<.0001	0.05	72.2553	76.7447
1	10	6	10	73.7500	1.1299	90	65.27	<.0001	<.0001	0.05	71.5053	75.9947
2	5	2	6	-1.0000	0.7109	90	-1.41	0.1629	1.0000	0.05	-2.4123	0.4123
2	5	2	7	-1.2500	0.7109	90	-1.76	0.0821	0.9983	0.05	-2.6623	0.1623
2	5	2	8	-1.7500	0.7109	90	-2.46	0.0157	0.8583	0.05	-3.1623	-0.3377
2	5	2	9	-2.5000	0.7109	90	-3.52	0.0007	0.1710	0.05	-3.9123	-1.0877
2	5	2	10	-3.7500	0.7109	90	-5.28	<.0001	0.0005	0.05	-5.1623	-2.3377
2	5	3	5	5.7500	1.1299	90	5.09	<.0001	0.0010	0.05	3.5053	7.9947
2	5	3	6	4.2500	1.1299	90	3.76	0.0003	0.0909	0.05	2.0053	6.4947
2	5	3	7	3.7500	1.1299	90	3.32	0.0013	0.2677	0.05	1.5053	5.9947
2	5	3	8	3.0000	1.1299	90	2.66	0.0094	0.7412	0.05	0.7553	5.2447

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
1	10	2	10	60.2645	69.2355
1	10	3	5	69.7645	78.7355
1	10	3	6	68.2645	77.2355
1	10	3	7	67.7645	76.7355
1	10	3	8	67.0145	75.9855
1	10	3	9	65.7645	74.7355
1	10	3	10	64.2645	73.2355
1	10	4	5	68.2645	77.2355
1	10	4	6	66.7645	75.7355
1	10	4	7	65.7645	74.7355
1	10	4	8	64.0145	72.9855
1	10	4	9	62.2645	71.2355
1	10	4	10	62.2645	71.2355
1	10	5	5	73.2645	82.2355
1	10	5	6	72.0145	80.9855
1	10	5	7	71.2645	80.2355
1	10	5	8	71.0145	79.9855
1	10	5	9	69.0145	77.9855
1	10	5	10	67.2645	76.2355
1	10	6	5	72.7645	81.7355
1	10	6	6	71.0145	79.9855
1	10	6	7	70.5145	79.4855
1	10	6	8	70.0145	78.9855
1	10	6	9	70.0145	78.9855
1	10	6	10	69.2645	78.2355
2	5	2	6	-3.8221	1.8221
2	5	2	7	-4.0721	1.5721
2	5	2	8	-4.5721	1.0721
2	5	2	9	-5.3221	0.3221
2	5	2	10	-6.5721	-0.9279
2	5	3	5	1.2645	10.2355
2	5	3	6	-0.2355	8.7355
2	5	3	7	-0.7355	8.2355
2	5	3	8	-1.4855	7.4855

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer												
treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
2	5	3	9	1.7500	1.1299	90	1.55	0.1249	0.9998	0.05	-0.4947	3.9947
2	5	3	10	0.2500	1.1299	90	0.22	0.8254	1.0000	0.05	-1.9947	2.4947
2	5	4	5	4.2500	1.1299	90	3.76	0.0003	0.0909	0.05	2.0053	6.4947
2	5	4	6	2.7500	1.1299	90	2.43	0.0169	0.8722	0.05	0.5053	4.9947
2	5	4	7	1.7500	1.1299	90	1.55	0.1249	0.9998	0.05	-0.4947	3.9947
2	5	4	8	1.08E-14	1.1299	90	0.00	1.0000	1.0000	0.05	-2.2447	2.2447
2	5	4	9	-1.7500	1.1299	90	-1.55	0.1249	0.9998	0.05	-3.9947	0.4947
2	5	4	10	-1.7500	1.1299	90	-1.55	0.1249	0.9998	0.05	-3.9947	0.4947
2	5	5	5	9.2500	1.1299	90	8.19	<.0001	<.0001	0.05	7.0053	11.4947
2	5	5	6	8.0000	1.1299	90	7.08	<.0001	<.0001	0.05	5.7553	10.2447
2	5	5	7	7.2500	1.1299	90	6.42	<.0001	<.0001	0.05	5.0053	9.4947
2	5	5	8	7.0000	1.1299	90	6.20	<.0001	<.0001	0.05	4.7553	9.2447
2	5	5	9	5.0000	1.1299	90	4.43	<.0001	0.0115	0.05	2.7553	7.2447
2	5	5	10	3.2500	1.1299	90	2.88	0.0050	0.5769	0.05	1.0053	5.4947
2	5	6	5	8.7500	1.1299	90	7.74	<.0001	<.0001	0.05	6.5053	10.9947
2	5	6	6	7.0000	1.1299	90	6.20	<.0001	<.0001	0.05	4.7553	9.2447
2	5	6	7	6.5000	1.1299	90	5.75	<.0001	<.0001	0.05	4.2553	8.7447
2	5	6	8	6.0000	1.1299	90	5.31	<.0001	0.0004	0.05	3.7553	8.2447
2	5	6	9	6.0000	1.1299	90	5.31	<.0001	0.0004	0.05	3.7553	8.2447
2	5	6	10	5.2500	1.1299	90	4.65	<.0001	0.0053	0.05	3.0053	7.4947
2	6	2	7	-0.2500	0.7109	90	-0.35	0.7259	1.0000	0.05	-1.6623	1.1623
2	6	2	8	-0.7500	0.7109	90	-1.06	0.2942	1.0000	0.05	-2.1623	0.6623
2	6	2	9	-1.5000	0.7109	90	-2.11	0.0376	0.9734	0.05	-2.9123	-0.08775
2	6	2	10	-2.7500	0.7109	90	-3.87	0.0002	0.0673	0.05	-4.1623	-1.3377
2	6	3	5	6.7500	1.1299	90	5.97	<.0001	<.0001	0.05	4.5053	8.9947
2	6	3	6	5.2500	1.1299	90	4.65	<.0001	0.0053	0.05	3.0053	7.4947
2	6	3	7	4.7500	1.1299	90	4.20	<.0001	0.0241	0.05	2.5053	6.9947
2	6	3	8	4.0000	1.1299	90	3.54	0.0006	0.1616	0.05	1.7553	6.2447
2	6	3	9	2.7500	1.1299	90	2.43	0.0169	0.8722	0.05	0.5053	4.9947
2	6	3	10	1.2500	1.1299	90	1.11	0.2715	1.0000	0.05	-0.9947	3.4947
2	6	4	5	5.2500	1.1299	90	4.65	<.0001	0.0053	0.05	3.0053	7.4947
2	6	4	6	3.7500	1.1299	90	3.32	0.0013	0.2677	0.05	1.5053	5.9947
2	6	4	7	2.7500	1.1299	90	2.43	0.0169	0.8722	0.05	0.5053	4.9947
2	6	4	8	1.0000	1.1299	90	0.89	0.3785	1.0000	0.05	-1.2447	3.2447

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
2	5	3	9	-2.7355	6.2355
2	5	3	10	-4.2355	4.7355
2	5	4	5	-0.2355	8.7355
2	5	4	6	-1.7355	7.2355
2	5	4	7	-2.7355	6.2355
2	5	4	8	-4.4855	4.4855
2	5	4	9	-6.2355	2.7355
2	5	4	10	-6.2355	2.7355
2	5	5	5	4.7645	13.7355
2	5	5	6	3.5145	12.4855
2	5	5	7	2.7645	11.7355
2	5	5	8	2.5145	11.4855
2	5	5	9	0.5145	9.4855
2	5	5	10	-1.2355	7.7355
2	5	6	5	4.2645	13.2355
2	5	6	6	2.5145	11.4855
2	5	6	7	2.0145	10.9855
2	5	6	8	1.5145	10.4855
2	5	6	9	1.5145	10.4855
2	5	6	10	0.7645	9.7355
2	6	2	7	-3.0721	2.5721
2	6	2	8	-3.5721	2.0721
2	6	2	9	-4.3221	1.3221
2	6	2	10	-5.5721	0.07206
2	6	3	5	2.2645	11.2355
2	6	3	6	0.7645	9.7355
2	6	3	7	0.2645	9.2355
2	6	3	8	-0.4855	8.4855
2	6	3	9	-1.7355	7.2355
2	6	3	10	-3.2355	5.7355
2	6	4	5	0.7645	9.7355
2	6	4	6	-0.7355	8.2355
2	6	4	7	-1.7355	7.2355
2	6	4	8	-3.4855	5.4855

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer												
treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
2	6	4	9	-0.7500	1.1299	90	-0.66	0.5085	1.0000	0.05	-2.9947	1.4947
2	6	4	10	-0.7500	1.1299	90	-0.66	0.5085	1.0000	0.05	-2.9947	1.4947
2	6	5	5	10.2500	1.1299	90	9.07	<.0001	<.0001	0.05	8.0053	12.4947
2	6	5	6	9.0000	1.1299	90	7.97	<.0001	<.0001	0.05	6.7553	11.2447
2	6	5	7	8.2500	1.1299	90	7.30	<.0001	<.0001	0.05	6.0053	10.4947
2	6	5	8	8.0000	1.1299	90	7.08	<.0001	<.0001	0.05	5.7553	10.2447
2	6	5	9	6.0000	1.1299	90	5.31	<.0001	0.0004	0.05	3.7553	8.2447
2	6	5	10	4.2500	1.1299	90	3.76	0.0003	0.0909	0.05	2.0053	6.4947
2	6	6	5	9.7500	1.1299	90	8.63	<.0001	<.0001	0.05	7.5053	11.9947
2	6	6	6	8.0000	1.1299	90	7.08	<.0001	<.0001	0.05	5.7553	10.2447
2	6	6	7	7.5000	1.1299	90	6.64	<.0001	<.0001	0.05	5.2553	9.7447
2	6	6	8	7.0000	1.1299	90	6.20	<.0001	<.0001	0.05	4.7553	9.2447
2	6	6	9	7.0000	1.1299	90	6.20	<.0001	<.0001	0.05	4.7553	9.2447
2	6	6	10	6.2500	1.1299	90	5.53	<.0001	0.0002	0.05	4.0053	8.4947
2	7	2	8	-0.5000	0.7109	90	-0.70	0.4836	1.0000	0.05	-1.9123	0.9123
2	7	2	9	-1.2500	0.7109	90	-1.76	0.0821	0.9983	0.05	-2.6623	0.1623
2	7	2	10	-2.5000	0.7109	90	-3.52	0.0007	0.1710	0.05	-3.9123	-1.0877
2	7	3	5	7.0000	1.1299	90	6.20	<.0001	<.0001	0.05	4.7553	9.2447
2	7	3	6	5.5000	1.1299	90	4.87	<.0001	0.0023	0.05	3.2553	7.7447
2	7	3	7	5.0000	1.1299	90	4.43	<.0001	0.0115	0.05	2.7553	7.2447
2	7	3	8	4.2500	1.1299	90	3.76	0.0003	0.0909	0.05	2.0053	6.4947
2	7	3	9	3.0000	1.1299	90	2.66	0.0094	0.7412	0.05	0.7553	5.2447
2	7	3	10	1.5000	1.1299	90	1.33	0.1877	1.0000	0.05	-0.7447	3.7447
2	7	4	5	5.5000	1.1299	90	4.87	<.0001	0.0023	0.05	3.2553	7.7447
2	7	4	6	4.0000	1.1299	90	3.54	0.0006	0.1616	0.05	1.7553	6.2447
2	7	4	7	3.0000	1.1299	90	2.66	0.0094	0.7412	0.05	0.7553	5.2447
2	7	4	8	1.2500	1.1299	90	1.11	0.2715	1.0000	0.05	-0.9947	3.4947
2	7	4	9	-0.5000	1.1299	90	-0.44	0.6592	1.0000	0.05	-2.7447	1.7447
2	7	4	10	-0.5000	1.1299	90	-0.44	0.6592	1.0000	0.05	-2.7447	1.7447
2	7	5	5	10.5000	1.1299	90	9.29	<.0001	<.0001	0.05	8.2553	12.7447
2	7	5	6	9.2500	1.1299	90	8.19	<.0001	<.0001	0.05	7.0053	11.4947
2	7	5	7	8.5000	1.1299	90	7.52	<.0001	<.0001	0.05	6.2553	10.7447
2	7	5	8	8.2500	1.1299	90	7.30	<.0001	<.0001	0.05	6.0053	10.4947
2	7	5	9	6.2500	1.1299	90	5.53	<.0001	0.0002	0.05	4.0053	8.4947

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
2	6	4	9	-5.2355	3.7355
2	6	4	10	-5.2355	3.7355
2	6	5	5	5.7645	14.7355
2	6	5	6	4.5145	13.4855
2	6	5	7	3.7645	12.7355
2	6	5	8	3.5145	12.4855
2	6	5	9	1.5145	10.4855
2	6	5	10	-0.2355	8.7355
2	6	6	5	5.2645	14.2355
2	6	6	6	3.5145	12.4855
2	6	6	7	3.0145	11.9855
2	6	6	8	2.5145	11.4855
2	6	6	9	2.5145	11.4855
2	6	6	10	1.7645	10.7355
2	7	2	8	-3.3221	2.3221
2	7	2	9	-4.0721	1.5721
2	7	2	10	-5.3221	0.3221
2	7	3	5	2.5145	11.4855
2	7	3	6	1.0145	9.9855
2	7	3	7	0.5145	9.4855
2	7	3	8	-0.2355	8.7355
2	7	3	9	-1.4855	7.4855
2	7	3	10	-2.9855	5.9855
2	7	4	5	1.0145	9.9855
2	7	4	6	-0.4855	8.4855
2	7	4	7	-1.4855	7.4855
2	7	4	8	-3.2355	5.7355
2	7	4	9	-4.9855	3.9855
2	7	4	10	-4.9855	3.9855
2	7	5	5	6.0145	14.9855
2	7	5	6	4.7645	13.7355
2	7	5	7	4.0145	12.9855
2	7	5	8	3.7645	12.7355
2	7	5	9	1.7645	10.7355

The PLM Procedure

Differences of treatment*number Least Squares Means
Adjustment for Multiple Comparisons: Tukey-Kramer

treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
2	7	5	10	4.5000	1.1299	90	3.98	0.0001	0.0481	0.05	2.2553	6.7447
2	7	6	5	10.0000	1.1299	90	8.85	<.0001	<.0001	0.05	7.7553	12.2447
2	7	6	6	8.2500	1.1299	90	7.30	<.0001	<.0001	0.05	6.0053	10.4947
2	7	6	7	7.7500	1.1299	90	6.86	<.0001	<.0001	0.05	5.5053	9.9947
2	7	6	8	7.2500	1.1299	90	6.42	<.0001	<.0001	0.05	5.0053	9.4947
2	7	6	9	7.2500	1.1299	90	6.42	<.0001	<.0001	0.05	5.0053	9.4947
2	7	6	10	6.5000	1.1299	90	5.75	<.0001	<.0001	0.05	4.2553	8.7447
2	8	2	9	-0.7500	0.7109	90	-1.06	0.2942	1.0000	0.05	-2.1623	0.6623
2	8	2	10	-2.0000	0.7109	90	-2.81	0.0060	0.6253	0.05	-3.4123	-0.5877
2	8	3	5	7.5000	1.1299	90	6.64	<.0001	<.0001	0.05	5.2553	9.7447
2	8	3	6	6.0000	1.1299	90	5.31	<.0001	0.0004	0.05	3.7553	8.2447
2	8	3	7	5.5000	1.1299	90	4.87	<.0001	0.0023	0.05	3.2553	7.7447
2	8	3	8	4.7500	1.1299	90	4.20	<.0001	0.0241	0.05	2.5053	6.9947
2	8	3	9	3.5000	1.1299	90	3.10	0.0026	0.4103	0.05	1.2553	5.7447
2	8	3	10	2.0000	1.1299	90	1.77	0.0801	0.9981	0.05	-0.2447	4.2447
2	8	4	5	6.0000	1.1299	90	5.31	<.0001	0.0004	0.05	3.7553	8.2447
2	8	4	6	4.5000	1.1299	90	3.98	0.0001	0.0481	0.05	2.2553	6.7447
2	8	4	7	3.5000	1.1299	90	3.10	0.0026	0.4103	0.05	1.2553	5.7447
2	8	4	8	1.7500	1.1299	90	1.55	0.1249	0.9998	0.05	-0.4947	3.9947
2	8	4	9	5.88E-15	1.1299	90	0.00	1.0000	1.0000	0.05	-2.2447	2.2447
2	8	4	10	2.5E-7	1.1299	90	0.00	1.0000	1.0000	0.05	-2.2447	2.2447
2	8	5	5	11.0000	1.1299	90	9.74	<.0001	<.0001	0.05	8.7553	13.2447
2	8	5	6	9.7500	1.1299	90	8.63	<.0001	<.0001	0.05	7.5053	11.9947
2	8	5	7	9.0000	1.1299	90	7.97	<.0001	<.0001	0.05	6.7553	11.2447
2	8	5	8	8.7500	1.1299	90	7.74	<.0001	<.0001	0.05	6.5053	10.9947
2	8	5	9	6.7500	1.1299	90	5.97	<.0001	<.0001	0.05	4.5053	8.9947
2	8	5	10	5.0000	1.1299	90	4.43	<.0001	0.0115	0.05	2.7553	7.2447
2	8	6	5	10.5000	1.1299	90	9.29	<.0001	<.0001	0.05	8.2553	12.7447
2	8	6	6	8.7500	1.1299	90	7.74	<.0001	<.0001	0.05	6.5053	10.9947
2	8	6	7	8.2500	1.1299	90	7.30	<.0001	<.0001	0.05	6.0053	10.4947
2	8	6	8	7.7500	1.1299	90	6.86	<.0001	<.0001	0.05	5.5053	9.9947
2	8	6	9	7.7500	1.1299	90	6.86	<.0001	<.0001	0.05	5.5053	9.9947
2	8	6	10	7.0000	1.1299	90	6.20	<.0001	<.0001	0.05	4.7553	9.2447
2	9	2	10	-1.2500	0.7109	90	-1.76	0.0821	0.9983	0.05	-2.6623	0.1623

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
2	7	5	10	0.01450	8.9855
2	7	6	5	5.5145	14.4855
2	7	6	6	3.7645	12.7355
2	7	6	7	3.2645	12.2355
2	7	6	8	2.7645	11.7355
2	7	6	9	2.7645	11.7355
2	7	6	10	2.0145	10.9855
2	8	2	9	-3.5721	2.0721
2	8	2	10	-4.8221	0.8221
2	8	3	5	3.0145	11.9855
2	8	3	6	1.5145	10.4855
2	8	3	7	1.0145	9.9855
2	8	3	8	0.2645	9.2355
2	8	3	9	-0.9855	7.9855
2	8	3	10	-2.4855	6.4855
2	8	4	5	1.5145	10.4855
2	8	4	6	0.01450	8.9855
2	8	4	7	-0.9855	7.9855
2	8	4	8	-2.7355	6.2355
2	8	4	9	-4.4855	4.4855
2	8	4	10	-4.4855	4.4855
2	8	5	5	6.5145	15.4855
2	8	5	6	5.2645	14.2355
2	8	5	7	4.5145	13.4855
2	8	5	8	4.2645	13.2355
2	8	5	9	2.2645	11.2355
2	8	5	10	0.5145	9.4855
2	8	6	5	6.0145	14.9855
2	8	6	6	4.2645	13.2355
2	8	6	7	3.7645	12.7355
2	8	6	8	3.2645	12.2355
2	8	6	9	3.2645	12.2355
2	8	6	10	2.5145	11.4855
2	9	2	10	-4.0721	1.5721

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer												
treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
2	9	3	5	8.2500	1.1299	90	7.30	<.0001	<.0001	0.05	6.0053	10.4947
2	9	3	6	6.7500	1.1299	90	5.97	<.0001	<.0001	0.05	4.5053	8.9947
2	9	3	7	6.2500	1.1299	90	5.53	<.0001	0.0002	0.05	4.0053	8.4947
2	9	3	8	5.5000	1.1299	90	4.87	<.0001	0.0023	0.05	3.2553	7.7447
2	9	3	9	4.2500	1.1299	90	3.76	0.0003	0.0909	0.05	2.0053	6.4947
2	9	3	10	2.7500	1.1299	90	2.43	0.0169	0.8722	0.05	0.5053	4.9947
2	9	4	5	6.7500	1.1299	90	5.97	<.0001	<.0001	0.05	4.5053	8.9947
2	9	4	6	5.2500	1.1299	90	4.65	<.0001	0.0053	0.05	3.0053	7.4947
2	9	4	7	4.2500	1.1299	90	3.76	0.0003	0.0909	0.05	2.0053	6.4947
2	9	4	8	2.5000	1.1299	90	2.21	0.0295	0.9525	0.05	0.2553	4.7447
2	9	4	9	0.7500	1.1299	90	0.66	0.5085	1.0000	0.05	-1.4947	2.9947
2	9	4	10	0.7500	1.1299	90	0.66	0.5085	1.0000	0.05	-1.4947	2.9947
2	9	5	5	11.7500	1.1299	90	10.40	<.0001	<.0001	0.05	9.5053	13.9947
2	9	5	6	10.5000	1.1299	90	9.29	<.0001	<.0001	0.05	8.2553	12.7447
2	9	5	7	9.7500	1.1299	90	8.63	<.0001	<.0001	0.05	7.5053	11.9947
2	9	5	8	9.5000	1.1299	90	8.41	<.0001	<.0001	0.05	7.2553	11.7447
2	9	5	9	7.5000	1.1299	90	6.64	<.0001	<.0001	0.05	5.2553	9.7447
2	9	5	10	5.7500	1.1299	90	5.09	<.0001	0.0010	0.05	3.5053	7.9947
2	9	6	5	11.2500	1.1299	90	9.96	<.0001	<.0001	0.05	9.0053	13.4947
2	9	6	6	9.5000	1.1299	90	8.41	<.0001	<.0001	0.05	7.2553	11.7447
2	9	6	7	9.0000	1.1299	90	7.97	<.0001	<.0001	0.05	6.7553	11.2447
2	9	6	8	8.5000	1.1299	90	7.52	<.0001	<.0001	0.05	6.2553	10.7447
2	9	6	9	8.5000	1.1299	90	7.52	<.0001	<.0001	0.05	6.2553	10.7447
2	9	6	10	7.7500	1.1299	90	6.86	<.0001	<.0001	0.05	5.5053	9.9947
2	10	3	5	9.5000	1.1299	90	8.41	<.0001	<.0001	0.05	7.2553	11.7447
2	10	3	6	8.0000	1.1299	90	7.08	<.0001	<.0001	0.05	5.7553	10.2447
2	10	3	7	7.5000	1.1299	90	6.64	<.0001	<.0001	0.05	5.2553	9.7447
2	10	3	8	6.7500	1.1299	90	5.97	<.0001	<.0001	0.05	4.5053	8.9947
2	10	3	9	5.5000	1.1299	90	4.87	<.0001	0.0023	0.05	3.2553	7.7447
2	10	3	10	4.0000	1.1299	90	3.54	0.0006	0.1616	0.05	1.7553	6.2447
2	10	4	5	8.0000	1.1299	90	7.08	<.0001	<.0001	0.05	5.7553	10.2447
2	10	4	6	6.5000	1.1299	90	5.75	<.0001	<.0001	0.05	4.2553	8.7447
2	10	4	7	5.5000	1.1299	90	4.87	<.0001	0.0023	0.05	3.2553	7.7447
2	10	4	8	3.7500	1.1299	90	3.32	0.0013	0.2677	0.05	1.5053	5.9947

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
2	9	3	5	3.7645	12.7355
2	9	3	6	2.2645	11.2355
2	9	3	7	1.7645	10.7355
2	9	3	8	1.0145	9.9855
2	9	3	9	-0.2355	8.7355
2	9	3	10	-1.7355	7.2355
2	9	4	5	2.2645	11.2355
2	9	4	6	0.7645	9.7355
2	9	4	7	-0.2355	8.7355
2	9	4	8	-1.9855	6.9855
2	9	4	9	-3.7355	5.2355
2	9	4	10	-3.7355	5.2355
2	9	5	5	7.2645	16.2355
2	9	5	6	6.0145	14.9855
2	9	5	7	5.2645	14.2355
2	9	5	8	5.0145	13.9855
2	9	5	9	3.0145	11.9855
2	9	5	10	1.2645	10.2355
2	9	6	5	6.7645	15.7355
2	9	6	6	5.0145	13.9855
2	9	6	7	4.5145	13.4855
2	9	6	8	4.0145	12.9855
2	9	6	9	4.0145	12.9855
2	9	6	10	3.2645	12.2355
2	10	3	5	5.0145	13.9855
2	10	3	6	3.5145	12.4855
2	10	3	7	3.0145	11.9855
2	10	3	8	2.2645	11.2355
2	10	3	9	1.0145	9.9855
2	10	3	10	-0.4855	8.4855
2	10	4	5	3.5145	12.4855
2	10	4	6	2.0145	10.9855
2	10	4	7	1.0145	9.9855
2	10	4	8	-0.7355	8.2355

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer												
treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
2	10	4	9	2.0000	1.1299	90	1.77	0.0801	0.9981	0.05	-0.2447	4.2447
2	10	4	10	2.0000	1.1299	90	1.77	0.0801	0.9981	0.05	-0.2447	4.2447
2	10	5	5	13.0000	1.1299	90	11.51	<.0001	<.0001	0.05	10.7553	15.2447
2	10	5	6	11.7500	1.1299	90	10.40	<.0001	<.0001	0.05	9.5053	13.9947
2	10	5	7	11.0000	1.1299	90	9.74	<.0001	<.0001	0.05	8.7553	13.2447
2	10	5	8	10.7500	1.1299	90	9.51	<.0001	<.0001	0.05	8.5053	12.9947
2	10	5	9	8.7500	1.1299	90	7.74	<.0001	<.0001	0.05	6.5053	10.9947
2	10	5	10	7.0000	1.1299	90	6.20	<.0001	<.0001	0.05	4.7553	9.2447
2	10	6	5	12.5000	1.1299	90	11.06	<.0001	<.0001	0.05	10.2553	14.7447
2	10	6	6	10.7500	1.1299	90	9.51	<.0001	<.0001	0.05	8.5053	12.9947
2	10	6	7	10.2500	1.1299	90	9.07	<.0001	<.0001	0.05	8.0053	12.4947
2	10	6	8	9.7500	1.1299	90	8.63	<.0001	<.0001	0.05	7.5053	11.9947
2	10	6	9	9.7500	1.1299	90	8.63	<.0001	<.0001	0.05	7.5053	11.9947
2	10	6	10	9.0000	1.1299	90	7.97	<.0001	<.0001	0.05	6.7553	11.2447
3	5	3	6	-1.5000	0.7109	90	-2.11	0.0376	0.9734	0.05	-2.9123	-0.08775
3	5	3	7	-2.0000	0.7109	90	-2.81	0.0060	0.6253	0.05	-3.4123	-0.5877
3	5	3	8	-2.7500	0.7109	90	-3.87	0.0002	0.0673	0.05	-4.1623	-1.3377
3	5	3	9	-4.0000	0.7109	90	-5.63	<.0001	0.0001	0.05	-5.4123	-2.5877
3	5	3	10	-5.5000	0.7109	90	-7.74	<.0001	<.0001	0.05	-6.9123	-4.0877
3	5	4	5	-1.5000	1.1299	90	-1.33	0.1877	1.0000	0.05	-3.7447	0.7447
3	5	4	6	-3.0000	1.1299	90	-2.66	0.0094	0.7412	0.05	-5.2447	-0.7553
3	5	4	7	-4.0000	1.1299	90	-3.54	0.0006	0.1616	0.05	-6.2447	-1.7553
3	5	4	8	-5.7500	1.1299	90	-5.09	<.0001	0.0010	0.05	-7.9947	-3.5053
3	5	4	9	-7.5000	1.1299	90	-6.64	<.0001	<.0001	0.05	-9.7447	-5.2553
3	5	4	10	-7.5000	1.1299	90	-6.64	<.0001	<.0001	0.05	-9.7447	-5.2553
3	5	5	5	3.5000	1.1299	90	3.10	0.0026	0.4103	0.05	1.2553	5.7447
3	5	5	6	2.2500	1.1299	90	1.99	0.0495	0.9878	0.05	0.005308	4.4947
3	5	5	7	1.5000	1.1299	90	1.33	0.1877	1.0000	0.05	-0.7447	3.7447
3	5	5	8	1.2500	1.1299	90	1.11	0.2715	1.0000	0.05	-0.9947	3.4947
3	5	5	9	-0.7500	1.1299	90	-0.66	0.5085	1.0000	0.05	-2.9947	1.4947
3	5	5	10	-2.5000	1.1299	90	-2.21	0.0295	0.9525	0.05	-4.7447	-0.2553
3	5	6	5	3.0000	1.1299	90	2.66	0.0094	0.7412	0.05	0.7553	5.2447
3	5	6	6	1.2500	1.1299	90	1.11	0.2715	1.0000	0.05	-0.9947	3.4947
3	5	6	7	0.7500	1.1299	90	0.66	0.5085	1.0000	0.05	-1.4947	2.9947

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
2	10	4	9	-2.4855	6.4855
2	10	4	10	-2.4855	6.4855
2	10	5	5	8.5145	17.4855
2	10	5	6	7.2645	16.2355
2	10	5	7	6.5145	15.4855
2	10	5	8	6.2645	15.2355
2	10	5	9	4.2645	13.2355
2	10	5	10	2.5145	11.4855
2	10	6	5	8.0145	16.9855
2	10	6	6	6.2645	15.2355
2	10	6	7	5.7645	14.7355
2	10	6	8	5.2645	14.2355
2	10	6	9	5.2645	14.2355
2	10	6	10	4.5145	13.4855
3	5	3	6	-4.3221	1.3221
3	5	3	7	-4.8221	0.8221
3	5	3	8	-5.5721	0.07206
3	5	3	9	-6.8221	-1.1779
3	5	3	10	-8.3221	-2.6779
3	5	4	5	-5.9855	2.9855
3	5	4	6	-7.4855	1.4855
3	5	4	7	-8.4855	0.4855
3	5	4	8	-10.2355	-1.2645
3	5	4	9	-11.9855	-3.0145
3	5	4	10	-11.9855	-3.0145
3	5	5	5	-0.9855	7.9855
3	5	5	6	-2.2355	6.7355
3	5	5	7	-2.9855	5.9855
3	5	5	8	-3.2355	5.7355
3	5	5	9	-5.2355	3.7355
3	5	5	10	-6.9855	1.9855
3	5	6	5	-1.4855	7.4855
3	5	6	6	-3.2355	5.7355
3	5	6	7	-3.7355	5.2355

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer												
treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
3	5	6	8	0.2500	1.1299	90	0.22	0.8254	1.0000	0.05	-1.9947	2.4947
3	5	6	9	0.2500	1.1299	90	0.22	0.8254	1.0000	0.05	-1.9947	2.4947
3	5	6	10	-0.5000	1.1299	90	-0.44	0.6592	1.0000	0.05	-2.7447	1.7447
3	6	3	7	-0.5000	0.7109	90	-0.70	0.4836	1.0000	0.05	-1.9123	0.9123
3	6	3	8	-1.2500	0.7109	90	-1.76	0.0821	0.9983	0.05	-2.6623	0.1623
3	6	3	9	-2.5000	0.7109	90	-3.52	0.0007	0.1710	0.05	-3.9123	-1.0877
3	6	3	10	-4.0000	0.7109	90	-5.63	<.0001	0.0001	0.05	-5.4123	-2.5877
3	6	4	5	-2.5E-7	1.1299	90	-0.00	1.0000	1.0000	0.05	-2.2447	2.2447
3	6	4	6	-1.5000	1.1299	90	-1.33	0.1877	1.0000	0.05	-3.7447	0.7447
3	6	4	7	-2.5000	1.1299	90	-2.21	0.0295	0.9525	0.05	-4.7447	-0.2553
3	6	4	8	-4.2500	1.1299	90	-3.76	0.0003	0.0909	0.05	-6.4947	-2.0053
3	6	4	9	-6.0000	1.1299	90	-5.31	<.0001	0.0004	0.05	-8.2447	-3.7553
3	6	4	10	-6.0000	1.1299	90	-5.31	<.0001	0.0004	0.05	-8.2447	-3.7553
3	6	5	5	5.0000	1.1299	90	4.43	<.0001	0.0115	0.05	2.7553	7.2447
3	6	5	6	3.7500	1.1299	90	3.32	0.0013	0.2677	0.05	1.5053	5.9947
3	6	5	7	3.0000	1.1299	90	2.66	0.0094	0.7412	0.05	0.7553	5.2447
3	6	5	8	2.7500	1.1299	90	2.43	0.0169	0.8722	0.05	0.5053	4.9947
3	6	5	9	0.7500	1.1299	90	0.66	0.5085	1.0000	0.05	-1.4947	2.9947
3	6	5	10	-1.0000	1.1299	90	-0.89	0.3785	1.0000	0.05	-3.2447	1.2447
3	6	6	5	4.5000	1.1299	90	3.98	0.0001	0.0481	0.05	2.2553	6.7447
3	6	6	6	2.7500	1.1299	90	2.43	0.0169	0.8722	0.05	0.5053	4.9947
3	6	6	7	2.2500	1.1299	90	1.99	0.0495	0.9878	0.05	0.005307	4.4947
3	6	6	8	1.7500	1.1299	90	1.55	0.1249	0.9998	0.05	-0.4947	3.9947
3	6	6	9	1.7500	1.1299	90	1.55	0.1249	0.9998	0.05	-0.4947	3.9947
3	6	6	10	1.0000	1.1299	90	0.89	0.3785	1.0000	0.05	-1.2447	3.2447
3	7	3	8	-0.7500	0.7109	90	-1.06	0.2942	1.0000	0.05	-2.1623	0.6623
3	7	3	9	-2.0000	0.7109	90	-2.81	0.0060	0.6253	0.05	-3.4123	-0.5877
3	7	3	10	-3.5000	0.7109	90	-4.92	<.0001	0.0019	0.05	-4.9123	-2.0877
3	7	4	5	0.5000	1.1299	90	0.44	0.6592	1.0000	0.05	-1.7447	2.7447
3	7	4	6	-1.0000	1.1299	90	-0.89	0.3785	1.0000	0.05	-3.2447	1.2447
3	7	4	7	-2.0000	1.1299	90	-1.77	0.0801	0.9981	0.05	-4.2447	0.2447
3	7	4	8	-3.7500	1.1299	90	-3.32	0.0013	0.2677	0.05	-5.9947	-1.5053
3	7	4	9	-5.5000	1.1299	90	-4.87	<.0001	0.0023	0.05	-7.7447	-3.2553
3	7	4	10	-5.5000	1.1299	90	-4.87	<.0001	0.0023	0.05	-7.7447	-3.2553

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
3	5	6	8	-4.2355	4.7355
3	5	6	9	-4.2355	4.7355
3	5	6	10	-4.9855	3.9855
3	6	3	7	-3.3221	2.3221
3	6	3	8	-4.0721	1.5721
3	6	3	9	-5.3221	0.3221
3	6	3	10	-6.8221	-1.1779
3	6	4	5	-4.4855	4.4855
3	6	4	6	-5.9855	2.9855
3	6	4	7	-6.9855	1.9855
3	6	4	8	-8.7355	0.2355
3	6	4	9	-10.4855	-1.5145
3	6	4	10	-10.4855	-1.5145
3	6	5	5	0.5145	9.4855
3	6	5	6	-0.7355	8.2355
3	6	5	7	-1.4855	7.4855
3	6	5	8	-1.7355	7.2355
3	6	5	9	-3.7355	5.2355
3	6	5	10	-5.4855	3.4855
3	6	6	5	0.01450	8.9855
3	6	6	6	-1.7355	7.2355
3	6	6	7	-2.2355	6.7355
3	6	6	8	-2.7355	6.2355
3	6	6	9	-2.7355	6.2355
3	6	6	10	-3.4855	5.4855
3	7	3	8	-3.5721	2.0721
3	7	3	9	-4.8221	0.8221
3	7	3	10	-6.3221	-0.6779
3	7	4	5	-3.9855	4.9855
3	7	4	6	-5.4855	3.4855
3	7	4	7	-6.4855	2.4855
3	7	4	8	-8.2355	0.7355
3	7	4	9	-9.9855	-1.0145
3	7	4	10	-9.9855	-1.0145

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer												
treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
3	7	5	5	5.5000	1.1299	90	4.87	<.0001	0.0023	0.05	3.2553	7.7447
3	7	5	6	4.2500	1.1299	90	3.76	0.0003	0.0909	0.05	2.0053	6.4947
3	7	5	7	3.5000	1.1299	90	3.10	0.0026	0.4103	0.05	1.2553	5.7447
3	7	5	8	3.2500	1.1299	90	2.88	0.0050	0.5769	0.05	1.0053	5.4947
3	7	5	9	1.2500	1.1299	90	1.11	0.2715	1.0000	0.05	-0.9947	3.4947
3	7	5	10	-0.5000	1.1299	90	-0.44	0.6592	1.0000	0.05	-2.7447	1.7447
3	7	6	5	5.0000	1.1299	90	4.43	<.0001	0.0115	0.05	2.7553	7.2447
3	7	6	6	3.2500	1.1299	90	2.88	0.0050	0.5769	0.05	1.0053	5.4947
3	7	6	7	2.7500	1.1299	90	2.43	0.0169	0.8722	0.05	0.5053	4.9947
3	7	6	8	2.2500	1.1299	90	1.99	0.0495	0.9878	0.05	0.005307	4.4947
3	7	6	9	2.2500	1.1299	90	1.99	0.0495	0.9878	0.05	0.005307	4.4947
3	7	6	10	1.5000	1.1299	90	1.33	0.1877	1.0000	0.05	-0.7447	3.7447
3	8	3	9	-1.2500	0.7109	90	-1.76	0.0821	0.9983	0.05	-2.6623	0.1623
3	8	3	10	-2.7500	0.7109	90	-3.87	0.0002	0.0673	0.05	-4.1623	-1.3377
3	8	4	5	1.2500	1.1299	90	1.11	0.2715	1.0000	0.05	-0.9947	3.4947
3	8	4	6	-0.2500	1.1299	90	-0.22	0.8254	1.0000	0.05	-2.4947	1.9947
3	8	4	7	-1.2500	1.1299	90	-1.11	0.2715	1.0000	0.05	-3.4947	0.9947
3	8	4	8	-3.0000	1.1299	90	-2.66	0.0094	0.7412	0.05	-5.2447	-0.7553
3	8	4	9	-4.7500	1.1299	90	-4.20	<.0001	0.0241	0.05	-6.9947	-2.5053
3	8	4	10	-4.7500	1.1299	90	-4.20	<.0001	0.0241	0.05	-6.9947	-2.5053
3	8	5	5	6.2500	1.1299	90	5.53	<.0001	0.0002	0.05	4.0053	8.4947
3	8	5	6	5.0000	1.1299	90	4.43	<.0001	0.0115	0.05	2.7553	7.2447
3	8	5	7	4.2500	1.1299	90	3.76	0.0003	0.0909	0.05	2.0053	6.4947
3	8	5	8	4.0000	1.1299	90	3.54	0.0006	0.1616	0.05	1.7553	6.2447
3	8	5	9	2.0000	1.1299	90	1.77	0.0801	0.9981	0.05	-0.2447	4.2447
3	8	5	10	0.2500	1.1299	90	0.22	0.8254	1.0000	0.05	-1.9947	2.4947
3	8	6	5	5.7500	1.1299	90	5.09	<.0001	0.0010	0.05	3.5053	7.9947
3	8	6	6	4.0000	1.1299	90	3.54	0.0006	0.1616	0.05	1.7553	6.2447
3	8	6	7	3.5000	1.1299	90	3.10	0.0026	0.4103	0.05	1.2553	5.7447
3	8	6	8	3.0000	1.1299	90	2.66	0.0094	0.7412	0.05	0.7553	5.2447
3	8	6	9	3.0000	1.1299	90	2.66	0.0094	0.7412	0.05	0.7553	5.2447
3	8	6	10	2.2500	1.1299	90	1.99	0.0495	0.9878	0.05	0.005307	4.4947
3	9	3	10	-1.5000	0.7109	90	-2.11	0.0376	0.9734	0.05	-2.9123	-0.08775
3	9	4	5	2.5000	1.1299	90	2.21	0.0295	0.9525	0.05	0.2553	4.7447

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
3	7	5	5	1.0145	9.9855
3	7	5	6	-0.2355	8.7355
3	7	5	7	-0.9855	7.9855
3	7	5	8	-1.2355	7.7355
3	7	5	9	-3.2355	5.7355
3	7	5	10	-4.9855	3.9855
3	7	6	5	0.5145	9.4855
3	7	6	6	-1.2355	7.7355
3	7	6	7	-1.7355	7.2355
3	7	6	8	-2.2355	6.7355
3	7	6	9	-2.2355	6.7355
3	7	6	10	-2.9855	5.9855
3	8	3	9	-4.0721	1.5721
3	8	3	10	-5.5721	0.07206
3	8	4	5	-3.2355	5.7355
3	8	4	6	-4.7355	4.2355
3	8	4	7	-5.7355	3.2355
3	8	4	8	-7.4855	1.4855
3	8	4	9	-9.2355	-0.2645
3	8	4	10	-9.2355	-0.2645
3	8	5	5	1.7645	10.7355
3	8	5	6	0.5145	9.4855
3	8	5	7	-0.2355	8.7355
3	8	5	8	-0.4855	8.4855
3	8	5	9	-2.4855	6.4855
3	8	5	10	-4.2355	4.7355
3	8	6	5	1.2645	10.2355
3	8	6	6	-0.4855	8.4855
3	8	6	7	-0.9855	7.9855
3	8	6	8	-1.4855	7.4855
3	8	6	9	-1.4855	7.4855
3	8	6	10	-2.2355	6.7355
3	9	3	10	-4.3221	1.3221
3	9	4	5	-1.9855	6.9855

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer												
treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
3	9	4	6	1.0000	1.1299	90	0.89	0.3785	1.0000	0.05	-1.2447	3.2447
3	9	4	7	1.6E-14	1.1299	90	0.00	1.0000	1.0000	0.05	-2.2447	2.2447
3	9	4	8	-1.7500	1.1299	90	-1.55	0.1249	0.9998	0.05	-3.9947	0.4947
3	9	4	9	-3.5000	1.1299	90	-3.10	0.0026	0.4103	0.05	-5.7447	-1.2553
3	9	4	10	-3.5000	1.1299	90	-3.10	0.0026	0.4103	0.05	-5.7447	-1.2553
3	9	5	5	7.5000	1.1299	90	6.64	<.0001	<.0001	0.05	5.2553	9.7447
3	9	5	6	6.2500	1.1299	90	5.53	<.0001	0.0002	0.05	4.0053	8.4947
3	9	5	7	5.5000	1.1299	90	4.87	<.0001	0.0023	0.05	3.2553	7.7447
3	9	5	8	5.2500	1.1299	90	4.65	<.0001	0.0053	0.05	3.0053	7.4947
3	9	5	9	3.2500	1.1299	90	2.88	0.0050	0.5769	0.05	1.0053	5.4947
3	9	5	10	1.5000	1.1299	90	1.33	0.1877	1.0000	0.05	-0.7447	3.7447
3	9	6	5	7.0000	1.1299	90	6.20	<.0001	<.0001	0.05	4.7553	9.2447
3	9	6	6	5.2500	1.1299	90	4.65	<.0001	0.0053	0.05	3.0053	7.4947
3	9	6	7	4.7500	1.1299	90	4.20	<.0001	0.0241	0.05	2.5053	6.9947
3	9	6	8	4.2500	1.1299	90	3.76	0.0003	0.0909	0.05	2.0053	6.4947
3	9	6	9	4.2500	1.1299	90	3.76	0.0003	0.0909	0.05	2.0053	6.4947
3	9	6	10	3.5000	1.1299	90	3.10	0.0026	0.4103	0.05	1.2553	5.7447
3	10	4	5	4.0000	1.1299	90	3.54	0.0006	0.1616	0.05	1.7553	6.2447
3	10	4	6	2.5000	1.1299	90	2.21	0.0295	0.9525	0.05	0.2553	4.7447
3	10	4	7	1.5000	1.1299	90	1.33	0.1877	1.0000	0.05	-0.7447	3.7447
3	10	4	8	-0.2500	1.1299	90	-0.22	0.8254	1.0000	0.05	-2.4947	1.9947
3	10	4	9	-2.0000	1.1299	90	-1.77	0.0801	0.9981	0.05	-4.2447	0.2447
3	10	4	10	-2.0000	1.1299	90	-1.77	0.0801	0.9981	0.05	-4.2447	0.2447
3	10	5	5	9.0000	1.1299	90	7.97	<.0001	<.0001	0.05	6.7553	11.2447
3	10	5	6	7.7500	1.1299	90	6.86	<.0001	<.0001	0.05	5.5053	9.9947
3	10	5	7	7.0000	1.1299	90	6.20	<.0001	<.0001	0.05	4.7553	9.2447
3	10	5	8	6.7500	1.1299	90	5.97	<.0001	<.0001	0.05	4.5053	8.9947
3	10	5	9	4.7500	1.1299	90	4.20	<.0001	0.0241	0.05	2.5053	6.9947
3	10	5	10	3.0000	1.1299	90	2.66	0.0094	0.7412	0.05	0.7553	5.2447
3	10	6	5	8.5000	1.1299	90	7.52	<.0001	<.0001	0.05	6.2553	10.7447
3	10	6	6	6.7500	1.1299	90	5.97	<.0001	<.0001	0.05	4.5053	8.9947
3	10	6	7	6.2500	1.1299	90	5.53	<.0001	0.0002	0.05	4.0053	8.4947
3	10	6	8	5.7500	1.1299	90	5.09	<.0001	0.0010	0.05	3.5053	7.9947
3	10	6	9	5.7500	1.1299	90	5.09	<.0001	0.0010	0.05	3.5053	7.9947

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
3	9	4	6	-3.4855	5.4855
3	9	4	7	-4.4855	4.4855
3	9	4	8	-6.2355	2.7355
3	9	4	9	-7.9855	0.9855
3	9	4	10	-7.9855	0.9855
3	9	5	5	3.0145	11.9855
3	9	5	6	1.7645	10.7355
3	9	5	7	1.0145	9.9855
3	9	5	8	0.7645	9.7355
3	9	5	9	-1.2355	7.7355
3	9	5	10	-2.9855	5.9855
3	9	6	5	2.5145	11.4855
3	9	6	6	0.7645	9.7355
3	9	6	7	0.2645	9.2355
3	9	6	8	-0.2355	8.7355
3	9	6	9	-0.2355	8.7355
3	9	6	10	-0.9855	7.9855
3	10	4	5	-0.4855	8.4855
3	10	4	6	-1.9855	6.9855
3	10	4	7	-2.9855	5.9855
3	10	4	8	-4.7355	4.2355
3	10	4	9	-6.4855	2.4855
3	10	4	10	-6.4855	2.4855
3	10	5	5	4.5145	13.4855
3	10	5	6	3.2645	12.2355
3	10	5	7	2.5145	11.4855
3	10	5	8	2.2645	11.2355
3	10	5	9	0.2645	9.2355
3	10	5	10	-1.4855	7.4855
3	10	6	5	4.0145	12.9855
3	10	6	6	2.2645	11.2355
3	10	6	7	1.7645	10.7355
3	10	6	8	1.2645	10.2355
3	10	6	9	1.2645	10.2355

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer												
treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
3	10	6	10	5.0000	1.1299	90	4.43	<.0001	0.0115	0.05	2.7553	7.2447
4	5	4	6	-1.5000	0.7109	90	-2.11	0.0376	0.9734	0.05	-2.9123	-0.08775
4	5	4	7	-2.5000	0.7109	90	-3.52	0.0007	0.1710	0.05	-3.9123	-1.0877
4	5	4	8	-4.2500	0.7109	90	-5.98	<.0001	<.0001	0.05	-5.6623	-2.8377
4	5	4	9	-6.0000	0.7109	90	-8.44	<.0001	<.0001	0.05	-7.4123	-4.5877
4	5	4	10	-6.0000	0.7109	90	-8.44	<.0001	<.0001	0.05	-7.4123	-4.5877
4	5	5	5	5.0000	1.1299	90	4.43	<.0001	0.0115	0.05	2.7553	7.2447
4	5	5	6	3.7500	1.1299	90	3.32	0.0013	0.2677	0.05	1.5053	5.9947
4	5	5	7	3.0000	1.1299	90	2.66	0.0094	0.7412	0.05	0.7553	5.2447
4	5	5	8	2.7500	1.1299	90	2.43	0.0169	0.8722	0.05	0.5053	4.9947
4	5	5	9	0.7500	1.1299	90	0.66	0.5085	1.0000	0.05	-1.4947	2.9947
4	5	5	10	-1.0000	1.1299	90	-0.89	0.3785	1.0000	0.05	-3.2447	1.2447
4	5	6	5	4.5000	1.1299	90	3.98	0.0001	0.0481	0.05	2.2553	6.7447
4	5	6	6	2.7500	1.1299	90	2.43	0.0169	0.8722	0.05	0.5053	4.9947
4	5	6	7	2.2500	1.1299	90	1.99	0.0495	0.9878	0.05	0.005307	4.4947
4	5	6	8	1.7500	1.1299	90	1.55	0.1249	0.9998	0.05	-0.4947	3.9947
4	5	6	9	1.7500	1.1299	90	1.55	0.1249	0.9998	0.05	-0.4947	3.9947
4	5	6	10	1.0000	1.1299	90	0.89	0.3785	1.0000	0.05	-1.2447	3.2447
4	6	4	7	-1.0000	0.7109	90	-1.41	0.1629	1.0000	0.05	-2.4123	0.4123
4	6	4	8	-2.7500	0.7109	90	-3.87	0.0002	0.0673	0.05	-4.1623	-1.3377
4	6	4	9	-4.5000	0.7109	90	-6.33	<.0001	<.0001	0.05	-5.9123	-3.0877
4	6	4	10	-4.5000	0.7109	90	-6.33	<.0001	<.0001	0.05	-5.9123	-3.0877
4	6	5	5	6.5000	1.1299	90	5.75	<.0001	<.0001	0.05	4.2553	8.7447
4	6	5	6	5.2500	1.1299	90	4.65	<.0001	0.0053	0.05	3.0053	7.4947
4	6	5	7	4.5000	1.1299	90	3.98	0.0001	0.0481	0.05	2.2553	6.7447
4	6	5	8	4.2500	1.1299	90	3.76	0.0003	0.0909	0.05	2.0053	6.4947
4	6	5	9	2.2500	1.1299	90	1.99	0.0495	0.9878	0.05	0.005307	4.4947
4	6	5	10	0.5000	1.1299	90	0.44	0.6592	1.0000	0.05	-1.7447	2.7447
4	6	6	5	6.0000	1.1299	90	5.31	<.0001	0.0004	0.05	3.7553	8.2447
4	6	6	6	4.2500	1.1299	90	3.76	0.0003	0.0909	0.05	2.0053	6.4947
4	6	6	7	3.7500	1.1299	90	3.32	0.0013	0.2677	0.05	1.5053	5.9947
4	6	6	8	3.2500	1.1299	90	2.88	0.0050	0.5769	0.05	1.0053	5.4947
4	6	6	9	3.2500	1.1299	90	2.88	0.0050	0.5769	0.05	1.0053	5.4947
4	6	6	10	2.5000	1.1299	90	2.21	0.0295	0.9525	0.05	0.2553	4.7447

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
3	10	6	10	0.5145	9.4855
4	5	4	6	-4.3221	1.3221
4	5	4	7	-5.3221	0.3221
4	5	4	8	-7.0721	-1.4279
4	5	4	9	-8.8221	-3.1779
4	5	4	10	-8.8221	-3.1779
4	5	5	5	0.5145	9.4855
4	5	5	6	-0.7355	8.2355
4	5	5	7	-1.4855	7.4855
4	5	5	8	-1.7355	7.2355
4	5	5	9	-3.7355	5.2355
4	5	5	10	-5.4855	3.4855
4	5	6	5	0.01450	8.9855
4	5	6	6	-1.7355	7.2355
4	5	6	7	-2.2355	6.7355
4	5	6	8	-2.7355	6.2355
4	5	6	9	-2.7355	6.2355
4	5	6	10	-3.4855	5.4855
4	6	4	7	-3.8221	1.8221
4	6	4	8	-5.5721	0.07206
4	6	4	9	-7.3221	-1.6779
4	6	4	10	-7.3221	-1.6779
4	6	5	5	2.0145	10.9855
4	6	5	6	0.7645	9.7355
4	6	5	7	0.01450	8.9855
4	6	5	8	-0.2355	8.7355
4	6	5	9	-2.2355	6.7355
4	6	5	10	-3.9855	4.9855
4	6	6	5	1.5145	10.4855
4	6	6	6	-0.2355	8.7355
4	6	6	7	-0.7355	8.2355
4	6	6	8	-1.2355	7.7355
4	6	6	9	-1.2355	7.7355
4	6	6	10	-1.9855	6.9855

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer												
treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
4	7	4	8	-1.7500	0.7109	90	-2.46	0.0157	0.8583	0.05	-3.1623	-0.3377
4	7	4	9	-3.5000	0.7109	90	-4.92	<.0001	0.0019	0.05	-4.9123	-2.0877
4	7	4	10	-3.5000	0.7109	90	-4.92	<.0001	0.0019	0.05	-4.9123	-2.0877
4	7	5	5	7.5000	1.1299	90	6.64	<.0001	<.0001	0.05	5.2553	9.7447
4	7	5	6	6.2500	1.1299	90	5.53	<.0001	0.0002	0.05	4.0053	8.4947
4	7	5	7	5.5000	1.1299	90	4.87	<.0001	0.0023	0.05	3.2553	7.7447
4	7	5	8	5.2500	1.1299	90	4.65	<.0001	0.0053	0.05	3.0053	7.4947
4	7	5	9	3.2500	1.1299	90	2.88	0.0050	0.5769	0.05	1.0053	5.4947
4	7	5	10	1.5000	1.1299	90	1.33	0.1877	1.0000	0.05	-0.7447	3.7447
4	7	6	5	7.0000	1.1299	90	6.20	<.0001	<.0001	0.05	4.7553	9.2447
4	7	6	6	5.2500	1.1299	90	4.65	<.0001	0.0053	0.05	3.0053	7.4947
4	7	6	7	4.7500	1.1299	90	4.20	<.0001	0.0241	0.05	2.5053	6.9947
4	7	6	8	4.2500	1.1299	90	3.76	0.0003	0.0909	0.05	2.0053	6.4947
4	7	6	9	4.2500	1.1299	90	3.76	0.0003	0.0909	0.05	2.0053	6.4947
4	7	6	10	3.5000	1.1299	90	3.10	0.0026	0.4103	0.05	1.2553	5.7447
4	8	4	9	-1.7500	0.7109	90	-2.46	0.0157	0.8583	0.05	-3.1623	-0.3377
4	8	4	10	-1.7500	0.7109	90	-2.46	0.0157	0.8583	0.05	-3.1623	-0.3377
4	8	5	5	9.2500	1.1299	90	8.19	<.0001	<.0001	0.05	7.0053	11.4947
4	8	5	6	8.0000	1.1299	90	7.08	<.0001	<.0001	0.05	5.7553	10.2447
4	8	5	7	7.2500	1.1299	90	6.42	<.0001	<.0001	0.05	5.0053	9.4947
4	8	5	8	7.0000	1.1299	90	6.20	<.0001	<.0001	0.05	4.7553	9.2447
4	8	5	9	5.0000	1.1299	90	4.43	<.0001	0.0115	0.05	2.7553	7.2447
4	8	5	10	3.2500	1.1299	90	2.88	0.0050	0.5769	0.05	1.0053	5.4947
4	8	6	5	8.7500	1.1299	90	7.74	<.0001	<.0001	0.05	6.5053	10.9947
4	8	6	6	7.0000	1.1299	90	6.20	<.0001	<.0001	0.05	4.7553	9.2447
4	8	6	7	6.5000	1.1299	90	5.75	<.0001	<.0001	0.05	4.2553	8.7447
4	8	6	8	6.0000	1.1299	90	5.31	<.0001	0.0004	0.05	3.7553	8.2447
4	8	6	9	6.0000	1.1299	90	5.31	<.0001	0.0004	0.05	3.7553	8.2447
4	8	6	10	5.2500	1.1299	90	4.65	<.0001	0.0053	0.05	3.0053	7.4947
4	9	4	10	2.5E-7	0.7109	90	0.00	1.0000	1.0000	0.05	-1.4123	1.4123
4	9	5	5	11.0000	1.1299	90	9.74	<.0001	<.0001	0.05	8.7553	13.2447
4	9	5	6	9.7500	1.1299	90	8.63	<.0001	<.0001	0.05	7.5053	11.9947
4	9	5	7	9.0000	1.1299	90	7.97	<.0001	<.0001	0.05	6.7553	11.2447
4	9	5	8	8.7500	1.1299	90	7.74	<.0001	<.0001	0.05	6.5053	10.9947

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
4	7	4	8	-4.5721	1.0721
4	7	4	9	-6.3221	-0.6779
4	7	4	10	-6.3221	-0.6779
4	7	5	5	3.0145	11.9855
4	7	5	6	1.7645	10.7355
4	7	5	7	1.0145	9.9855
4	7	5	8	0.7645	9.7355
4	7	5	9	-1.2355	7.7355
4	7	5	10	-2.9855	5.9855
4	7	6	5	2.5145	11.4855
4	7	6	6	0.7645	9.7355
4	7	6	7	0.2645	9.2355
4	7	6	8	-0.2355	8.7355
4	7	6	9	-0.2355	8.7355
4	7	6	10	-0.9855	7.9855
4	8	4	9	-4.5721	1.0721
4	8	4	10	-4.5721	1.0721
4	8	5	5	4.7645	13.7355
4	8	5	6	3.5145	12.4855
4	8	5	7	2.7645	11.7355
4	8	5	8	2.5145	11.4855
4	8	5	9	0.5145	9.4855
4	8	5	10	-1.2355	7.7355
4	8	6	5	4.2645	13.2355
4	8	6	6	2.5145	11.4855
4	8	6	7	2.0145	10.9855
4	8	6	8	1.5145	10.4855
4	8	6	9	1.5145	10.4855
4	8	6	10	0.7645	9.7355
4	9	4	10	-2.8221	2.8221
4	9	5	5	6.5145	15.4855
4	9	5	6	5.2645	14.2355
4	9	5	7	4.5145	13.4855
4	9	5	8	4.2645	13.2355

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer												
treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
4	9	5	9	6.7500	1.1299	90	5.97	<.0001	<.0001	0.05	4.5053	8.9947
4	9	5	10	5.0000	1.1299	90	4.43	<.0001	0.0115	0.05	2.7553	7.2447
4	9	6	5	10.5000	1.1299	90	9.29	<.0001	<.0001	0.05	8.2553	12.7447
4	9	6	6	8.7500	1.1299	90	7.74	<.0001	<.0001	0.05	6.5053	10.9947
4	9	6	7	8.2500	1.1299	90	7.30	<.0001	<.0001	0.05	6.0053	10.4947
4	9	6	8	7.7500	1.1299	90	6.86	<.0001	<.0001	0.05	5.5053	9.9947
4	9	6	9	7.7500	1.1299	90	6.86	<.0001	<.0001	0.05	5.5053	9.9947
4	9	6	10	7.0000	1.1299	90	6.20	<.0001	<.0001	0.05	4.7553	9.2447
4	10	5	5	11.0000	1.1299	90	9.74	<.0001	<.0001	0.05	8.7553	13.2447
4	10	5	6	9.7500	1.1299	90	8.63	<.0001	<.0001	0.05	7.5053	11.9947
4	10	5	7	9.0000	1.1299	90	7.97	<.0001	<.0001	0.05	6.7553	11.2447
4	10	5	8	8.7500	1.1299	90	7.74	<.0001	<.0001	0.05	6.5053	10.9947
4	10	5	9	6.7500	1.1299	90	5.97	<.0001	<.0001	0.05	4.5053	8.9947
4	10	5	10	5.0000	1.1299	90	4.43	<.0001	0.0115	0.05	2.7553	7.2447
4	10	6	5	10.5000	1.1299	90	9.29	<.0001	<.0001	0.05	8.2553	12.7447
4	10	6	6	8.7500	1.1299	90	7.74	<.0001	<.0001	0.05	6.5053	10.9947
4	10	6	7	8.2500	1.1299	90	7.30	<.0001	<.0001	0.05	6.0053	10.4947
4	10	6	8	7.7500	1.1299	90	6.86	<.0001	<.0001	0.05	5.5053	9.9947
4	10	6	9	7.7500	1.1299	90	6.86	<.0001	<.0001	0.05	5.5053	9.9947
4	10	6	10	7.0000	1.1299	90	6.20	<.0001	<.0001	0.05	4.7553	9.2447
5	5	5	6	-1.2500	0.7109	90	-1.76	0.0821	0.9983	0.05	-2.6623	0.1623
5	5	5	7	-2.0000	0.7109	90	-2.81	0.0060	0.6253	0.05	-3.4123	-0.5877
5	5	5	8	-2.2500	0.7109	90	-3.17	0.0021	0.3634	0.05	-3.6623	-0.8377
5	5	5	9	-4.2500	0.7109	90	-5.98	<.0001	<.0001	0.05	-5.6623	-2.8377
5	5	5	10	-6.0000	0.7109	90	-8.44	<.0001	<.0001	0.05	-7.4123	-4.5877
5	5	6	5	-0.5000	1.1299	90	-0.44	0.6592	1.0000	0.05	-2.7447	1.7447
5	5	6	6	-2.2500	1.1299	90	-1.99	0.0495	0.9878	0.05	-4.4947	-0.00531
5	5	6	7	-2.7500	1.1299	90	-2.43	0.0169	0.8722	0.05	-4.9947	-0.5053
5	5	6	8	-3.2500	1.1299	90	-2.88	0.0050	0.5769	0.05	-5.4947	-1.0053
5	5	6	9	-3.2500	1.1299	90	-2.88	0.0050	0.5769	0.05	-5.4947	-1.0053
5	5	6	10	-4.0000	1.1299	90	-3.54	0.0006	0.1616	0.05	-6.2447	-1.7553
5	6	5	7	-0.7500	0.7109	90	-1.06	0.2942	1.0000	0.05	-2.1623	0.6623
5	6	5	8	-1.0000	0.7109	90	-1.41	0.1629	1.0000	0.05	-2.4123	0.4123
5	6	5	9	-3.0000	0.7109	90	-4.22	<.0001	0.0229	0.05	-4.4123	-1.5877

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
4	9	5	9	2.2645	11.2355
4	9	5	10	0.5145	9.4855
4	9	6	5	6.0145	14.9855
4	9	6	6	4.2645	13.2355
4	9	6	7	3.7645	12.7355
4	9	6	8	3.2645	12.2355
4	9	6	9	3.2645	12.2355
4	9	6	10	2.5145	11.4855
4	10	5	5	6.5145	15.4855
4	10	5	6	5.2645	14.2355
4	10	5	7	4.5145	13.4855
4	10	5	8	4.2645	13.2355
4	10	5	9	2.2645	11.2355
4	10	5	10	0.5145	9.4855
4	10	6	5	6.0145	14.9855
4	10	6	6	4.2645	13.2355
4	10	6	7	3.7645	12.7355
4	10	6	8	3.2645	12.2355
4	10	6	9	3.2645	12.2355
4	10	6	10	2.5145	11.4855
5	5	5	6	-4.0721	1.5721
5	5	5	7	-4.8221	0.8221
5	5	5	8	-5.0721	0.5721
5	5	5	9	-7.0721	-1.4279
5	5	5	10	-8.8221	-3.1779
5	5	6	5	-4.9855	3.9855
5	5	6	6	-6.7355	2.2355
5	5	6	7	-7.2355	1.7355
5	5	6	8	-7.7355	1.2355
5	5	6	9	-7.7355	1.2355
5	5	6	10	-8.4855	0.4855
5	6	5	7	-3.5721	2.0721
5	6	5	8	-3.8221	1.8221
5	6	5	9	-5.8221	-0.1779

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer												
treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
5	6	5	10	-4.7500	0.7109	90	-6.68	<.0001	<.0001	0.05	-6.1623	-3.3377
5	6	6	5	0.7500	1.1299	90	0.66	0.5085	1.0000	0.05	-1.4947	2.9947
5	6	6	6	-1.0000	1.1299	90	-0.89	0.3785	1.0000	0.05	-3.2447	1.2447
5	6	6	7	-1.5000	1.1299	90	-1.33	0.1877	1.0000	0.05	-3.7447	0.7447
5	6	6	8	-2.0000	1.1299	90	-1.77	0.0801	0.9981	0.05	-4.2447	0.2447
5	6	6	9	-2.0000	1.1299	90	-1.77	0.0801	0.9981	0.05	-4.2447	0.2447
5	6	6	10	-2.7500	1.1299	90	-2.43	0.0169	0.8722	0.05	-4.9947	-0.5053
5	7	5	8	-0.2500	0.7109	90	-0.35	0.7259	1.0000	0.05	-1.6623	1.1623
5	7	5	9	-2.2500	0.7109	90	-3.17	0.0021	0.3634	0.05	-3.6623	-0.8377
5	7	5	10	-4.0000	0.7109	90	-5.63	<.0001	0.0001	0.05	-5.4123	-2.5877
5	7	6	5	1.5000	1.1299	90	1.33	0.1877	1.0000	0.05	-0.7447	3.7447
5	7	6	6	-0.2500	1.1299	90	-0.22	0.8254	1.0000	0.05	-2.4947	1.9947
5	7	6	7	-0.7500	1.1299	90	-0.66	0.5085	1.0000	0.05	-2.9947	1.4947
5	7	6	8	-1.2500	1.1299	90	-1.11	0.2715	1.0000	0.05	-3.4947	0.9947
5	7	6	9	-1.2500	1.1299	90	-1.11	0.2715	1.0000	0.05	-3.4947	0.9947
5	7	6	10	-2.0000	1.1299	90	-1.77	0.0801	0.9981	0.05	-4.2447	0.2447
5	8	5	9	-2.0000	0.7109	90	-2.81	0.0060	0.6253	0.05	-3.4123	-0.5877
5	8	5	10	-3.7500	0.7109	90	-5.28	<.0001	0.0005	0.05	-5.1623	-2.3377
5	8	6	5	1.7500	1.1299	90	1.55	0.1249	0.9998	0.05	-0.4947	3.9947
5	8	6	6	-59E-13	1.1299	90	-0.00	1.0000	1.0000	0.05	-2.2447	2.2447
5	8	6	7	-0.5000	1.1299	90	-0.44	0.6592	1.0000	0.05	-2.7447	1.7447
5	8	6	8	-1.0000	1.1299	90	-0.89	0.3785	1.0000	0.05	-3.2447	1.2447
5	8	6	9	-1.0000	1.1299	90	-0.89	0.3785	1.0000	0.05	-3.2447	1.2447
5	8	6	10	-1.7500	1.1299	90	-1.55	0.1249	0.9998	0.05	-3.9947	0.4947
5	9	5	10	-1.7500	0.7109	90	-2.46	0.0157	0.8583	0.05	-3.1623	-0.3377
5	9	6	5	3.7500	1.1299	90	3.32	0.0013	0.2677	0.05	1.5053	5.9947
5	9	6	6	2.0000	1.1299	90	1.77	0.0801	0.9981	0.05	-0.2447	4.2447
5	9	6	7	1.5000	1.1299	90	1.33	0.1877	1.0000	0.05	-0.7447	3.7447
5	9	6	8	1.0000	1.1299	90	0.89	0.3785	1.0000	0.05	-1.2447	3.2447
5	9	6	9	1.0000	1.1299	90	0.89	0.3785	1.0000	0.05	-1.2447	3.2447
5	9	6	10	0.2500	1.1299	90	0.22	0.8254	1.0000	0.05	-1.9947	2.4947
5	10	6	5	5.5000	1.1299	90	4.87	<.0001	0.0023	0.05	3.2553	7.7447
5	10	6	6	3.7500	1.1299	90	3.32	0.0013	0.2677	0.05	1.5053	5.9947
5	10	6	7	3.2500	1.1299	90	2.88	0.0050	0.5769	0.05	1.0053	5.4947

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
5	6	5	10	-7.5721	-1.9279
5	6	6	5	-3.7355	5.2355
5	6	6	6	-5.4855	3.4855
5	6	6	7	-5.9855	2.9855
5	6	6	8	-6.4855	2.4855
5	6	6	9	-6.4855	2.4855
5	6	6	10	-7.2355	1.7355
5	7	5	8	-3.0721	2.5721
5	7	5	9	-5.0721	0.5721
5	7	5	10	-6.8221	-1.1779
5	7	6	5	-2.9855	5.9855
5	7	6	6	-4.7355	4.2355
5	7	6	7	-5.2355	3.7355
5	7	6	8	-5.7355	3.2355
5	7	6	9	-5.7355	3.2355
5	7	6	10	-6.4855	2.4855
5	8	5	9	-4.8221	0.8221
5	8	5	10	-6.5721	-0.9279
5	8	6	5	-2.7355	6.2355
5	8	6	6	-4.4855	4.4855
5	8	6	7	-4.9855	3.9855
5	8	6	8	-5.4855	3.4855
5	8	6	9	-5.4855	3.4855
5	8	6	10	-6.2355	2.7355
5	9	5	10	-4.5721	1.0721
5	9	6	5	-0.7355	8.2355
5	9	6	6	-2.4855	6.4855
5	9	6	7	-2.9855	5.9855
5	9	6	8	-3.4855	5.4855
5	9	6	9	-3.4855	5.4855
5	9	6	10	-4.2355	4.7355
5	10	6	5	1.0145	9.9855
5	10	6	6	-0.7355	8.2355
5	10	6	7	-1.2355	7.7355

The PLM Procedure

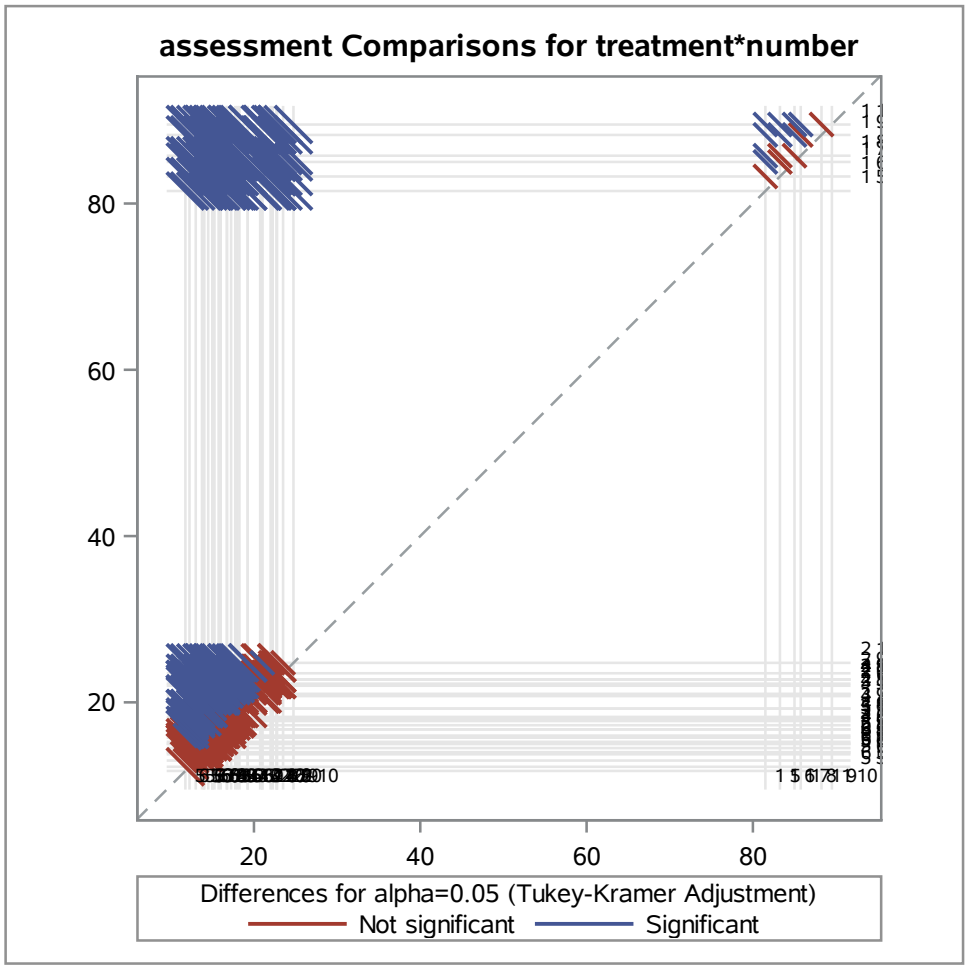
Differences of treatment*number Least Squares Means
Adjustment for Multiple Comparisons: Tukey-Kramer

treatment	number	_treatment	_number	Estimate	Standard Error	DF	t Value	Pr > |t|	Adj P	Alpha	Lower	Upper
5	10	6	8	2.7500	1.1299	90	2.43	0.0169	0.8722	0.05	0.5053	4.9947
5	10	6	9	2.7500	1.1299	90	2.43	0.0169	0.8722	0.05	0.5053	4.9947
5	10	6	10	2.0000	1.1299	90	1.77	0.0801	0.9981	0.05	-0.2447	4.2447
6	5	6	6	-1.7500	0.7109	90	-2.46	0.0157	0.8583	0.05	-3.1623	-0.3377
6	5	6	7	-2.2500	0.7109	90	-3.17	0.0021	0.3634	0.05	-3.6623	-0.8377
6	5	6	8	-2.7500	0.7109	90	-3.87	0.0002	0.0673	0.05	-4.1623	-1.3377
6	5	6	9	-2.7500	0.7109	90	-3.87	0.0002	0.0673	0.05	-4.1623	-1.3377
6	5	6	10	-3.5000	0.7109	90	-4.92	<.0001	0.0019	0.05	-4.9123	-2.0877
6	6	6	7	-0.5000	0.7109	90	-0.70	0.4836	1.0000	0.05	-1.9123	0.9123
6	6	6	8	-1.0000	0.7109	90	-1.41	0.1629	1.0000	0.05	-2.4123	0.4123
6	6	6	9	-1.0000	0.7109	90	-1.41	0.1629	1.0000	0.05	-2.4123	0.4123
6	6	6	10	-1.7500	0.7109	90	-2.46	0.0157	0.8583	0.05	-3.1623	-0.3377
6	7	6	8	-0.5000	0.7109	90	-0.70	0.4836	1.0000	0.05	-1.9123	0.9123
6	7	6	9	-0.5000	0.7109	90	-0.70	0.4836	1.0000	0.05	-1.9123	0.9123
6	7	6	10	-1.2500	0.7109	90	-1.76	0.0821	0.9983	0.05	-2.6623	0.1623
6	8	6	9	4.55E-15	0.7109	90	0.00	1.0000	1.0000	0.05	-1.4123	1.4123
6	8	6	10	-0.7500	0.7109	90	-1.06	0.2942	1.0000	0.05	-2.1623	0.6623
6	9	6	10	-0.7500	0.7109	90	-1.06	0.2942	1.0000	0.05	-2.1623	0.6623

The PLM Procedure

Differences of treatment*number Least Squares Means Adjustment for Multiple Comparisons: Tukey-Kramer					
treatment	number	_treatment	_number	Adj Lower	Adj Upper
5	10	6	8	-1.7355	7.2355
5	10	6	9	-1.7355	7.2355
5	10	6	10	-2.4855	6.4855
6	5	6	6	-4.5721	1.0721
6	5	6	7	-5.0721	0.5721
6	5	6	8	-5.5721	0.07206
6	5	6	9	-5.5721	0.07206
6	5	6	10	-6.3221	-0.6779
6	6	6	7	-3.3221	2.3221
6	6	6	8	-3.8221	1.8221
6	6	6	9	-3.8221	1.8221
6	6	6	10	-4.5721	1.0721
6	7	6	8	-3.3221	2.3221
6	7	6	9	-3.3221	2.3221
6	7	6	10	-4.0721	1.5721
6	8	6	9	-2.8221	2.8221
6	8	6	10	-3.5721	2.0721
6	9	6	10	-3.5721	2.0721

The PLM Procedure



Conservative Tukey-Kramer Grouping for treatment*number Least Squares Means (Alpha=0.05)								
LS-means with the same letter are not significantly different.								
treatment	**number**	**Estimate**						
1	10	89.5000				A		
						A		
1	9	88.2500		B		A		
				B				
1	8	85.7500		B		C		
						C		
1	7	85.0000				C		
						C		
1	6	83.2500		D		C		
				D				
1	5	81.5000		D				
2	10	24.7500				E		
						E		

The PLM Procedure

Conservative Tukey-Kramer Grouping for treatment*number Least Squares Means (Alpha=0.05)								
LS-means with the same letter are not significantly different.								
treatment	number	Estimate						
2	9	23.5000		F		E		
				F		E		
2	8	22.7500		F		E		
				F		E		
4	9	22.7500		F		E		
				F		E		
4	10	22.7500		F		E		
				F		E		
2	7	22.2500		F		E	G	
				F		E	G	
2	6	22.0000		F	H	E	G	
				F	H	E	G	
2	5	21.0000	I	F	H	E	G	
			I	F	H	E	G	
4	8	21.0000	I	F	H	E	G	
			I	F	H	E	G	
3	10	20.7500	I	F	H	E	G	
			I	F	H		G	
3	9	19.2500	I	F	H	J	G	
			I	F	H	J	G	
4	7	19.2500	I	F	H	J	G	
			I		H	J	G	
4	6	18.2500	I	K	H	J	G	
			I	K	H	J	G	
3	8	18.0000	I	K	H	J	G	L
			I	K	H	J		L
5	10	17.7500	I	K	H	J		L
			I	K		J		L
3	7	17.2500	I	K		J	M	L
			I	K		J	M	L
4	5	16.7500	I	K		J	M	L
			I	K		J	M	L
3	6	16.7500	I	K		J	M	L
				K		J	M	L

The PLM Procedure

Conservative Tukey-Kramer Grouping for treatment*number Least Squares Means (Alpha=0.05)								
LS-means with the same letter are not significantly different.								
treatment	**number**	**Estimate**						
5	9	16.0000		K	N	J	M	L
				K	N	J	M	L
6	10	15.7500	O	K	N	J	M	L
			O	K	N	J	M	L
3	5	15.2500	O	K	N	J	M	L
			O	K	N	J	M	L
6	8	15.0000	O	K	N	J	M	L
			O	K	N	J	M	L
6	9	15.0000	O	K	N	J	M	L
			O	K	N		M	L
6	7	14.5000	O	K	N		M	L
			O	K	N		M	L
6	6	14.0000	O	K	N		M	L
			O	K	N		M	L
5	8	14.0000	O	K	N		M	L
			O		N		M	L
5	7	13.7500	O		N		M	L
			O		N		M	
5	6	13.0000	O		N		M	
			O		N			
6	5	12.2500	O		N			
			O					
5	5	11.7500	O					

The GLM Procedure

Class Level Information		
Class	Levels	Values
replicate	4	1 2 3 4
treatment	6	1 2 3 4 5 6

Number of Observations Read	24
Number of Observations Used	24

The GLM Procedure

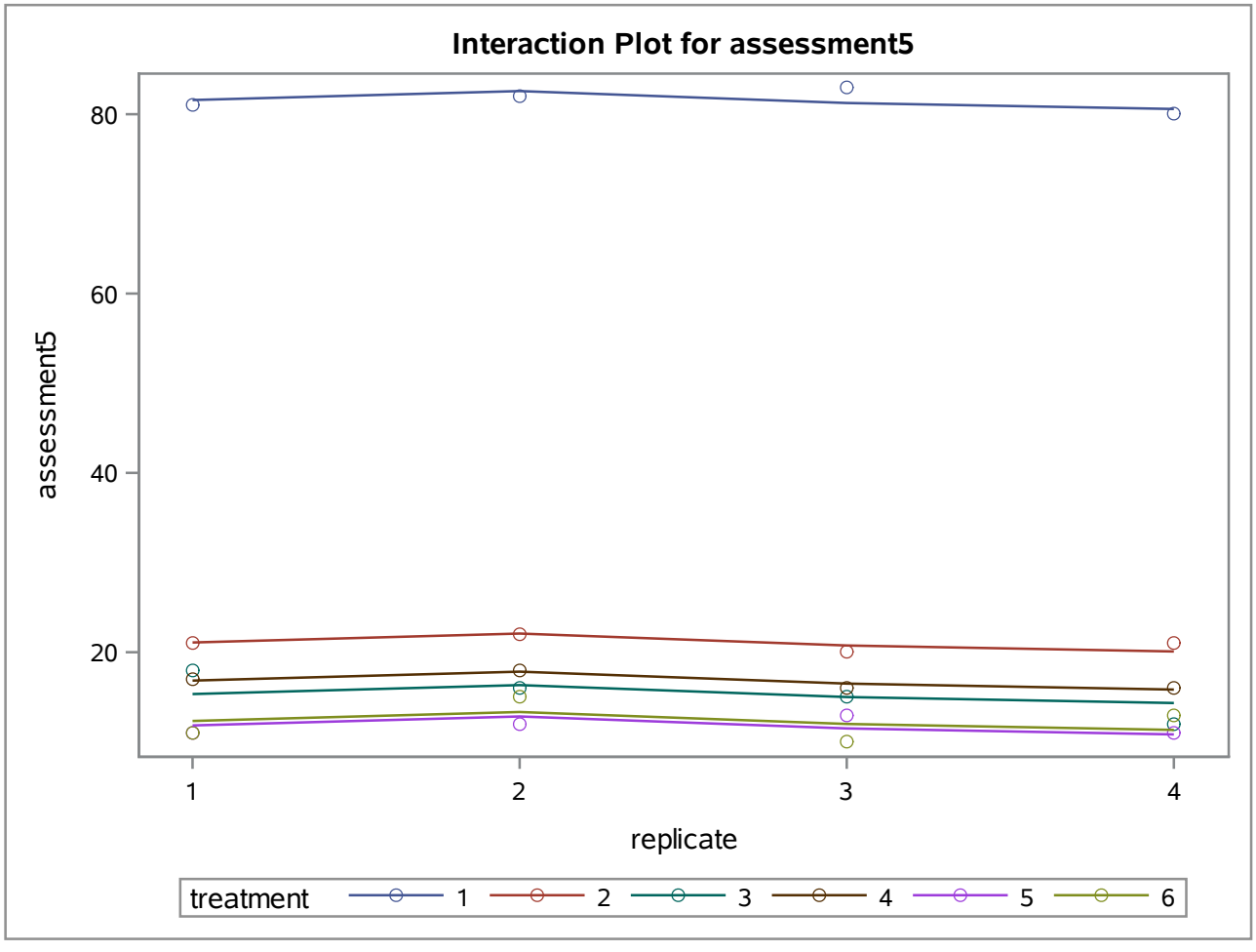
Dependent Variable: assessment5

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	14802.33621	1850.29203	828.49	<.0001
Error	15	33.50001	2.23333		
Corrected Total	23	14835.83621			

R-Square	Coeff Var	Root MSE	assessment5 Mean
0.997742	5.657164	1.494434	26.41667

Source	DF	Type I SS	Mean Square	F Value	Pr > F
replicate	3	12.50000	4.16667	1.87	0.1788
treatment	5	14789.83620	2957.96724	1324.46	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
replicate	3	12.50000	4.16667	1.87	0.1788
treatment	5	14789.83620	2957.96724	1324.46	<.0001



The GLM Procedure

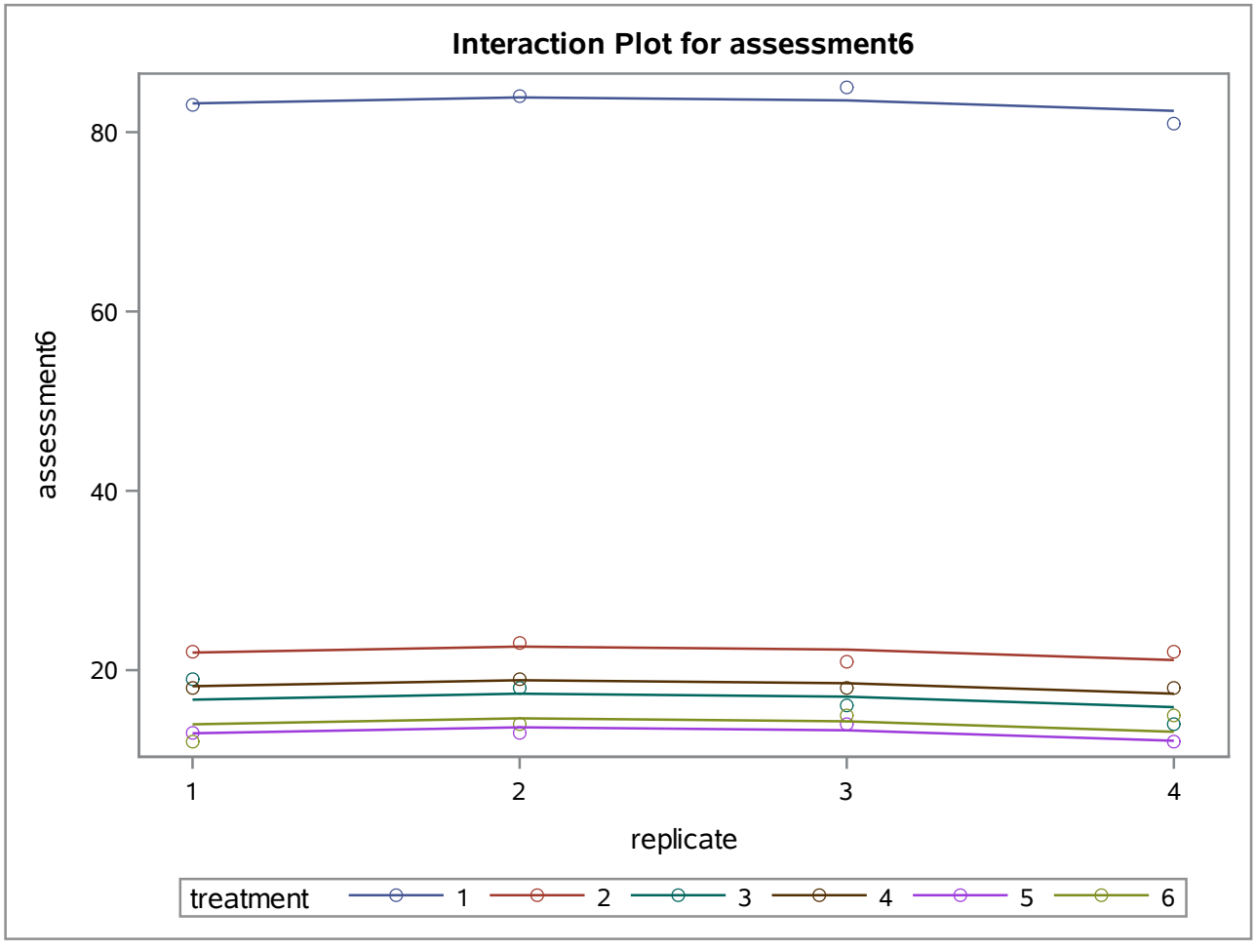
Dependent Variable: assessment6

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	14931.83630	1866.47954	1045.00	<.0001
Error	15	26.79168	1.78611		
Corrected Total	23	14958.62798			

R-Square	Coeff Var	Root MSE	assessment6 Mean
0.998209	4.794457	1.336455	27.87500

Source	DF	Type I SS	Mean Square	F Value	Pr > F
replicate	3	7.45833	2.48611	1.39	0.2838
treatment	5	14924.37797	2984.87559	1671.16	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
replicate	3	7.45833	2.48611	1.39	0.2838
treatment	5	14924.37797	2984.87559	1671.16	<.0001



The GLM Procedure

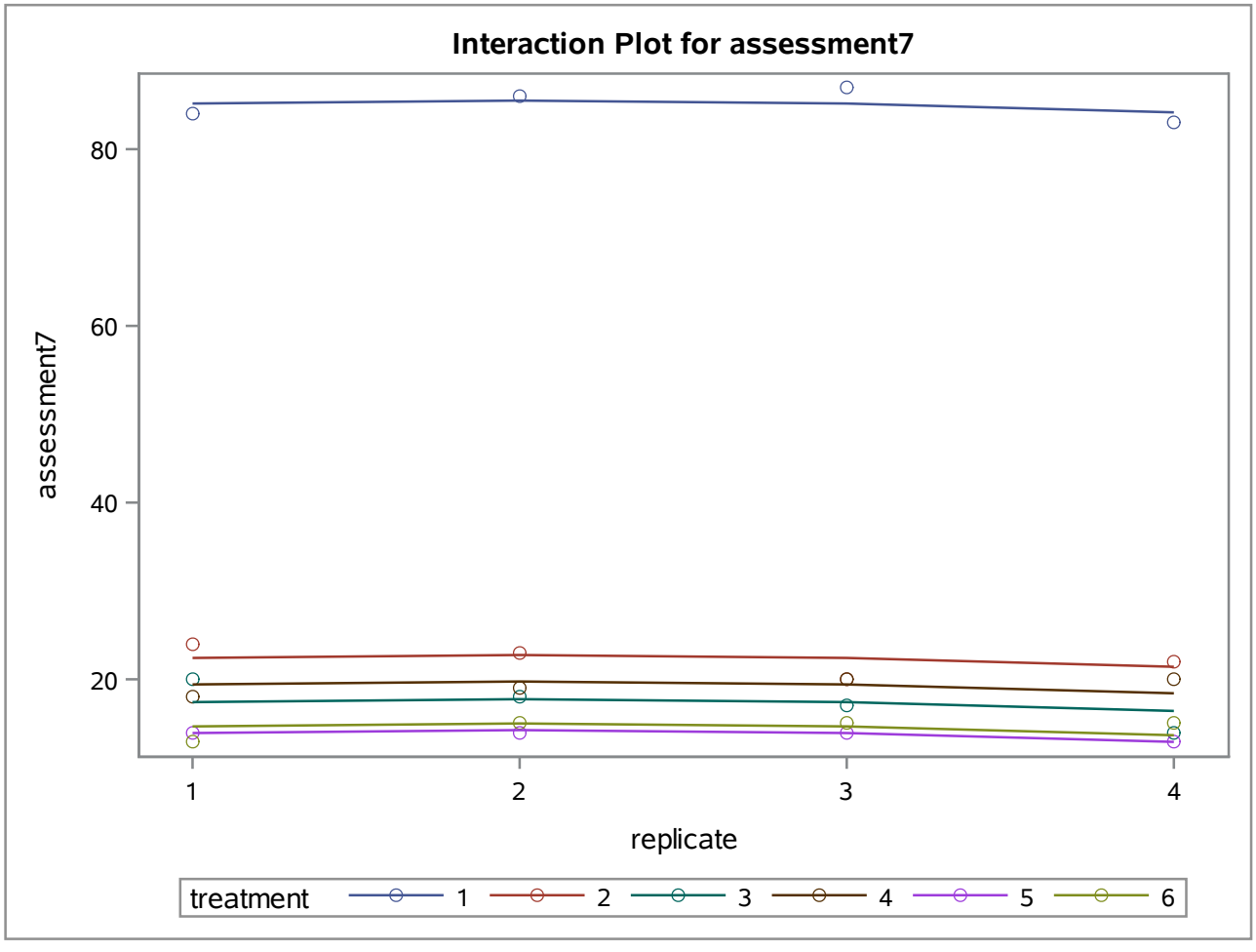
Dependent Variable: assessment7

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	15433.33644	1929.16705	761.51	<.0001
Error	15	38.00001	2.53333		
Corrected Total	23	15471.33645			

R-Square	Coeff Var	Root MSE	assessment7 Mean
0.997544	5.552250	1.591645	28.66667

Source	DF	Type I SS	Mean Square	F Value	Pr > F
replicate	3	6.00000	2.00000	0.79	0.5184
treatment	5	15427.33643	3085.46729	1217.95	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
replicate	3	6.00000	2.00000	0.79	0.5184
treatment	5	15427.33643	3085.46729	1217.95	<.0001



The GLM Procedure

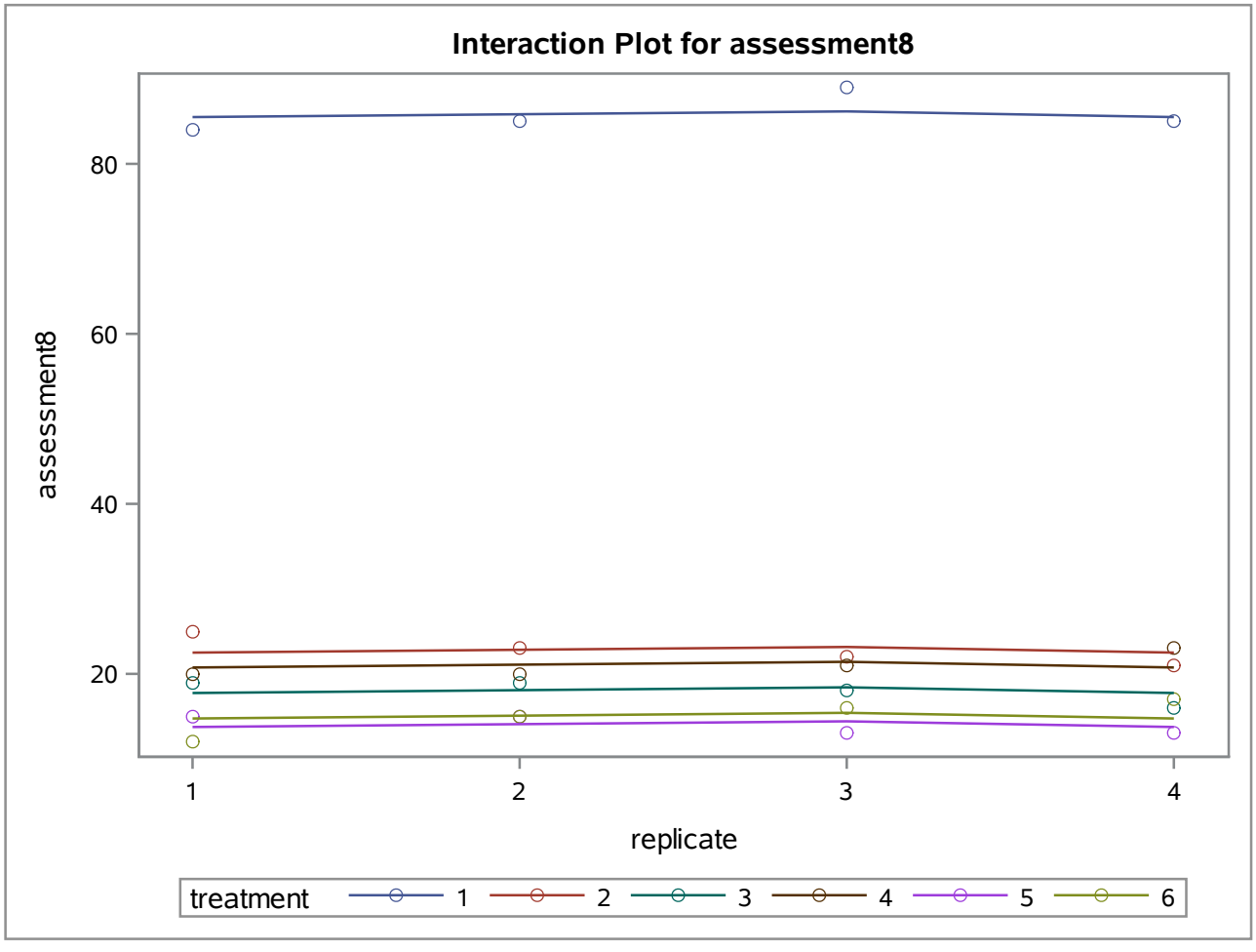
Dependent Variable: assessment8

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	15460.16979	1932.52122	561.05	<.0001
Error	15	51.66668	3.44445		
Corrected Total	23	15511.83647			

R-Square	Coeff Var	Root MSE	assessment8 Mean
0.996669	6.309082	1.855922	29.41667

Source	DF	Type I SS	Mean Square	F Value	Pr > F
replicate	3	1.83333	0.61111	0.18	0.9100
treatment	5	15458.33645	3091.66729	897.58	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
replicate	3	1.83333	0.61111	0.18	0.9100
treatment	5	15458.33645	3091.66729	897.58	<.0001



The GLM Procedure

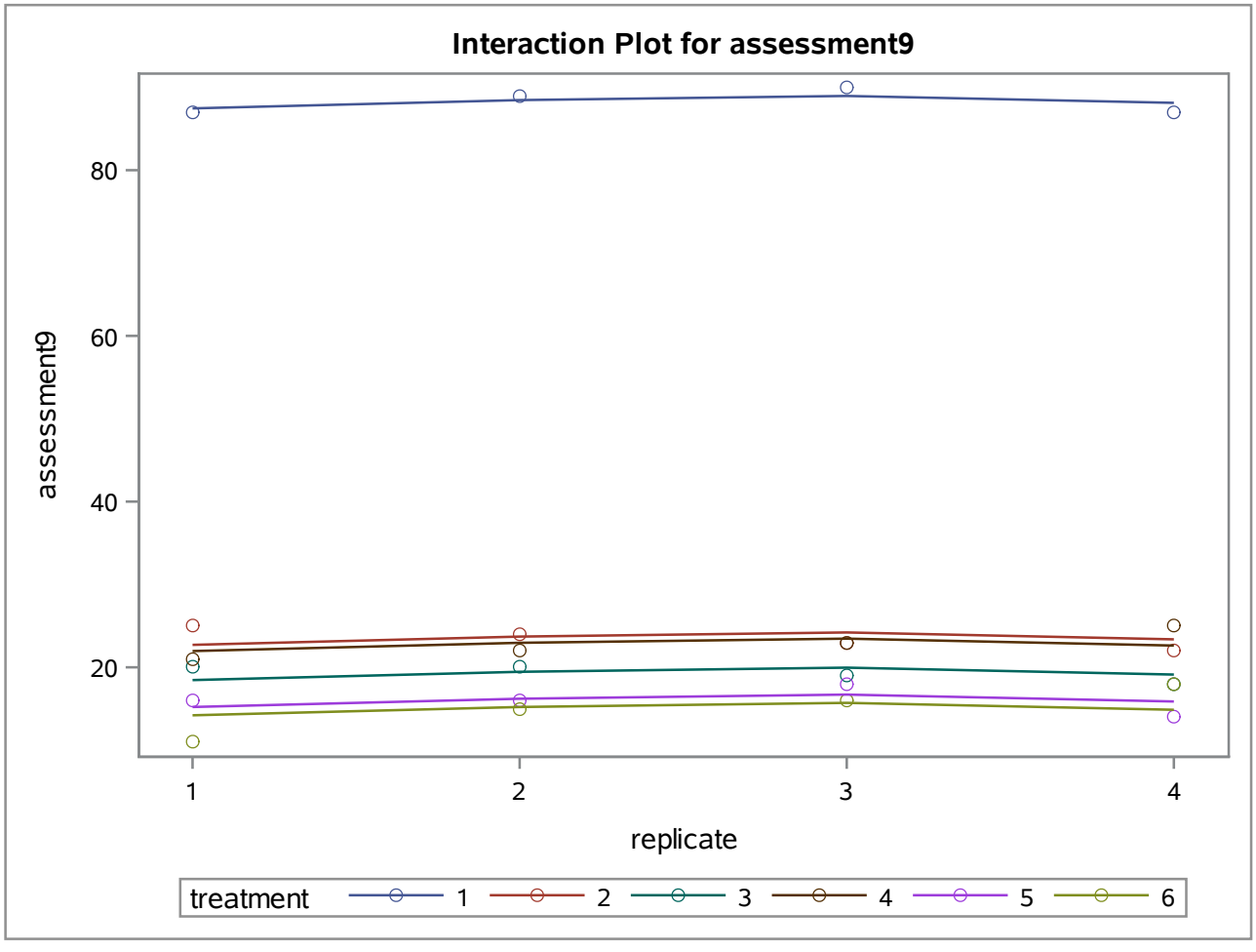
Dependent Variable: assessment9

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	16089.83658	2011.22957	601.86	<.0001
Error	15	50.12502	3.34167		
Corrected Total	23	16139.96160			

R-Square	Coeff Var	Root MSE	assessment9 Mean
0.996894	5.936745	1.828023	30.79167

Source	DF	Type I SS	Mean Square	F Value	Pr > F
replicate	3	7.12500	2.37500	0.71	0.5605
treatment	5	16082.71158	3216.54232	962.56	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
replicate	3	7.12500	2.37500	0.71	0.5605
treatment	5	16082.71158	3216.54232	962.56	<.0001



The GLM Procedure

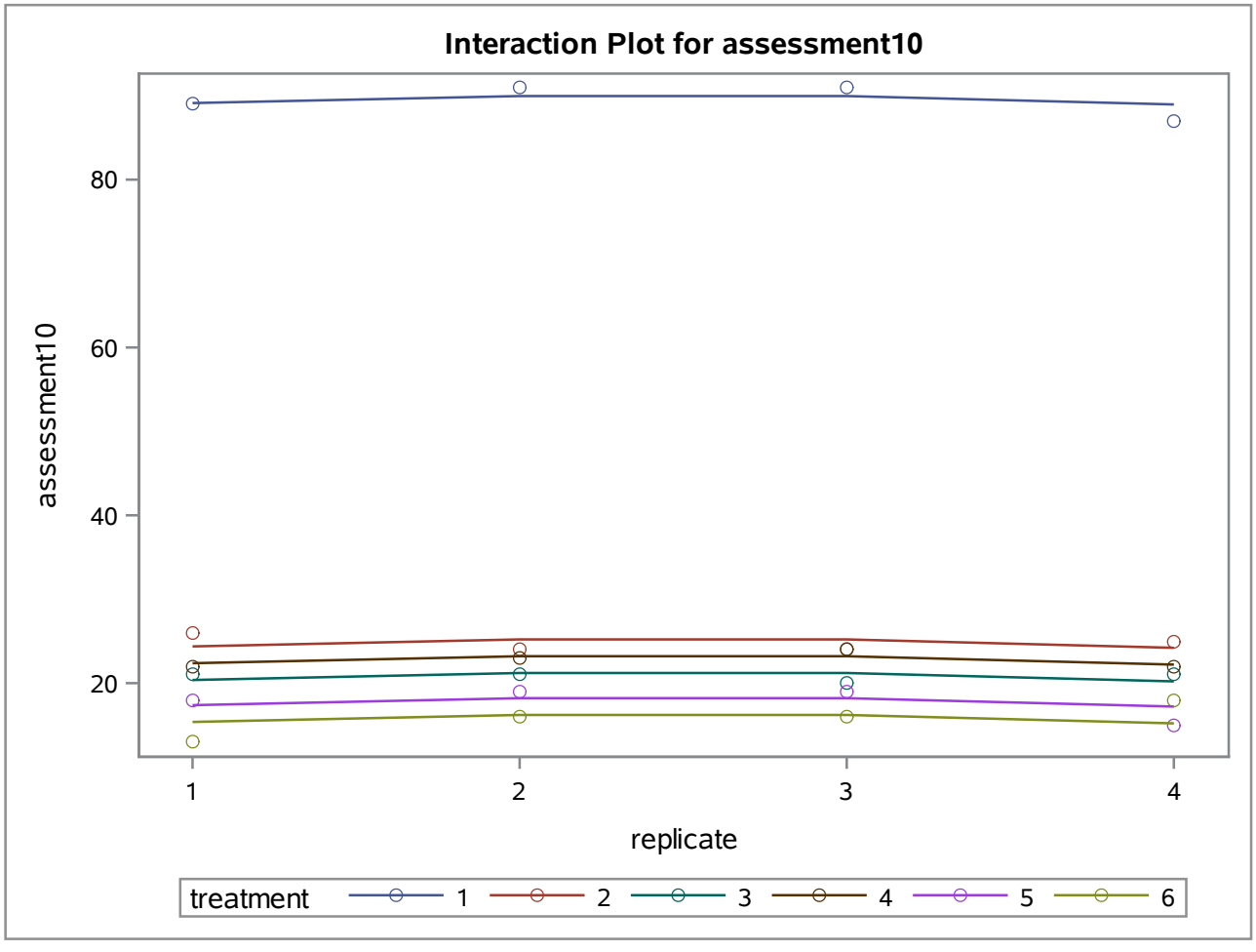
Dependent Variable: assessment10

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	8	16157.00323	2019.62540	850.37	<.0001
Error	15	35.62501	2.37500		
Corrected Total	23	16192.62824			

R-Square	Coeff Var	Root MSE	assessment10 Mean
0.997800	4.834835	1.541104	31.87500

Source	DF	Type I SS	Mean Square	F Value	Pr > F
replicate	3	5.12500	1.70833	0.72	0.5558
treatment	5	16151.87823	3230.37565	1360.16	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
replicate	3	5.12500	1.70833	0.72	0.5558
treatment	5	16151.87823	3230.37565	1360.16	<.0001



The GLM Procedure
Repeated Measures Analysis of Variance

Repeated Measures Level Information						
Dependent Variable	assessment5	assessment6	assessment7	assessment8	assessment9	assessment10
Level of time	1	2	3	4	5	6

Partial Correlation Coefficients from the Error SSCP Matrix / Prob > |r|						
DF = 15	assessment5	assessment6	assessment7	assessment8	assessment9	assessment10
assessment5	1.000000	0.687058 0.0033	0.632956 0.0085	0.368561 0.1601	0.449429 0.0807	0.316002 0.2331
assessment6	0.687058 0.0033	1.000000	0.830528 <.0001	0.613711 0.0114	0.719723 0.0017	0.551613 0.0268
assessment7	0.632956 0.0085	0.830528 <.0001	1.000000	0.757926 0.0007	0.740852 0.0010	0.511868 0.0427
assessment8	0.368561 0.1601	0.613711 0.0114	0.757926 0.0007	1.000000	0.815484 0.0001	0.501136 0.0480
assessment9	0.449429 0.0807	0.719723 0.0017	0.740852 0.0010	0.815484 0.0001	1.000000	0.716834 0.0018
assessment10	0.316002 0.2331	0.551613 0.0268	0.511868 0.0427	0.501136 0.0480	0.716834 0.0018	1.000000

time_N represents the contrast between the nth level of time and the last M Matrix Describing Transformed Variables						
	assessment5	assessment6	assessment7	assessment8	assessment9	assessment10
time_1	1.000000000	0.000000000	0.000000000	0.000000000	0.000000000	-1.000000000
time_2	0.000000000	1.000000000	0.000000000	0.000000000	0.000000000	-1.000000000
time_3	0.000000000	0.000000000	1.000000000	0.000000000	0.000000000	-1.000000000
time_4	0.000000000	0.000000000	0.000000000	1.000000000	0.000000000	-1.000000000
time_5	0.000000000	0.000000000	0.000000000	0.000000000	1.000000000	-1.000000000

E = Error SSCP Matrix time_N represents the contrast between the nth level of time and the last					
	time_1	time_2	time_3	time_4	time_5
time_1	47.292	28.250	28.458	18.542	12.833
time_2	28.250	28.333	26.250	19.917	14.667
time_3	28.458	26.250	35.958	28.875	18.833
time_4	18.542	19.917	28.875	44.292	25.333
time_5	12.833	14.667	18.833	25.333	25.167

The GLM Procedure
Repeated Measures Analysis of Variance

Partial Correlation Coefficients from the Error SSCP Matrix of the Variables Defined by the Specified Transformation / Prob > |r|					
DF = 15	**time_1**	**time_2**	**time_3**	**time_4**	**time_5**
time_1	1.000000	0.771751 0.0005	0.690109 0.0031	0.405131 0.1195	0.371993 0.1560
time_2	0.771751 0.0005	1.000000	0.822395 <.0001	0.562221 0.0234	0.549249 0.0275
time_3	0.690109 0.0031	0.822395 <.0001	1.000000	0.723538 0.0015	0.626058 0.0095
time_4	0.405131 0.1195	0.562221 0.0234	0.723538 0.0015	1.000000	0.758784 0.0007
time_5	0.371993 0.1560	0.549249 0.0275	0.626058 0.0095	0.758784 0.0007	1.000000

Sphericity Tests				
Variables	**DF**	**Mauchly's Criterion**	**Chi-Square**	**Pr > ChiSq**
Transformed Variates	14	0.0202356	51.09411	<.0001
Orthogonal Components	14	0.2441938	18.468287	0.1863

MANOVA Test Criteria and Exact F Statistics for the Hypothesis of no time Effect
H = Type III SSCP Matrix for time
E = Error SSCP Matrix

S=1 M=1.5 N=4.5

Statistic	Value	F Value	Num DF	Den DF	Pr > F
Wilks' Lambda	0.05106930	40.88	5	11	<.0001
Pillai's Trace	0.94893070	40.88	5	11	<.0001
Hotelling-Lawley Trace	18.58123643	40.88	5	11	<.0001
Roy's Greatest Root	18.58123643	40.88	5	11	<.0001

MANOVA Test Criteria and F Approximations for the Hypothesis of no time*replicate Effect
H = Type III SSCP Matrix for time*replicate
E = Error SSCP Matrix

S=3 M=0.5 N=4.5

Statistic	Value	F Value	Num DF	Den DF	Pr > F
Wilks' Lambda	0.56270130	0.47	15	30.768	0.9357
Pillai's Trace	0.49329736	0.51	15	39	0.9189
Hotelling-Lawley Trace	0.68085598	0.47	15	16.143	0.9265
Roy's Greatest Root	0.51118868	1.33	5	13	0.3120

NOTE: F Statistic for Roy's Greatest Root is an upper bound.

The GLM Procedure
Repeated Measures Analysis of Variance

MANOVA Test Criteria and F Approximations for the Hypothesis of no time*treatment Effect
H = Type III SSCP Matrix for time*treatment
E = Error SSCP Matrix

S=5 M=-0.5 N=4.5

Statistic	Value	F Value	Num DF	Den DF	Pr > F
Wilks' Lambda	0.14653013	1.15	25	42.365	0.3391
Pillai's Trace	1.23309631	0.98	25	75	0.5002
Hotelling-Lawley Trace	3.55095137	1.43	25	19	0.2144
Roy's Greatest Root	2.91150966	8.73	5	15	0.0005

NOTE: F Statistic for Roy's Greatest Root is an upper bound.

The GLM Procedure
Repeated Measures Analysis of Variance
Tests of Hypotheses for Between Subjects Effects

Source	DF	Type III SS	Mean Square	F Value	Pr > F
replicate	3	25.96528	8.65509	0.82	0.5041
treatment	5	92771.05324	18554.21065	1752.31	<.0001
Error	15	158.82644	10.58843		

The GLM Procedure
Repeated Measures Analysis of Variance
Univariate Tests of Hypotheses for Within Subject Effects

Source	DF	Type III SS	Mean Square	F Value	Pr > F	Adj Pr > F	
						G - G	H-F-L
time	5	468.4514931	93.6902986	91.40	<.0001	<.0001	<.0001
time*replicate	15	14.0763895	0.9384260	0.92	0.5508	0.5256	0.5416
time*treatment	25	63.4236233	2.5369449	2.47	0.0014	0.0074	0.0027
Error(time)	75	76.8819724	1.0250930				

Greenhouse-Geisser Epsilon	0.6543
Huynh-Feldt-Lecoutre Epsilon	0.8585

The GLM Procedure
Repeated Measures Analysis of Variance
Analysis of Variance of Contrast Variables

time_N represents the contrast between the nth level of time and the last

Contrast Variable: time_1

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Mean	1	715.0418086	715.0418086	226.80	<.0001
replicate	3	7.4583361	2.4861120	0.79	0.5189
treatment	5	55.2083434	11.0416687	3.50	0.0269
Error	15	47.2916819	3.1527788		

Contrast Variable: time_2

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Mean	1	384.0000880	384.0000880	203.29	<.0001
replicate	3	1.6666667	0.5555556	0.29	0.8290
treatment	5	50.0000100	10.0000020	5.29	0.0053
Error	15	28.3333433	1.8888896		

Contrast Variable: time_3

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Mean	1	247.0417244	247.0417244	103.05	<.0001
replicate	3	2.7916663	0.9305554	0.39	0.7632
treatment	5	27.2083426	5.4416685	2.27	0.1003
Error	15	35.9583407	2.3972227		

Contrast Variable: time_4

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Mean	1	145.0416863	145.0416863	49.12	<.0001
replicate	3	1.4583320	0.4861107	0.16	0.9185
treatment	5	28.2083402	5.6416680	1.91	0.1522
Error	15	44.2916755	2.9527784		

Contrast Variable: time_5

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Mean	1	28.16666883	28.16666883	16.79	0.0010
replicate	3	2.83333250	0.94444417	0.56	0.6477
treatment	5	7.83333717	1.56666743	0.93	0.4869
Error	15	25.16667550	1.67777837		

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

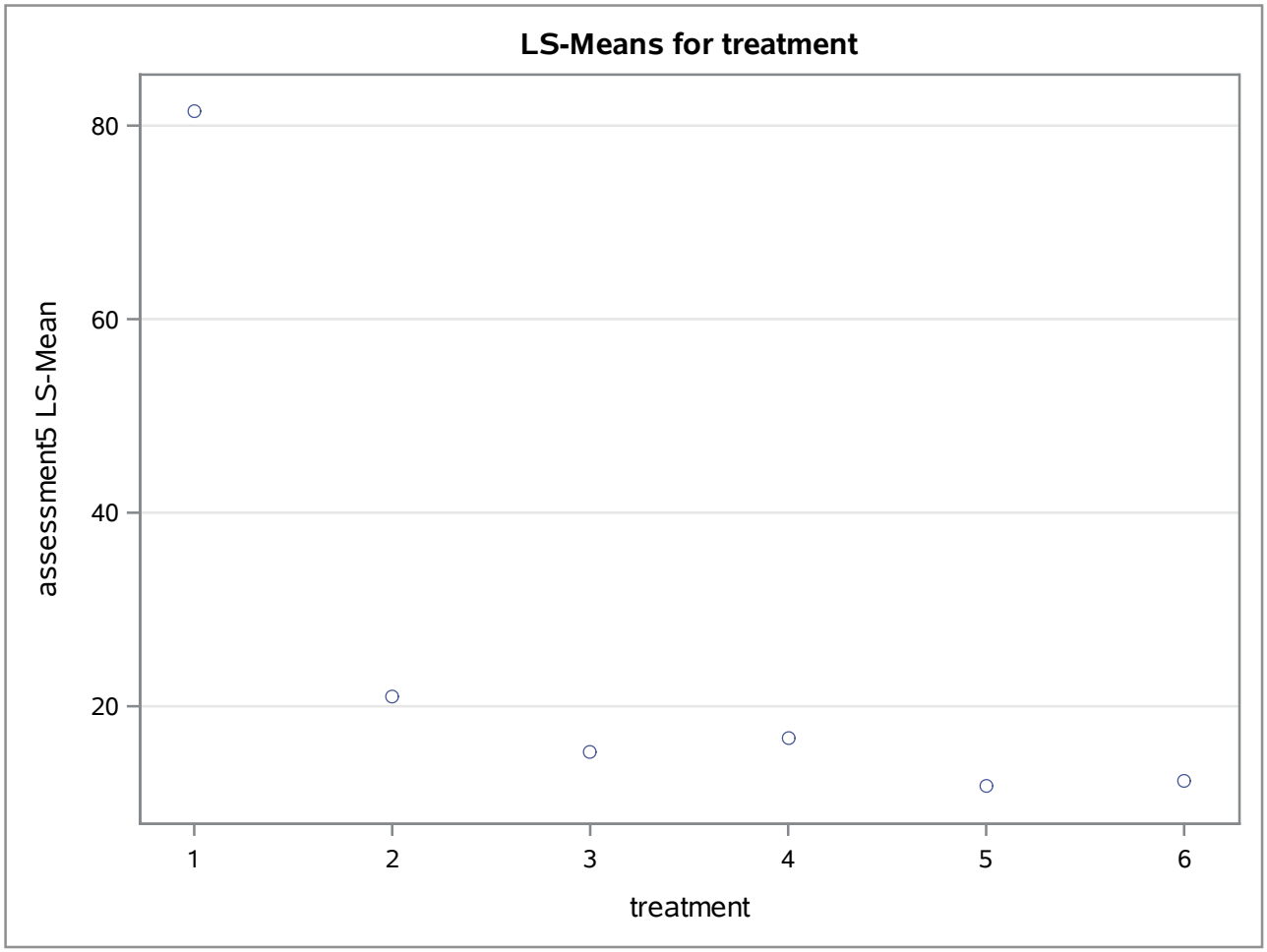
treatment	assessment5 LSMEAN	Standard Error	Pr > |t|	LSMEAN Number
1	81.5000080	0.7472171	<.0001	1
2	21.0000020	0.7472171	<.0001	2
3	15.2500018	0.7472171	<.0001	3
4	16.7500020	0.7472171	<.0001	4
5	11.7500010	0.7472171	<.0001	5
6	12.2500012	0.7472171	<.0001	6

Least Squares Means for effect treatment
Pr > |t| for H0: LSMean(i)=LSMean(j)

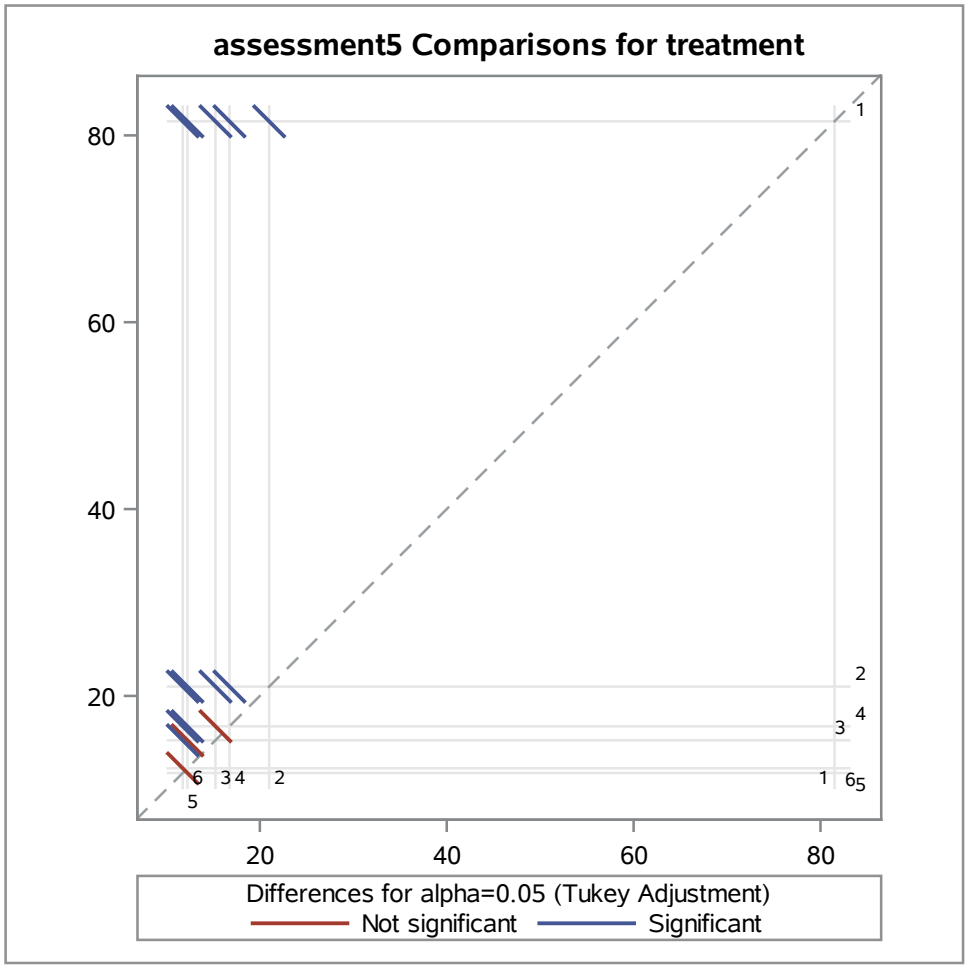
Dependent Variable: assessment5

i/j	1	2	3	4	5	6
1		<.0001	<.0001	<.0001	<.0001	<.0001
2	<.0001		0.0008	0.0116	<.0001	<.0001
3	<.0001	0.0008		0.7157	0.0445	0.1047
4	<.0001	0.0116	0.7157		0.0030	0.0074
5	<.0001	<.0001	0.0445	0.0030		0.9964
6	<.0001	<.0001	0.1047	0.0074	0.9964	

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



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



Tukey Comparison Lines for Least Squares Means of treatment				
LS-means with the same letter are not significantly different.				
		assessment5 LSMEAN	treatment	LSMEAN Number
	A	81.50001	**1**	1
	B	21.00000	**2**	2
	C	16.75000	**4**	4
	C			
D	C	15.25000	**3**	3
D				
D	E	12.25000	**6**	6
	E			
	E	11.75000	**5**	5

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

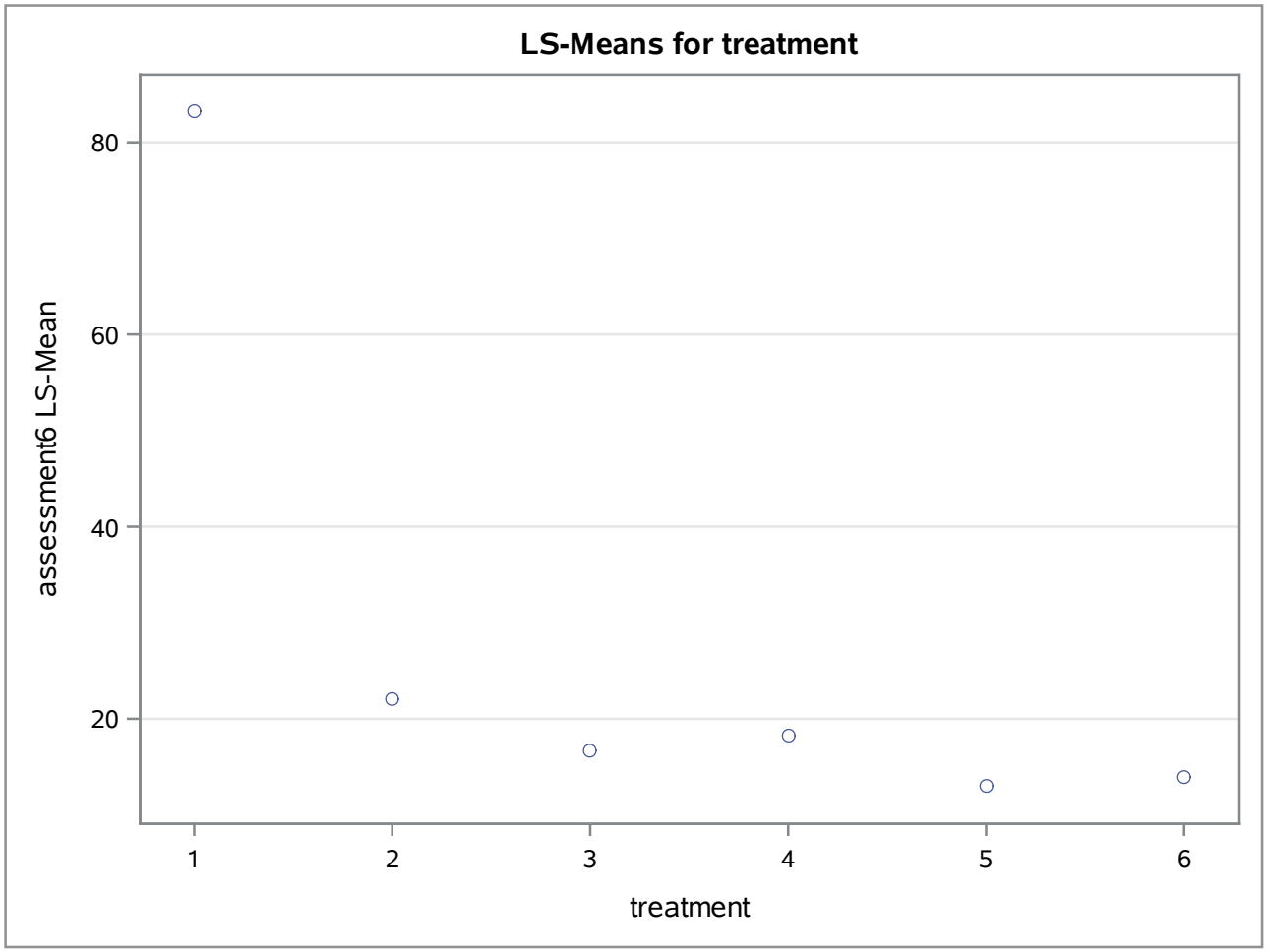
treatment	assessment6 LSMEAN	Standard Error	Pr > |t|	LSMEAN Number
1	83.2500083	0.6682275	<.0001	1
2	22.0000020	0.6682275	<.0001	2
3	16.7500018	0.6682275	<.0001	3
4	18.2500020	0.6682275	<.0001	4
5	13.0000010	0.6682275	<.0001	5
6	14.0000015	0.6682275	<.0001	6

Least Squares Means for effect treatment
Pr > |t| for H0: LSMean(i)=LSMean(j)

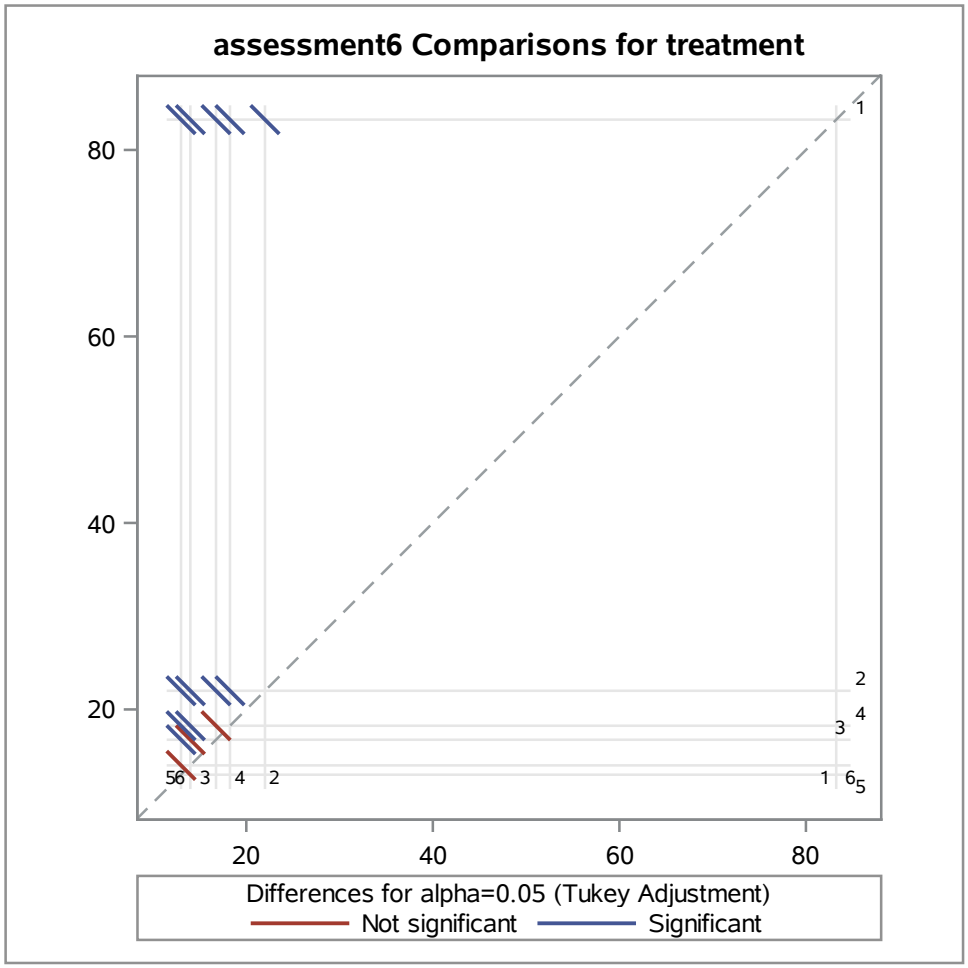
Dependent Variable: assessment6

i/j	1	2	3	4	5	6
1		<.0001	<.0001	<.0001	<.0001	<.0001
2	<.0001		0.0006	0.0128	<.0001	<.0001
3	<.0001	0.0006		0.6182	0.0128	0.0924
4	<.0001	0.0128	0.6182		0.0006	0.0047
5	<.0001	<.0001	0.0128	0.0006		0.8902
6	<.0001	<.0001	0.0924	0.0047	0.8902	

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



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



Tukey Comparison Lines for Least Squares Means of treatment				
LS-means with the same letter are not significantly different.				
		assessment6 LSMEAN	treatment	LSMEAN Number
	A	83.25001	**1**	1
	B	22.00000	**2**	2
	C	18.25000	**4**	4
	C			
D	C	16.75000	**3**	3
D				
D	E	14.00000	**6**	6
	E			
	E	13.00000	**5**	5

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

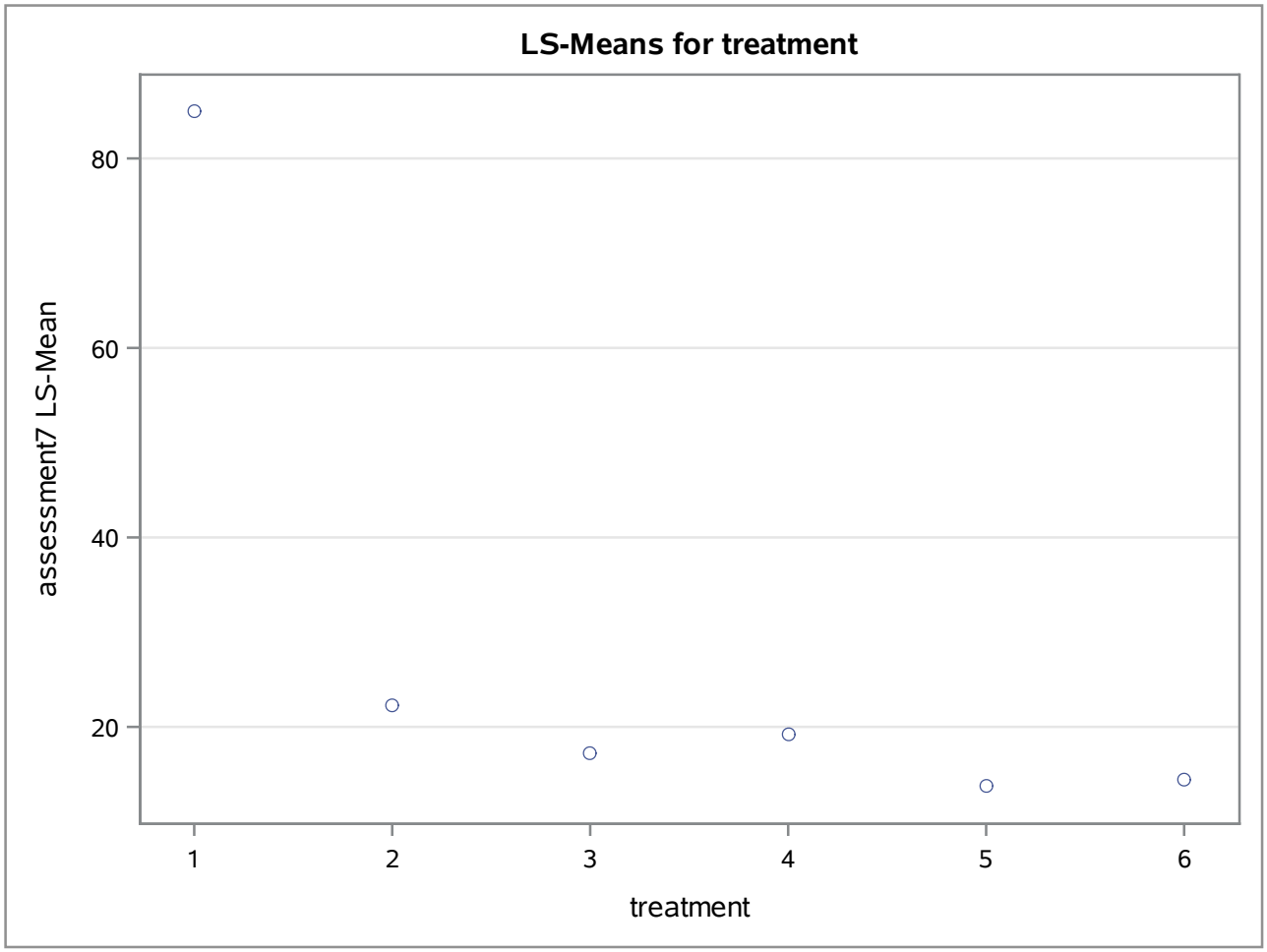
treatment	assessment7 LSMEAN	Standard Error	Pr > |t|	LSMEAN Number
1	85.0000085	0.7958226	<.0001	1
2	22.2500020	0.7958226	<.0001	2
3	17.2500018	0.7958226	<.0001	3
4	19.2500020	0.7958226	<.0001	4
5	13.7500010	0.7958226	<.0001	5
6	14.5000018	0.7958226	<.0001	6

Least Squares Means for effect treatment
Pr > |t| for H0: LSMean(i)=LSMean(j)

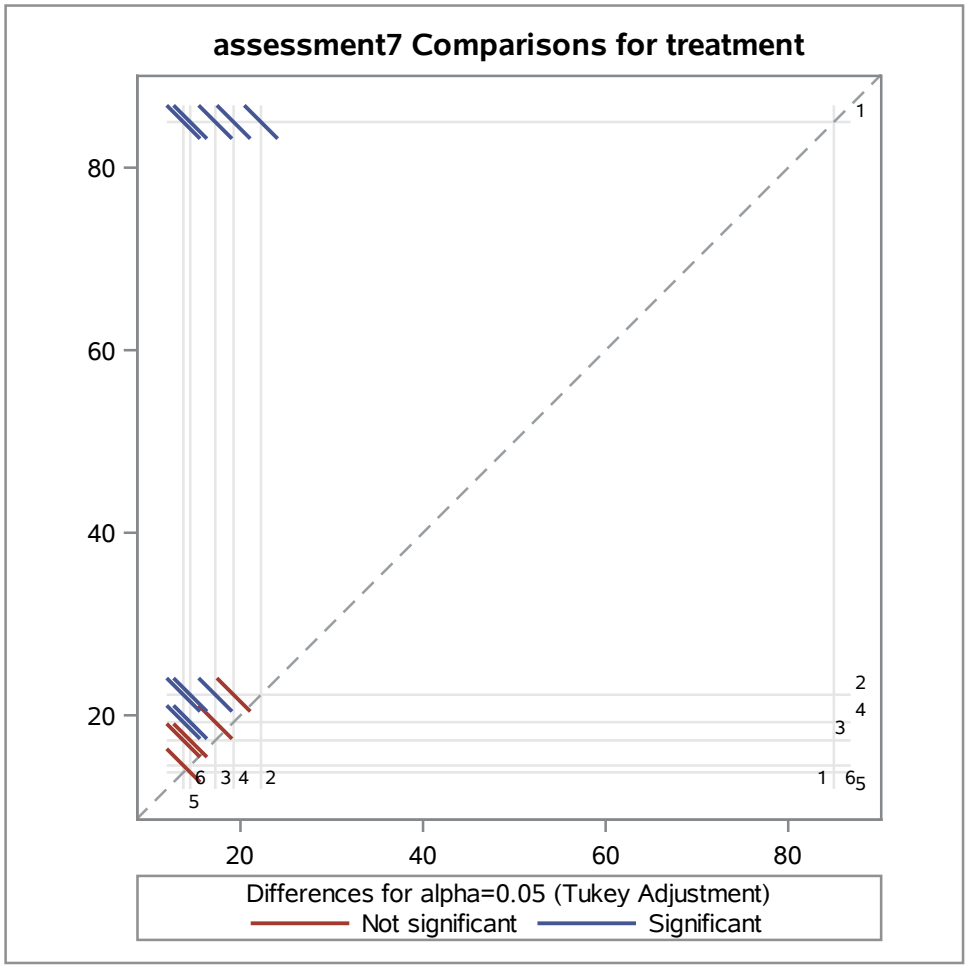
Dependent Variable: assessment7

i/j	1	2	3	4	5	6
1		<.0001	<.0001	<.0001	<.0001	<.0001
2	<.0001		0.0052	0.1409	<.0001	<.0001
3	<.0001	0.0052		0.5072	0.0645	0.2026
4	<.0001	0.1409	0.5072		0.0022	0.0079
5	<.0001	<.0001	0.0645	0.0022		0.9831
6	<.0001	<.0001	0.2026	0.0079	0.9831	

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



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



Tukey Comparison Lines for Least Squares Means of treatment				
LS-means with the same letter are not significantly different.				
		assessment7 LSMEAN	treatment	LSMEAN Number
	A	85.00001	**1**	1
	B	22.25000	**2**	2
	B			
C	B	19.25000	**4**	4
C				
C	D	17.25000	**3**	3
	D			
	D	14.50000	**6**	6
	D			
	D	13.75000	**5**	5

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

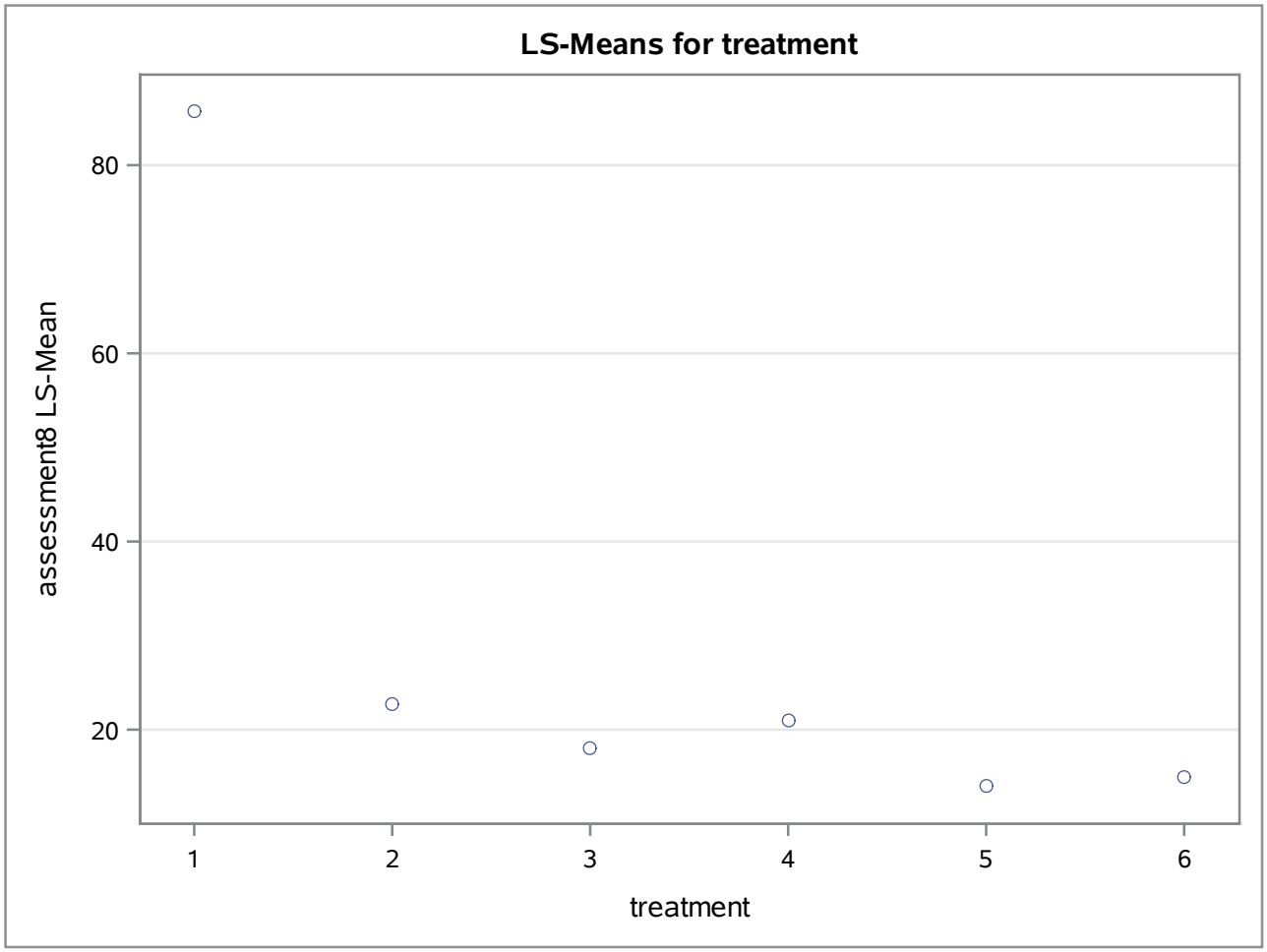
treatment	assessment8 LSMEAN	Standard Error	Pr > |t|	LSMEAN Number
1	85.7500087	0.9279609	<.0001	1
2	22.7500023	0.9279609	<.0001	2
3	18.0000020	0.9279609	<.0001	3
4	21.0000020	0.9279609	<.0001	4
5	14.0000015	0.9279609	<.0001	5
6	15.0000018	0.9279609	<.0001	6

Least Squares Means for effect treatment
Pr > |t| for H0: LSMean(i)=LSMean(j)

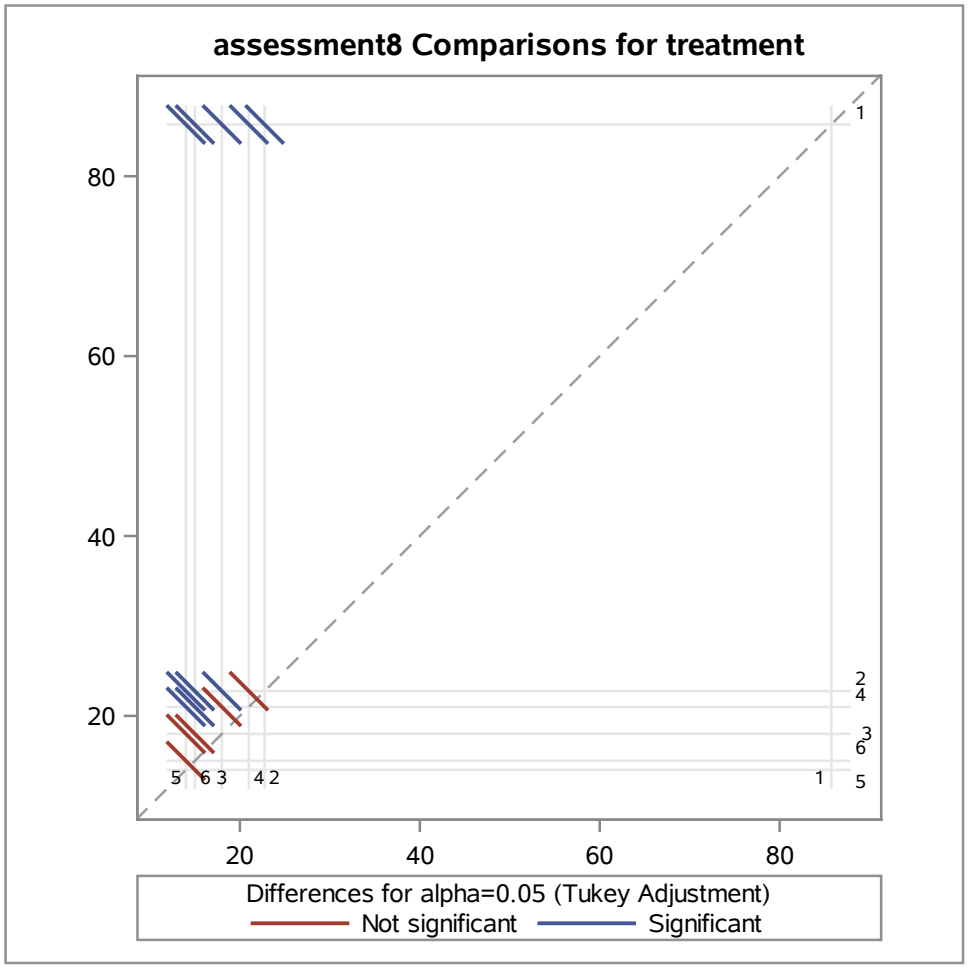
Dependent Variable: assessment8

i/j	1	2	3	4	5	6
1		<.0001	<.0001	<.0001	<.0001	<.0001
2	<.0001		0.0250	0.7630	<.0001	0.0003
3	<.0001	0.0250		0.2583	0.0722	0.2583
4	<.0001	0.7630	0.2583		0.0010	0.0040
5	<.0001	<.0001	0.0722	0.0010		0.9699
6	<.0001	0.0003	0.2583	0.0040	0.9699	

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



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



Tukey Comparison Lines for Least Squares Means of treatment				
LS-means with the same letter are not significantly different.				
		assessment8 LSMEAN	treatment	LSMEAN Number
	A	85.75001	**1**	1
	B	22.75000	**2**	2
	B			
C	B	21.00000	**4**	4
C				
C	D	18.00000	**3**	3
	D			
	D	15.00000	**6**	6
	D			
	D	14.00000	**5**	5

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

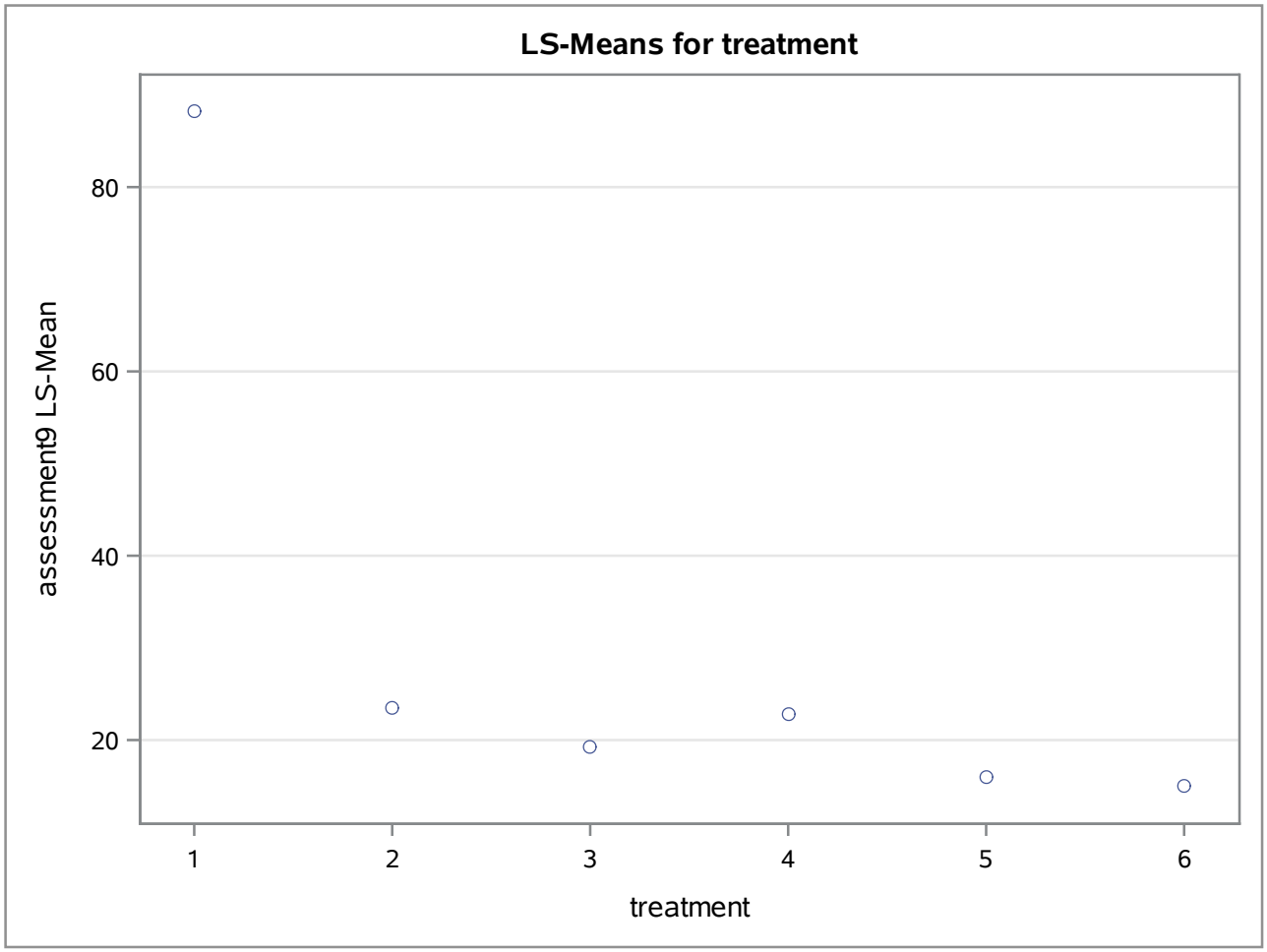
treatment	assessment9 LSMEAN	Standard Error	Pr > |t|	LSMEAN Number
1	88.2500090	0.9140115	<.0001	1
2	23.5000022	0.9140115	<.0001	2
3	19.2500020	0.9140115	<.0001	3
4	22.7500022	0.9140115	<.0001	4
5	16.0000017	0.9140115	<.0001	5
6	15.0000018	0.9140115	<.0001	6

Least Squares Means for effect treatment
Pr > |t| for H0: LSMean(i)=LSMean(j)

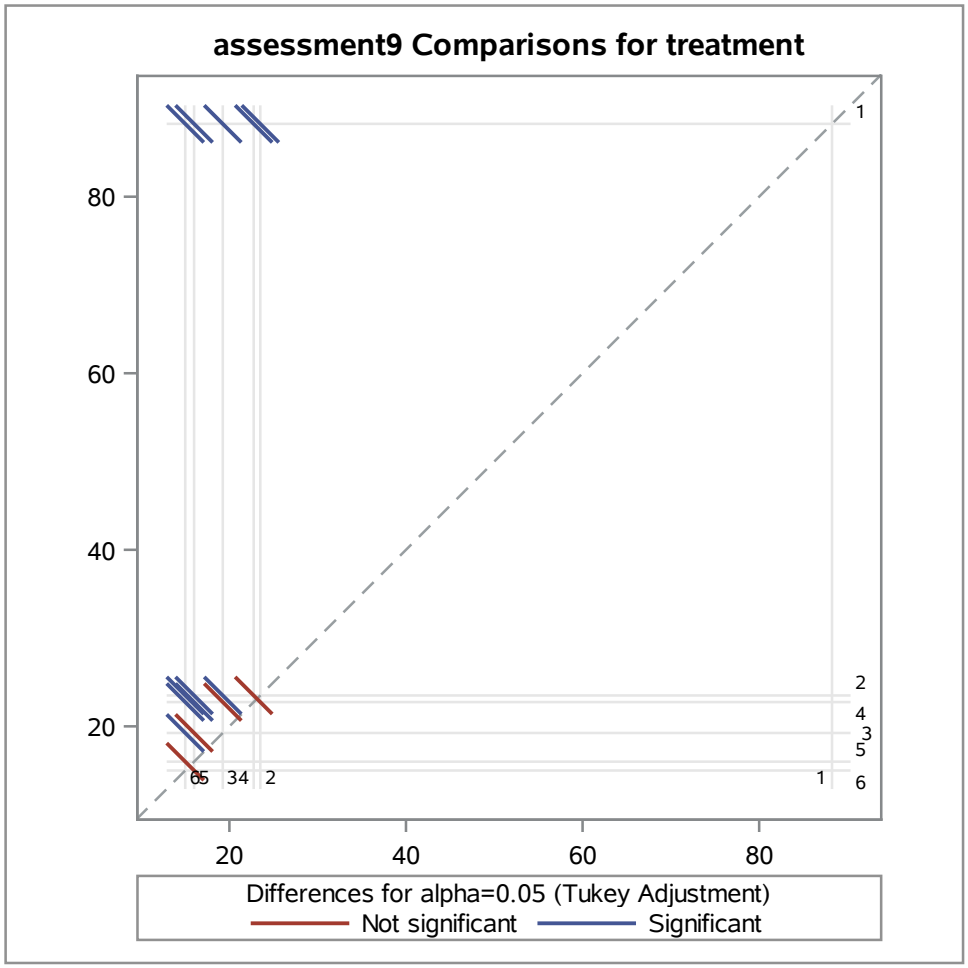
Dependent Variable: assessment9

i/j	1	2	3	4	5	6
1		<.0001	<.0001	<.0001	<.0001	<.0001
2	<.0001		0.0465	0.9909	0.0004	0.0001
3	<.0001	0.0465		0.1312	0.1809	0.0465
4	<.0001	0.9909	0.1312		0.0012	0.0003
5	<.0001	0.0004	0.1809	0.0012		0.9679
6	<.0001	0.0001	0.0465	0.0003	0.9679	

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



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



Tukey Comparison Lines for Least Squares Means of treatment				
LS-means with the same letter are not significantly different.				
		assessment9 LSMEAN	treatment	LSMEAN Number
	A	88.25001	**1**	1
	B	23.50000	**2**	2
	B			
C	B	22.75000	**4**	4
C				
C	D	19.25000	**3**	3
	D			
E	D	16.00000	**5**	5
E				
E		15.00000	**6**	6

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

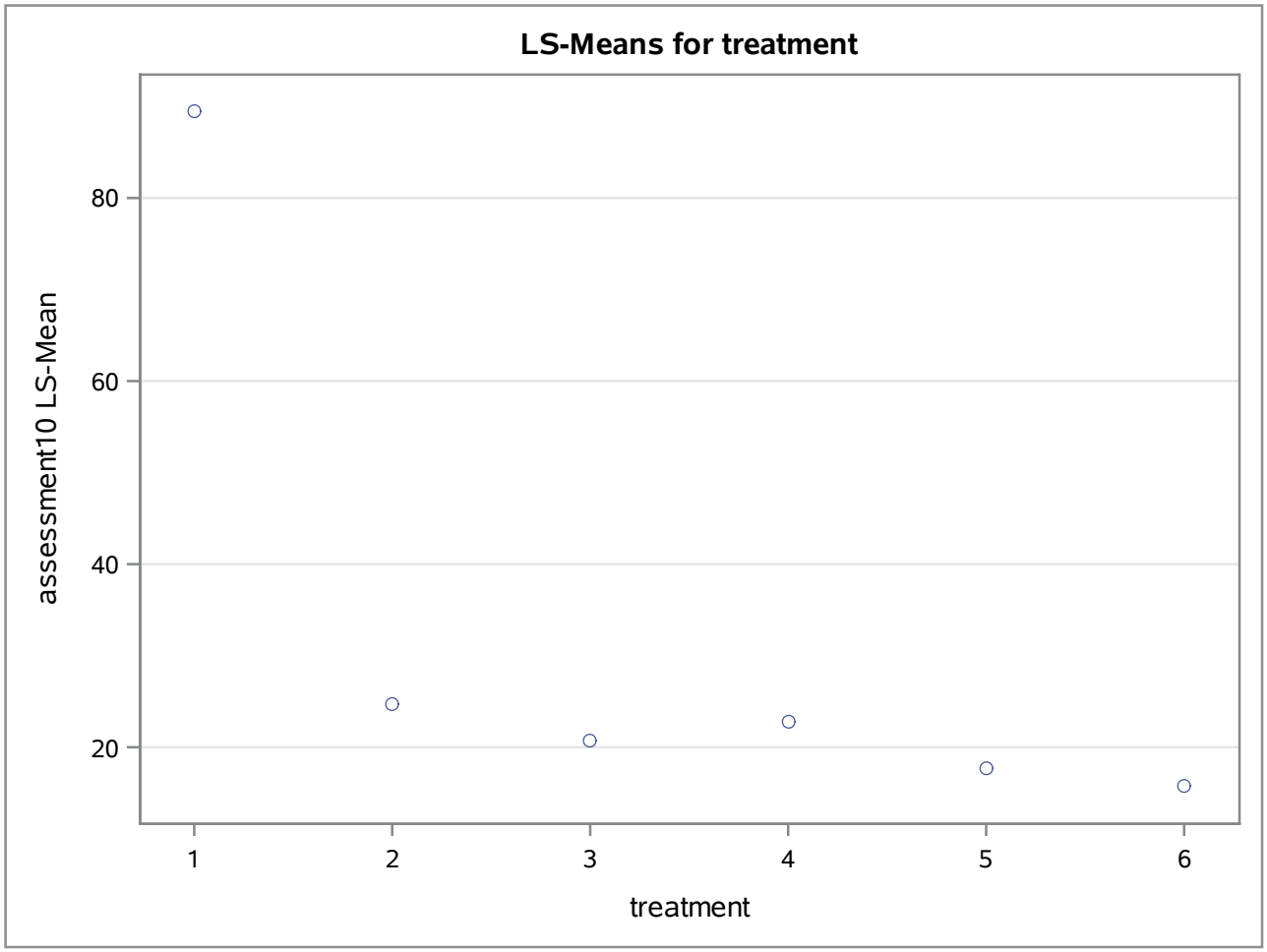
treatment	assessment10 LSMEAN	Standard Error	Pr > |t|	LSMEAN Number
1	89.5000090	0.7705519	<.0001	1
2	24.7500025	0.7705519	<.0001	2
3	20.7500020	0.7705519	<.0001	3
4	22.7500020	0.7705519	<.0001	4
5	17.7500020	0.7705519	<.0001	5
6	15.7500018	0.7705519	<.0001	6

Least Squares Means for effect treatment
Pr > |t| for H0: LSMean(i)=LSMean(j)

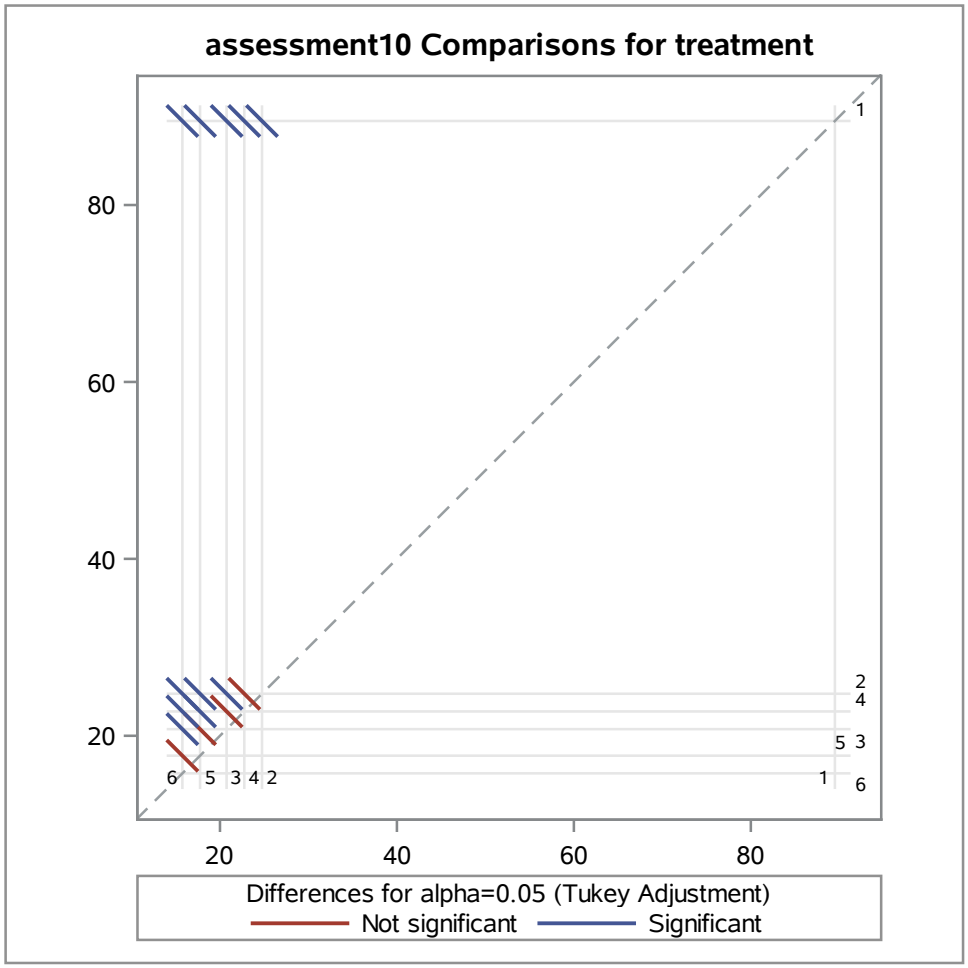
Dependent Variable: assessment10

i/j	1	2	3	4	5	6
1		<.0001	<.0001	<.0001	<.0001	<.0001
2	<.0001		0.0226	0.4742	0.0001	<.0001
3	<.0001	0.0226		0.4742	0.1214	0.0039
4	<.0001	0.4742	0.4742		0.0039	0.0001
5	<.0001	0.0001	0.1214	0.0039		0.4742
6	<.0001	<.0001	0.0039	0.0001	0.4742	

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



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



Tukey Comparison Lines for Least Squares Means of treatment				
LS-means with the same letter are not significantly different.				
		assessment10 LSMEAN	treatment	LSMEAN Number
	A	89.50001	**1**	1
	B	24.75000	**2**	2
	B			
C	B	22.75000	**4**	4
C				
C	D	20.75000	**3**	3
	D			
E	D	17.75000	**5**	5
E				
E		15.75000	**6**	6