

Latin Square in Multiple Blocks

Treatments: Colors Levels = _____

Columns: Maps Levels = _____

Squares: Levels = _____ Rows (Squares): Levels = _____

Square	Student/Map	ME	MS	VTNH	WY
1	Matt	Purple	Green	Pink	Orange
1	Cath	Pink	Purple	Orange	Green
1	Melissa	Orange	Pink	Green	Purple
1	IB	Green	Orange	Purple	Pink
2	Lacey	Purple	Green	Pink	Orange
2	Jennifer	Pink	Orange	Purple	Green
2	GK	Orange	Purple	Green	Pink
2	Cris	Green	Pink	Orange	Purple
3	Huazhi	Purple	Green	Pink	Orange
3	Paras	Orange	Pink	Purple	Green
3	Hsiao	Pink	Orange	Green	Purple
3	Rob	Green	Purple	Orange	Pink

Square	Student/Map	ME	MS	VTNH	WY	StdntMn	SquareMn	StdntSS	Std(Sq)SS	SquareSS
1	Matt	3.20	29.34	4.09	24.24	15.22	9.41	78.14	135.03	7.73
1	Cath	4.74	12.67	1.91	0.35	4.92	9.41	138.24	80.59	7.73
1	Melissa	7.39	31.60	7.36	2.69	12.26	9.41	8.55	32.53	7.73
1	IB	1.87	10.65	1.91	6.49	5.23	9.41	123.81	69.67	7.73
2	Lacey	7.39	16.98	9.54	0.15	8.52	9.93	20.82	8.03	2.99
2	Jennifer	2.14	14.97	0.27	1.11	4.62	9.93	152.58	112.84	2.99
2	GK	7.12	13.53	39.51	10.30	17.62	9.93	185.96	236.12	2.99
2	Cris	0.24	4.00	9.00	22.67	8.98	9.93	13.25	3.65	2.99
3	Huazhi	3.68	24.74	10.63	21.90	15.24	13.05	78.93	19.14	20.34
3	Paras	0.02	14.97	6.27	0.61	5.47	13.05	113.67	230.18	20.34
3	Hsiao	3.68	20.71	4.63	8.78	9.45	13.05	7.26	51.90	20.34
3	Rob	1.83	17.26	18.25	50.87	22.05	13.05	506.77	324.06	20.34
	MapMn	3.61	17.62	9.45	12.51	10.80		1427.99	1303.74	124.25
	MapSS	619.98	558.22	21.83	35.35	1235.39	Total SS			
		Color	Color	Color	Color		5763.89			
		Purple	Pink	Orange	Green					
		8.36	12.75	11.36	10.71					
	ColorSS	71.32	45.96	3.81	0.08	121.17				

ANOVA1					
Source	df	SS	MS	F	F(0.05)
Color					
Map					
Square					
Student(Square)					
Error					
Total					
ANOVA2					
Source	df	SS	MS	F	F(0.05)
Color					
Map					
Student					
Error					
Total					

Tukey's HSD for comparing color means

Bonferroni's MSD for comparing color means