

	1st Stratum	
S.No.	y_i	y_i^2
1	1035	1071225
2	1020	1040400
3	1007	1014049
4	983	966289
5	951	904401
6	949	900601
7	907	822649
8	895	801025
9	885	783225
10	840	705600
11	832	692224
12	814	662596
13	807	651249
14	768	589824
15	714	509796
16	686	470596
Total	14093	12585749

	2nd Stratum	
S.No.	y_i	y_i^2
1	653	426409
2	650	422500
3	644	414736
4	620	384400
5	618	381924
6	601	361201
7	589	346921
8	572	327184
9	572	327184
10	570	324900
11	551	303601
12	542	293764
13	541	292681
14	539	290521
15	534	285156
16	533	284089
17	523	273529
18	509	259081
19	480	230400
20	475	225625
21	475	225625
22	465	216225
23	455	207025
24	430	184900
25	416	173056
26	415	172225
27	412	169744
28	360	129600
29	346	119716
30	346	119716
31	318	101124
32	293	85849
33	286	81796
34	276	76176
35	262	68644
36	246	60516
37	245	60025
38	244	59536
39	225	50625
40	224	50176
41	223	49729
42	218	47524
43	216	46656
44	185	34225
45	166	27556
46	155	24025
47	126	15876
48	117	13689
Total	19461	9127385

Signature Per Sheet(y_i)	No. Of Sheets(f_i)	$f_i y_i$	$f_i y_i^2$
50	4	200	10000
48	7	336	16128
45	1	45	2025
43	2	86	3698
41	1	41	1681
39	3	117	4563
35	2	70	2450
32	2	64	2048
30	1	30	900
29	1	29	841
25	3	75	1875
22	2	44	968
16	5	80	1280
4	2	8	32
3	4	12	36
Total	40	1237	48525

Sr. No.	Page No.	No. Of Words(y_i)	y_i^2
1	44	24	576
2	266	29	841
3	516	13	169
4	499	18	324
5	158	31	961
6	503	10	100
7	628	20	400
8	53	9	81
9	90	36	1296
10	302	15	225
11	321	26	676
12	623	22	484
13	74	35	1225
14	303	34	1156
15	604	16	256
16	24	8	64
17	393	17	289
18	252	10	100
19	481	14	196
20	210	21	441
21	140	16	256
22	529	17	289
23	630	40	1600
24	603	32	1024
25	245	8	64
26	113	30	900
27	48	20	400
28	211	19	361
29	191	27	729
30	343	13	169
31	123	36	1296
32	15	16	256
33	250	24	576
	Total	706	17780

Treatments Combinations	Blocks				Treatments Totals(T_i)	T_i^2
	I	II	III	IV		
1	-6	-3	0	-1	-10	100
k	-4	7	-9	2	-4	16
p	-7	11	-9	-5	-10	100
kp	9	9	1	5	24	576
Block Totals(B_i)	-8	24	-17	1	G = 0	
B_i^2	64	576	289	1		

Yate's Method For 2^2 Experiment				
Treatments Combination (1)	Total Yield Form All Blocks (2)	Total (3)	Factorial Effects Totals (4)	SS (5) = (4) ² /4r
1	-10	-14	0 = G	0
k	-4	14	40 = [K]	100
p	-10	6	28 = [P]	49
kp	24	34	28 = [KP]	49

Treatments Combination(1)	Treatments Total (2)	(3)	(4)	(5)	(6)
1	[1]	$[1] + [a] = u_1$	$u_1 + u_2 = v_1$	$v_1 + v_2 = w_1$	G.T.
a	[a]	$[b] + [ab] = u_2$	$u_3 + u_4 = v_2$	$v_3 + v_4 = w_2$	[A]
b	[b]	$[c] + [ac] = u_3$	$u_5 + u_6 = v_3$	$v_5 + v_6 = w_3$	[B]
ab	[ab]	$[bc] + [abc] = u_4$	$u_7 + u_8 = v_4$	$v_7 + v_8 = w_4$	[AB]
c	[c]	$[a] - [1] = u_5$	$u_2 - u_1 = v_5$	$v_2 - v_1 = w_5$	[C]
ac	[ac]	$[ab] - [b] = u_6$	$u_4 - u_3 = v_6$	$v_4 - v_3 = w_6$	[AC]
bc	[bc]	$[ac] - [c] = u_7$	$u_6 - u_5 = v_7$	$v_6 - v_5 = w_7$	[BC]
abc	[abc]	$[abc] - [bc] = u_8$	$u_8 - u_7 = v_8$	$v_8 - v_7 = w_8$	[ABC]