One:
pval $\sum_{k=B}^{n} \binom{n}{k} (p^k)(1-p)^{n-k}$
$\frac{a-np}{\sqrt{np(1-p)}} = -z_{(1-\alpha/2)}$ ner
$\frac{b-1-np}{\sqrt{np(1-p)}} = z_{(1-\alpha/2)}$ upp
CLT power alpha=0.05
$1-\Phi(1.645-\frac{\mu_{true}-\mu_0}{\sigma/\sqrt{n}})$
BIN power:
$1-\Phi(1.645\sqrt{\frac{.25}{p(1-p)}}-\frac{p-.5}{\sqrt{p(1-p)/n}})$

Two: 1. calculate $D_{obs} = \bar{X}_i - \bar{X}_j$ 2. From N randomly allocate values to n_i and n_j 3. for each permut calc D^* 4. upper pvalue
$U = mn - W + \frac{m(m+1)}{2}$
normAP $P(z \geq \frac{W_1 - \frac{1}{2}m(N+1)}{\sqrt{\frac{1}{12}mn(N+1)}})$
$var(W_{tie}) = \frac{mn(N+1)}{12} - \frac{mn\sum_i^k (t_i^3 - t_i)}{12N(N-1)}$ dont forget to square
1.$X_i - X_j$ and order
2.Find k_a & k_b s.th. $P(k_a \leq U \leq k_b - 1) = 1-\alpha \Rightarrow pwd(k_a) \leq \Delta \leq pwd(k_b)$
3.Small m & n $k_a = l+1$ $k_b = u$
SCORES
KS: rank, if in treatment add $1/n_{group}$, find all abs diff per value.

k:
reject if $|\frac{\sqrt{2}\hat{D}_i}{\sqrt{MSE(\frac{1}{n_i}+\frac{1}{n_j})}}| > q(1-\alpha;k;N-k)$
$all = \frac{N!}{n_1!n_2!...n_k!}$
$KW = \frac{12}{N(N+1)}\sum_i^k n_i(\bar{R}_i - \frac{N+1}{2})^2$
$KW_{tie} = \frac{KW}{1-\frac{\sum(t_i^3-t_i)}{N^3-N}}$
$KW_{large} \sim \chi^2_{k-1}$
lsd 1. obs T_{ij} 2. perm by selecting n_i n_j from N 3. T_{ij} from each 4. 100α point of permutaiton distirbution $= t^*(\alpha)$, reject if $T_{ij} > t^*(\alpha)$
HSD 1. obs $|T_{ij}| = \frac{|\bar{R}_i - \bar{R}_j|}{\sqrt{\frac{MSE}{2}(\frac{1}{n_i}+\frac{1}{n_j})}}$ 2. perm as F, calc $Q^* = max_{ij}|T_{ij}|$ 3.let $q^*(\alpha)$ be upper α^{th} quantile 4.signif $|T_{ij}| > q^*(\alpha)$ 5. pval but with $>$
$|\bar{R}_i - \bar{R}_j| \geq q(\alpha,k,\infty)\sqrt{\frac{N(N+1)}{24}(\frac{1}{n_i}+\frac{1}{n_j})}$ Z for LSD, and Z alpha/g for bon with LSD

Paired:
$H_0 : F(x) = 1-F(-x)$ $H_a : F(x) < 1-F(-x)$, $F(x) > 1-F(-x)$
perm 1. for all 2^n perm, comp D_i 2. all possible assingment of +,- 3. find $\bar{D}$ 4. pval as usual
perm for lare n
$\bar{D} = \frac{\sum U_i|D_i|}{n}$ $P(U_i = 1) = P(U_i = -1) = .5$
normAP
$z = \frac{\bar{D}}{\sqrt{\frac{1}{n^2}\sum|D_i|^2}}$
$z = \frac{SR_+ - \frac{n(n+1)}{4}}{\sqrt{\frac{n(n+1)(2n+1)}{24}}}$
$z_{tie,no0} = \frac{SR_+ - \frac{1}{2}\sum R_i}{\sqrt{\frac{1}{4}\sum R_i^2}}$
sign test:
$H_0 : \theta_D = 0$ $H_a : \theta_D > 0$

Trend:

1. r_obs
2. fix x, perm n! for y

3. calc r
4. pval as usaul

$z = r\sqrt{n-1}$

$$D = \sum [R(X_i) - R(Y_i)]^2$$

$$r_s = 1 - \frac{6D}{n(n^2-1)}$$

$$r_{s,tie} = \frac{1 - \frac{6D}{n(n^2-1)} - C_1}{C_2}$$

$$C_1 = \frac{\sum (s_i^3 - s_i) + \sum (t_i^3 - t_i)}{2n(n^2-1)}$$

$$C_2 = \sqrt{[1 - \frac{\sum (s_i^3 - s_i)}{n(n^2-1)}][1 - \frac{\sum (t_i^3 - t_i)}{n(n^2-1)}]}$$

tau

1. $U_{ij} = 1_{conc} = 1/2$ if tie
2. $V_i = \sum U_{ij}$ for that pair
3. $r_\tau = 2\frac{\sum_i^{n-1} V_i}{{}_nC_2} - 1$

normap $z = r_\tau 3\sqrt{\frac{n^2-n}{4n+10}}$
slope

$$\hat{\beta}_1 = r\frac{S_Y}{S_X}$$

$$\hat{\beta}_0 = \bar{Y} - \hat{\beta}_1\bar{X}$$

$t = \hat{\beta}_1\sqrt{\frac{\sum (X_i - \bar{X})^2}{MSE}}$
1.obs 2.fix X, n! for Y 3. p as usual
$H_0 : p_{ij} = p_{i.}p_{.j}\ V(i,j)$ vs $H_a : p_{ij} \neq p_{i.}p_{.j}$
$e_{ij} = \frac{n_{i.}n_{.j}}{n_{..}}$
$\chi^2 = \sum_i^r \sum_j^c \frac{(n_{ij}-e_{ij})^2}{e_{ij}} \sim \chi^2_{(r-1)(c-1)}$ if $e_{ij} < 5\ /Rightarrow$ fix margins and randomize. if A - 2, two sample with ${}_{(n_{1.}+n_{2.})}C_{n_{1.}}$
Fisher exact
$P(X=x) = \frac{{}_{(n_{.1})}C_{(x)} * {}_{(n_{.2})}C_{(n_{1.}-x)}}{{}_{n_{..}}C_{n_{1.}}}$
mcnemar $P_{AB} = P_{BA}$ vs $P_{AB} \neq P_{BA}$
large n: $T = \frac{(X_{AB}-X_{BA})^2}{X_{AB}+X_{BA}} \sim \chi^2_1$
small: $X_{AB} \sim Bin(X_{AB} + X_{BA}, 1/2)$

TABLE A2
Standard Normal Cumulative Probabilities

z	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
0.0	.5000	.5040	.5080	.5120	.5160	.5199	.5239	.5279	.5319	.5359
0.1	.5398	.5438	.5478	.5517	.5557	.5596	.5636	.5675	.5714	.5753
0.2	.5793	.5832	.5871	.5910	.5948	.5987	.6026	.6064	.6103	.6141
0.3	.6179	.6217	.6255	.6293	.6331	.6368	.6406	.6443	.6480	.6517
0.4	.6554	.6591	.6628	.6664	.6700	.6736	.6772	.6808	.6844	.6879
0.5	.6915	.6950	.6985	.7019	.7054	.7088	.7123	.7157	.7190	.7224
0.6	.7257	.7291	.7324	.7357	.7389	.7422	.7454	.7486	.7517	.7549
0.7	.7580	.7611	.7642	.7673	.7704	.7734	.7764	.7794	.7823	.7852
0.8	.7881	.7910	.7939	.7967	.7995	.8023	.8051	.8078	.8106	.8133
0.9	.8159	.8186	.8212	.8238	.8264	.8289	.8315	.8340	.8365	.8389
1.0	.8413	.8438	.8461	.8485	.8508	.8531	.8554	.8577	.8599	.8621
1.1	.8643	.8665	.8686	.8708	.8729	.8749	.8770	.8790	.8810	.8830
1.2	.8849	.8869	.8888	.8907	.8925	.8944	.8962	.8980	.8997	.9015
1.3	.9032	.9049	.9066	.9082	.9099	.9115	.9131	.9147	.9162	.9177
1.4	.9192	.9207	.9222	.9236	.9251	.9265	.9279	.9292	.9306	.9319
1.5	.9332	.9345	.9357	.9370	.9382	.9394	.9406	.9418	.9429	.9441
1.6	.9452	.9463	.9474	.9484	.9495	.9505	.9515	.9525	.9535	.9545
1.7	.9554	.9564	.9573	.9582	.9591	.9599	.9608	.9616	.9625	.9633
1.8	.9641	.9649	.9656	.9664	.9671	.9678	.9686	.9693	.9699	.9706
1.9	.9713	.9719	.9726	.9732	.9738	.9744	.9750	.9756	.9761	.9767
2.0	.9772	.9778	.9783	.9788	.9793	.9798	.9803	.9808	.9812	.9817
2.1	.9821	.9826	.9830	.9834	.9838	.9842	.9846	.9850	.9854	.9857
2.2	.9861	.9864	.9868	.9871	.9875	.9878	.9881	.9884	.9887	.9890
2.3	.9893	.9896	.9898	.9901	.9904	.9906	.9909	.9911	.9913	.9916
2.4	.9918	.9920	.9922	.9925	.9927	.9929	.9931	.9932	.9934	.9936
2.5	.9938	.9940	.9941	.9943	.9945	.9946	.9948	.9949	.9951	.9952
2.6	.9953	.9955	.9956	.9957	.9959	.9960	.9961	.9962	.9963	.9964
2.7	.9965	.9966	.9967	.9968	.9969	.9970	.9971	.9972	.9973	.9974
2.8	.9974	.9975	.9976	.9977	.9977	.9978	.9979	.9979	.9980	.9981
2.9	.9981	.9982	.9982	.9983	.9984	.9984	.9985	.9985	.9986	.9986
3.0	.9987	.9987	.9987	.9988	.9988	.9989	.9989	.9989	.9990	.9990

z	.842	1.036	1.282	1.645	1.960	2.326
prob ≤ z	.800	.850	.900	.950	.975	.990

TABLE A3

Critical Values for Wilcoxon Rank-Sum Statistic: Sum Is Taken for Treatment with n Observations

5%

$n \rightarrow$	4		5		6		7		8		9		10	
$m \downarrow$	*Lower*	*Upper*	*Lower*	*Upper*	*Lower*	*Upper*	*Lower*	*Upper*	*Lower*	*Upper*	*Lower*	*Upper*	*Lower*	*Upper*
4	11	25	17	33	24	42	32	52	41	63	51	75	62	88
5	12	28	19	36	26	46	34	57	44	68	54	81	66	94
6	13	31	20	40	28	50	36	62	46	74	57	87	69	101
7	14	34	21	44	29	55	39	66	49	79	60	93	72	108
8	15	37	23	47	31	59	41	71	51	85	63	99	75	115
9	16	40	24	51	33	63	43	76	54	90	66	105	79	121
10	17	43	26	54	35	67	45	81	56	96	69	111	82	128

2.5%

$n \rightarrow$	4		5		6		7		8		9		10	
$m \downarrow$	*Lower*	*Upper*	*Lower*	*Upper*	*Lower*	*Upper*	*Lower*	*Upper*	*Lower*	*Upper*	*Lower*	*Upper*	*Lower*	*Upper*
4	10	26	16	34	23	43	31	53	40	64	49	77	60	90
5	11	29	17	38	24	48	33	58	42	70	52	83	63	97
6	12	32	18	42	26	52	34	64	44	76	55	89	66	104
7	13	35	20	45	27	57	36	69	46	82	57	96	69	111
8	14	38	21	49	29	61	38	74	49	87	60	102	72	118
9	14	42	22	53	31	65	40	79	51	93	62	109	75	125
10	15	45	23	57	32	70	42	84	53	99	65	115	78	132

1%

$n \rightarrow$	4		5		6		7		8		9		10	
$m \downarrow$	*Lower*	*Upper*	*Lower*	*Upper*	*Lower*	*Upper*	*Lower*	*Upper*	*Lower*	*Upper*	*Lower*	*Upper*	*Lower*	*Upper*
4			15	35	22	44	29	55	38	66	48	78	58	92
5	10	30	16	39	23	49	31	60	40	72	50	85	61	99
6	11	33	17	43	24	54	32	66	42	78	52	92	63	107
7	11	37	18	47	25	59	34	71	43	85	54	99	66	114
8	12	40	19	51	27	63	35	77	45	91	56	106	68	122
9	13	43	20	55	28	68	37	82	47	97	59	112	71	129
10	13	47	21	59	29	73	39	87	49	103	61	119	74	136

TABLE A7
Upper Critical Values of the Chi-Square Distribution

	Upper-Tail Probability					Upper-Tail Probability			
df	*.1*	*.05*	*.025*	*.01*	*df*	*.1*	*.05*	*.025*	*.01*
1	2.71	3.84	5.02	6.63	31	41.4	45.0	48.2	52.2
2	4.61	5.99	7.38	9.21	32	42.6	46.2	49.5	53.5
3	6.25	7.81	9.35	11.3	33	43.7	47.4	50.7	54.8
4	7.78	9.49	11.1	13.3	34	44.9	48.6	52.0	56.1
5	9.24	11.1	12.8	15.1	35	46.1	49.8	53.2	57.3
6	10.6	12.6	14.4	16.8	36	47.2	51.0	54.4	58.6
7	12.0	14.1	16.0	18.5	37	48.4	52.2	55.7	59.9
8	13.4	15.5	17.5	20.1	38	49.5	53.4	56.9	61.2
9	14.7	16.9	19.0	21.7	39	50.7	54.6	58.1	62.4
10	16.0	18.3	20.5	23.2	40	51.8	55.8	59.3	63.7
11	17.3	19.7	21.9	24.7	41	52.9	56.9	60.6	64.9
12	18.5	21.0	23.3	26.2	42	54.1	58.1	61.8	66.2
13	19.8	22.4	24.7	27.7	43	55.2	59.3	63.0	67.5
14	21.1	23.7	26.1	29.1	44	56.4	60.5	64.2	68.7
15	22.3	25.0	27.5	30.6	45	57.5	61.7	65.4	70.0
16	23.5	26.3	28.8	32.0	46	58.6	62.8	66.6	71.2
17	24.8	27.6	30.2	33.4	47	59.8	64.0	67.8	72.4
18	26.0	28.9	31.5	34.8	48	60.9	65.2	69.0	73.7
19	27.2	30.1	32.9	36.2	49	62.0	66.3	70.2	74.9
20	28.4	31.4	34.2	37.6	50	63.2	67.5	71.4	76.2
21	29.6	32.7	35.5	38.9	51	64.3	68.7	72.6	77.4
22	30.8	33.9	36.8	40.3	52	65.4	69.8	73.8	78.6
23	32.0	35.2	38.1	41.6	53	66.5	71.0	75.0	79.8
24	33.2	36.4	39.4	43.0	54	67.7	72.2	76.2	81.1
25	34.4	37.7	40.6	44.3	55	68.8	73.3	77.4	82.3
26	35.6	38.9	41.9	45.6	56	69.9	74.5	78.6	83.5
27	36.7	40.1	43.2	47.0	57	71.0	75.6	79.8	84.7
28	37.9	41.3	44.5	48.3	58	72.2	76.8	80.9	86.0
29	39.1	42.6	45.7	49.6	59	73.3	77.9	82.1	87.2
30	40.3	43.8	47.0	50.9	60	74.4	79.1	83.3	88.4

TABLE A8

Tukey's HSD 5% Critical Values, $q(.05, k, \text{df})$

k = number of treatments

df	2	3	4	5	6	7	8	9	10
2	6.08	8.33	9.80	10.88	11.73	12.43	13.03	13.54	13.99
3	4.50	5.91	6.82	7.50	8.04	8.48	8.85	9.18	9.46
4	3.93	5.04	5.76	6.29	6.71	7.05	7.35	7.60	7.83
5	3.64	4.60	5.22	5.67	6.03	6.33	6.58	6.80	6.99
6	3.46	4.34	4.90	5.30	5.63	5.90	6.12	6.32	6.49
7	3.34	4.16	4.68	5.06	5.36	5.61	5.82	6.00	6.16
8	3.26	4.04	4.53	4.89	5.17	5.40	5.60	5.77	5.92
9	3.20	3.95	4.41	4.76	5.02	5.24	5.43	5.59	5.74
10	3.15	3.88	4.33	4.65	4.91	5.12	5.30	5.46	5.60
11	3.11	3.82	4.26	4.57	4.82	5.03	5.20	5.35	5.49
12	3.08	3.77	4.20	4.51	4.75	4.95	5.12	5.26	5.39
13	3.06	3.73	4.15	4.45	4.69	4.88	5.05	5.19	5.32
14	3.03	3.70	4.11	4.41	4.64	4.83	4.99	5.13	5.25
15	3.01	3.67	4.08	4.37	4.59	4.78	4.94	5.08	5.20
16	3.00	3.65	4.05	4.33	4.56	4.74	4.90	5.03	5.15
17	2.98	3.63	4.02	4.30	4.52	4.70	4.86	4.99	5.11
18	2.97	3.61	4.00	4.28	4.49	4.67	4.82	4.96	5.07
19	2.96	3.59	3.98	4.25	4.47	4.65	4.79	4.92	5.04
20	2.95	3.58	3.96	4.23	4.45	4.62	4.77	4.90	5.01
21	2.94	3.56	3.94	4.21	4.42	4.60	4.74	4.87	4.98
22	2.93	3.55	3.93	4.20	4.41	4.58	4.72	4.85	4.96
23	2.93	3.54	3.91	4.18	4.39	4.56	4.70	4.83	4.94
24	2.92	3.53	3.90	4.17	4.37	4.54	4.68	4.81	4.92
25	2.91	3.52	3.89	4.15	4.36	4.53	4.67	4.79	4.90
26	2.91	3.51	3.88	4.14	4.35	4.51	4.65	4.77	4.88
27	2.90	3.51	3.87	4.13	4.33	4.50	4.64	4.76	4.86
28	2.90	3.50	3.86	4.12	4.32	4.49	4.62	4.74	4.85
29	2.89	3.49	3.85	4.11	4.31	4.47	4.61	4.73	4.84
30	2.89	3.49	3.85	4.10	4.30	4.46	4.60	4.72	4.82
40	2.86	3.44	3.79	4.04	4.23	4.39	4.52	4.63	4.73
50	2.84	3.42	3.76	4.00	4.19	4.34	4.47	4.58	4.68
60	2.83	3.40	3.74	3.98	4.16	4.31	4.44	4.55	4.65
70	2.82	3.39	3.72	3.96	4.14	4.29	4.42	4.53	4.62
80	2.81	3.38	3.71	3.95	4.13	4.28	4.40	4.51	4.60
90	2.81	3.37	3.70	3.94	4.12	4.27	4.39	4.50	4.59
100	2.81	3.36	3.70	3.93	4.11	4.26	4.38	4.48	4.58
200	2.79	3.34	3.66	3.89	4.07	4.21	4.33	4.44	4.53
∞	2.77	3.31	3.63	3.86	4.03	4.17	4.29	4.39	4.47

A critical value may be obtained in SAS® using the following commands. The illustration is for df = 10 and $k = 3$.

```
data;
p = probmc("RANGE",.,.95,10,3);
proc print;
```

TABLE A9

Signed-Rank Tail Probabilities, $P(SR_+ \geq c)$

c	$n = 4$
7	0.313
8	0.188
9	0.125
10	0.063

c	$n = 5$
10	0.313
11	0.219
12	0.156
13	0.094
14	0.063
15	0.031

c	$n = 6$
14	0.281
15	0.219
16	0.156
17	0.109
18	0.078
19	0.047
20	0.031
21	0.016

c	$n = 7$
18	0.289
19	0.234
20	0.188
21	0.148
22	0.109
23	0.078
24	0.055
25	0.039
26	0.023
27	0.016
28	0.008

c	$n = 8$
23	0.273
24	0.230
25	0.191
26	0.156
27	0.125
28	0.098
29	0.074
30	0.055
31	0.039
32	0.027
33	0.020
34	0.012
35	0.008
36	0.004

c	$n = 9$
28	0.285
29	0.248
30	0.213
31	0.180
32	0.150
33	0.125
34	0.102
35	0.082
36	0.064
37	0.049
38	0.037
39	0.027
40	0.020
41	0.014
42	0.010
43	0.006
44	0.004
45	0.002

c	$n = 10$
34	0.278
35	0.246
36	0.216
37	0.188
38	0.161
39	0.138
40	0.116
41	0.097
42	0.080
43	0.065
44	0.053
45	0.042
46	0.032
47	0.024
48	0.019
49	0.014
50	0.010
51	0.007
52	0.005
53	0.003
54	0.002
55	0.001

c	$n = 11$
41	0.260
42	0.232
43	0.207
44	0.183
45	0.160
46	0.139
47	0.120
48	0.103
49	0.087
50	0.074
51	0.062
52	0.051
53	0.042
54	0.034
55	0.027
56	0.021
57	0.016
58	0.012
59	0.009
60	0.007
61	0.005
62	0.003
63	0.002
64	0.001
65	0.001
66	0.000

c	$n = 12$
48	0.259
49	0.235
50	0.212
51	0.190
52	0.170
53	0.151
54	0.133
55	0.117
56	0.102
57	0.088
58	0.076
59	0.065
60	0.055
61	0.046
62	0.039
63	0.032
64	0.026
65	0.021
66	0.017
67	0.013
68	0.010
69	0.008
70	0.006
71	0.005
72	0.003
73	0.002
74	0.002
75	0.001
76	0.001
77	0.000
78	0.000

Lower-tail probabilities may be obtained as $P(SR_+ \leq c) = P(SR_+ \geq n(n+1)/2 - c)$.

TABLE A12

Upper-Tail Probabilities for Spearman Rank Correlation, $P(r_s \ge c)$

$n = 4$

c	Prob
.00	.542
.20	.458
.40	.375
.60	.208
.80	.167
1.00	.042

$n = 5$

c	Prob
.00	.525
.10	.475
.20	.392
.30	.342
.40	.258
.50	.225
.60	.175
.70	.117
.80	.067
.90	.042
1.00	.008

$n = 6$

c	Prob
.03	.500
.09	.460
.14	.401
.20	.357
.26	.329
.31	.282
.37	.249
.43	.210
.49	.178
.54	.149
.60	.121
.66	.088
.71	.068
.77	.051
.83	.029
.89	.017
.94	.008
1.00	.001

$n = 7$

c	Prob
.00	.518
.04	.482
.07	.453
.11	.420
.14	.391
.18	.357
.21	.331
.25	.297
.29	.278
.32	.249
.36	.222
.39	.198
.43	.177
.46	.151
.50	.133
.54	.118
.57	.100
.61	.083
.64	.069
.68	.055
.71	.044
.75	.033
.79	.024
.82	.017
.86	.012
.89	.006
.93	.003
.96	.001
1.00	.000

$n = 8$

c	Prob
.00	.512
.02	.488
.05	.467
.07	.441
.10	.420
.12	.397
.14	.376
.17	.352
.19	.332
.21	.310
.24	.291
.26	.268
.29	.250
.31	.231
.33	.214
.36	.195
.38	.180
.40	.163
.43	.150
.45	.134
.48	.122
.50	.108
.52	.098
.55	.085
.57	.076
.60	.066
.62	.057
.64	.048
.67	.042
.69	.035
.71	.029
.74	.023
.76	.018
.79	.014
.81	.011
.83	.008
.86	.005
.88	.004
.90	.002
.93	.001
.95	.001
.98	.000
1.00	.000

$n = 9$

c	Prob
.00	.509
.02	.491
.03	.474
.05	.456
.07	.440
.08	.422
.10	.405
.12	.388
.13	.372
.15	.354
.17	.339
.18	.322
.20	.307
.22	.290
.23	.276
.25	.260
.27	.247
.28	.231
.30	.218
.32	.205
.33	.193
.35	.179
.37	.168
.38	.156
.40	.146
.42	.135
.43	.125
.45	.115
.47	.106
.48	.097
.50	.089
.52	.081
.53	.074
.55	.066
.57	.060
.58	.054
.60	.048
.62	.043
.63	.038
.65	.033
.67	.029
.68	.025
.70	.022
.72	.018
.73	.016
.75	.013
.77	.011
.78	.009
.80	.007
.82	.005
Greater	< .005

$n = 10$

c	Prob
.01	.500
.02	.486
.03	.473
.04	.459
.05	.446
.07	.433
.08	.419
.09	.406
.10	.393
.12	.379
.13	.367
.14	.354
.15	.341
.16	.328
.18	.316
.19	.304
.20	.292
.21	.280
.22	.268
.24	.257
.25	.246
.26	.235
.27	.224
.28	.214
.30	.203
.31	.193
.32	.184
.33	.174
.35	.165
.36	.156
.37	.148
.38	.139
.39	.132
.41	.124
.42	.116
.43	.109
.44	.102
.45	.096
.47	.089
.48	.083
.49	.077
.50	.072
.52	.067
.53	.062
.54	.057
.55	.052
.56	.048
.58	.044
.59	.040
.60	.037
.61	.033
.62	.030
.64	.027
.65	.024
.66	.022
.67	.019
.68	.017
.70	.015
.71	.013
.72	.012
.73	.010
.75	.009
.76	.007
.77	.006
.78	.005
Greater	< .005

TABLE A13

Upper-Tail Probabilities for Kendall's Tau, $P(r_\tau \geq c)$

n = 4

c	*Prob*
.00	.625
.33	.375
.67	.167
1.00	.042

n = 5

c	*Prob*
.00	.592
.20	.408
.40	.242
.60	.117
.80	.042
1.00	.008

n = 6

c	*Prob*
.07	.500
.20	.360
.33	.235
.47	.136
.60	.068
.73	.028
.87	.008
1.00	.001

n = 7

c	*Prob*
.05	.500
.14	.386
.24	.281
.33	.191
.43	.119
.52	.068
.62	.035
.71	.015
.81	.005
.90	.001
1.00	.000

n = 8

c	*Prob*
.00	.548
.07	.452
.14	.360
.21	.274
.29	.199
.36	.138
.43	.089
.50	.054
.57	.031
.64	.016
.71	.007
.79	.003
.86	.001
.93	.000
1.00	.000

n = 9

c	*Prob*
.00	.540
.06	.460
.11	.381
.17	.306
.22	.238
.28	.179
.33	.130
.39	.090
.44	.060
.50	.038
.56	.022
.61	.012
.67	.006
.72	.003
.78	.001
.83	.000
.89	.000
.94	.000
1.00	.000

n = 10

c	*Prob*
.02	.500
.07	.431
.11	.364
.16	.300
.20	.242
.24	.190
.29	.146
.33	.108
.38	.078
.42	.054
.47	.036
.51	.023
.56	.014
.60	.008
.64	.005
.69	.002
.73	.001
.78	.001
.82	.000
.87	.000
.91	.000
.96	.000
1.00	.000

For negative values of c, $P(r_\tau \leq c) = P(r_\tau \geq -c)$.