

Table H Probabilities for the Wilcoxon Signed-Rank Statistic

Each table entry labeled P is the tail probability from each extreme to the value of T , the Wilcoxon signed-rank statistic for sample size N , where T is interpreted as either T^+ or T^- .

N	Left tail	P	Right tail	N	Left tail	P	Right tail	N	Left tail	P	Right tail
2	0	.250	3	7	0	.008	28	9	0	.002	45
	1	.500	2		1	.016	27		1	.004	44
3	0	.125	6	8	2	.023	26	10	2	.006	43
	1	.250	5		3	.039	25		3	.010	42
	2	.375	4		4	.055	24		4	.014	41
4	3	.625	3	9	5	.078	23	11	5	.020	40
	0	.062	10		6	.109	22		6	.027	39
	1	.125	9		7	.148	21		7	.037	38
	2	.188	8		8	.188	20		8	.049	37
	3	.312	7		9	.234	19		9	.064	36
	4	.438	6		10	.289	18		10	.082	35
	5	.562	5		11	.344	17		11	.102	34
5	0	.031	15	10	12	.406	16	12	12	.125	33
	1	.062	14		13	.469	15		13	.150	32
	2	.094	13		14	.531	14		14	.180	31
	3	.156	12		0	.004	36		15	.213	30
	4	.219	11		1	.008	35		16	.248	29
	5	.312	10		2	.012	34		17	.285	28
	6	.406	9		3	.020	33		18	.326	27
6	7	.500	8	4	.027	32	19	.367	26		
	0	.016	21	5	.039	31	20	.410	25		
	1	.031	20	6	.055	30	21	.455	24		
	2	.047	19	7	.074	29	22	.500	23		
	3	.078	18	8	.098	28	0	.001	55		
	4	.109	17	9	.125	27	1	.002	54		
	5	.156	16	10	.156	26	2	.003	53		
	6	.219	15	11	.191	25	3	.005	52		
	7	.281	14	12	.230	24	4	.007	51		
	8	.344	13	13	.273	23	5	.010	50		
9	.422	12	14	.320	22	6	.014	49			
10	.500	11	15	.371	21	7	.019	48			
			16	.422	20	8	.024	47			
			17	.473	19	9	.032	46			
			18	.527	18	10	.042	45			

(Continued)

Table H (Continued)

	<i>N</i>	<i>Left tail</i>	<i>P</i>	<i>Right tail</i>	<i>N</i>	<i>Left tail</i>	<i>P</i>	<i>Right tail</i>	<i>N</i>	<i>Left tail</i>	<i>P</i>	<i>Right tail</i>	
10	11	.053		44	11	28	.350		38	13	0	.000	91
	12	.065		43		29	.382		37		1	.000	90
	13	.080		42		30	.416		36		2	.000	89
	14	.097		41		31	.449		35		3	.001	88
	15	.116		40		32	.483		34		4	.001	87
	16	.138		39		33	.517		33		5	.001	86
	17	.161		38	12	0	.000		78		6	.002	85
	18	.188		37		1	.000		77		7	.002	84
	19	.216		36		2	.001		76		8	.003	83
	20	.246		35		3	.001		75		9	.004	82
	21	.278		34		4	.002		74	10	.005	81	
	22	.312		33		5	.002		73	11	.007	80	
	23	.348		32		6	.003		72	12	.009	79	
	24	.385		31		7	.005		71	13	.011	78	
	25	.423		30		8	.006		70	14	.013	77	
	26	.461		29		9	.008		69	15	.016	76	
	27	.500		28		10	.010		68	16	.020	75	
11	0	.000		66		11	.013		67	17	.024	74	
	1	.001		65		12	.017		66	18	.029	73	
	2	.001		64		13	.021		65	19	.034	72	
	3	.002		63		14	.026		64	20	.040	71	
	4	.003		62		15	.032		63	21	.047	70	
	5	.005		61		16	.039		62	22	.055	69	
	6	.007		60		17	.0456		61	23	.064	68	
	7	.009		59		18	.055		60	24	.073	67	
	8	.0125		58		19	.065		59	25	.084	66	
	9	.016		57		20	.076		58	26	.095	65	
	10	.021		56		21	.088		57	27	.108	64	
	11	.027		55		22	.102		56	28	.122	63	
	12	.034		54		23	.117		55	29	.137	62	
	13	.042		53		24	.133		54	30	.153	61	
	14	.051		52		25	.151		53	31	.170	60	
	15	.062		51		26	.170		52	32	.188	59	
	16	.074		50		27	.190		51	33	.207	58	
	17	.087		49		28	.212		50	34	.227	57	
	18	.103		48		29	.235		49	35	.249	56	
	19	.120		47		30	.259		48	36	.271	55	
	20	.139		46		31	.285		47	37	.294	54	
	21	.160		45		32	.311		46	38	.318	53	
	22	.183		44		33	.339		45	39	.342	52	
	23	.207		43		34	.367		44	40	.368	51	
	24	.232		42		35	.396		43	41	.393	50	
	25	.260		41		36	.425		42	42	.420	49	
	26	.289		40		37	.455		41	43	.446	48	
	27	.319		39		38	.485		40	44	.473	47	
						39	.515		39	45	.500	46	

(Continued)

Table H (Continued)

<i>N</i>	<i>Left tail</i>	<i>P</i>	<i>Right tail</i>	<i>N</i>	<i>Left tail</i>	<i>P</i>	<i>Right tail</i>	<i>N</i>	<i>Left tail</i>	<i>P</i>	<i>Right tail</i>
14	0	.000	105	14	46	.357	59	15	39	.126	81
	1	.000	104		47	.380	58		40	.138	80
	2	.000	103		48	.404	57		41	.151	79
	3	.000	102		49	.428	56		42	.165	78
	4	.000	101		50	.452	55		43	.180	77
	5	.001	100		51	.476	54		44	.195	76
	6	.001	99		52	.500	53		45	.211	75
	7	.001	98	15	0	.000	120		46	.227	74
	8	.002	97		1	.000	119		47	.244	73
	9	.002	96		2	.000	118		48	.262	72
	10	.003	95		3	.000	117		49	.281	71
	11	.003	94		4	.000	116		50	.300	70
	12	.004	93		5	.000	115		51	.319	69
	13	.005	92		6	.000	114		52	.339	68
	14	.007	91		7	.001	113		53	.360	67
	15	.008	90		8	.001	112		54	.381	66
	16	.010	89		9	.001	111		55	.402	65
	17	.012	88		10	.001	110		56	.423	64
	18	.0158	87		11	.002	109		57	.445	63
	19	.018	86		12	.002	108		58	.467	62
	20	.021	85		13	.003	107		59	.489	61
	21	.025	84		14	.003	106		60	.511	60
	22	.029	83		15	.004	105				
	23	.034	82		16	.005	104				
	24	.039	81		17	.006	103				
	25	.045	80		18	.008	102				
	26	.052	79		19	.009	101				
	27	.059	78		20	.011	100				
	28	.068	77		21	.013	99				
	29	.077	76		22	.015	98				
	30	.086	75		23	.018	97				
	31	.097	74		24	.021	96				
	32	.108	73		25	.024	95				
	33	.121	72		26	.028	94				
	34	.134	71		27	.032	93				
	35	.148	70		28	.036	92				
	36	.163	69		29	.042	91				
	37	.179	68		30	.047	90				
	38	.196	67		31	.053	89				
	39	.213	66		32	.060	88				
	40	.232	65		33	.068	87				
	41	.251	64		34	.076	86				
	42	.271	63		35	.084	85				
	43	.292	62		36	.094	84				
	44	.313	61		37	.104	83				
	45	.335	60		38	.115	82				

Source: Adapted from F. Wilcoxon, S.K. Katti, and R. A. Wilcox (1973), Critical values and probability levels for the Wilcoxon rank sum test and the Wilcoxon signed rank test, pp. 171–259 in Institute of Mathematical Statistics, ed., *Selected Tables in Mathematical Statistics* vol. I, American Mathematical Society, Providence, Rhode Island, with permission.

