

## **Critical Values for the Sign Test**

These are the critical values for a one-tail sign test, at various levels of significance.

(Source: Dixon & Massey. *Introduction to Statistical Analysis*, 3<sup>rd</sup> Ed. New York: McGraw-Hill, 1969, as quoted in Johnson. *Elementary Statistics*, 7<sup>th</sup> Ed. Belmont, Calif.: Duxbury, 1996.)

<b>n</b>	<b>α = .01</b>	<b>α = .02</b>	<b>α = .05</b>	<b>α = .10</b>
3				0
4				0
<b>5</b>			<b>0</b>	<b>0</b>
6		0	0	1
7		0	1	1
8	0	0	1	1
9	0	1	1	2
<b>10</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>
11	0	1	2	3
12	1	2	2	3
13	1	2	3	3
14	1	2	3	4
<b>15</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>4</b>
16	2	3	4	5
17	2	4	4	5
18	3	4	5	6
19	3	4	5	6
<b>20</b>	<b>3</b>	<b>5</b>	<b>5</b>	<b>6</b>
21	4	5	6	7
22	4	5	6	7
23	4	6	7	8
24	5	6	7	8
<b>25</b>	<b>5</b>	<b>7</b>	<b>7</b>	<b>9</b>
26	6	7	8	9
27	6	7	8	10
28	6	8	9	10
29	7	8	9	10
<b>30</b>	<b>7</b>	<b>9</b>	<b>10</b>	<b>11</b>
31	7	9	10	11
32	8	9	10	12
33	8	10	11	12
34	9	10	11	13
<b>35</b>	<b>9</b>	<b>11</b>	<b>12</b>	<b>13</b>
36	9	11	12	14
37	10	12	13	14
38	10	12	13	14
39	11	12	13	15
<b>40</b>	<b>11</b>	<b>13</b>	<b>14</b>	<b>15</b>
41	11	13	14	16
42	12	14	15	16
43	12	14	15	17
44	13	15	16	17
<b>45</b>	<b>13</b>	<b>15</b>	<b>16</b>	<b>18</b>
46	13	15	16	18
47	14	16	17	19
48	14	16	17	19
49	15	17	18	19
<b>50</b>	<b>15</b>	<b>17</b>	<b>18</b>	<b>20</b>

*Critical Values for the Sign Test (ctd.)*

<b>n</b>	<b><math>\alpha = .01</math></b>	<b><math>\alpha = .02</math></b>	<b><math>\alpha = .05</math></b>	<b><math>\alpha = .10</math></b>
51	15	18	19	20
52	16	18	19	21
53	16	18	20	21
54	17	19	20	22
<b>55</b>	<b>17</b>	<b>19</b>	<b>20</b>	<b>22</b>
56	17	20	21	23
57	18	20	21	23
58	18	21	22	24
59	19	21	22	24
<b>60</b>	<b>19</b>	<b>21</b>	<b>23</b>	<b>25</b>
61	20	22	23	25
62	20	22	24	25
63	20	23	24	26
64	21	23	24	26
<b>65</b>	<b>21</b>	<b>24</b>	<b>25</b>	<b>27</b>
66	22	24	25	27
67	22	25	26	28
68	22	25	26	28
69	23	25	27	29
<b>70</b>	<b>23</b>	<b>26</b>	<b>27</b>	<b>29</b>
71	24	26	28	30
72	24	27	28	30
73	25	27	28	31
74	25	28	29	31
<b>75</b>	<b>25</b>	<b>28</b>	<b>29</b>	<b>32</b>
76	26	28	30	32
77	26	29	30	32
78	27	29	31	33
79	27	30	31	33
<b>80</b>	<b>28</b>	<b>30</b>	<b>32</b>	<b>34</b>
81	28	31	32	34
82	28	31	33	35
83	29	32	33	35
84	29	32	33	36
<b>85</b>	<b>30</b>	<b>32</b>	<b>34</b>	<b>36</b>
86	30	33	34	37
87	31	33	35	37
88	31	34	35	38
89	31	34	36	38
<b>90</b>	<b>32</b>	<b>35</b>	<b>36</b>	<b>39</b>
91	32	35	37	39
92	33	36	37	39
93	33	36	38	40
94	34	37	38	40
<b>95</b>	<b>34</b>	<b>37</b>	<b>38</b>	<b>41</b>
96	34	37	39	41
97	35	38	39	42
98	35	38	40	42
99	36	39	40	43
<b>100</b>	<b>36</b>	<b>39</b>	<b>41</b>	<b>44</b>