

## Number of Runs Critical Values Table

This table shows critical values at  $\alpha = 0.05$  for a two-tailed test.

Each cell shows two values, one smaller and one larger. Reject  $H_0$  if:

- a. The number of runs is less than or equal to the smaller value, **OR**
- b. The number of runs is greater than or equal to the larger value.

		Value of $n_2$																			
		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Value of $n_1$	2	1, 6	1, 6	1, 6	1, 6	1, 6	1, 6	1, 6	1, 6	1, 6	1, 6	2, 6	2, 6	2, 6	2, 6	2, 6	2, 6	2, 6	2, 6	2, 6	
	3	1, 6	1, 8	1, 8	1, 8	2, 8	2, 8	2, 8	2, 8	2, 8	2, 8	2, 8	2, 8	2, 8	3, 8	3, 8	3, 8	3, 8	3, 8	3, 8	3, 8
	4	1, 6	1, 8	1, 9	2, 9	2, 9	2, 10	3, 10	3, 10	3, 10	3, 10	3, 10	3, 10	3, 10	3, 10	4, 10	4, 10	4, 10	4, 10	4, 10	4, 10
	5	1, 6	1, 8	2, 9	2, 10	3, 10	3, 11	3, 11	3, 12	3, 12	4, 12	4, 12	4, 12	4, 12	4, 12	4, 12	4, 12	5, 12	5, 12	5, 12	5, 12
	6	1, 6	2, 8	2, 9	3, 10	3, 11	3, 12	3, 12	4, 13	4, 13	4, 13	4, 13	5, 14	5, 14	5, 14	5, 14	5, 14	5, 14	5, 14	6, 14	6, 14
	7	1, 6	2, 8	2, 10	3, 11	3, 12	3, 13	4, 13	4, 14	5, 14	5, 14	5, 14	5, 15	5, 15	6, 15	6, 16	6, 16	6, 16	6, 16	6, 16	6, 16
	8	1, 6	2, 8	3, 10	3, 11	3, 12	4, 13	4, 14	5, 14	5, 15	5, 15	6, 16	6, 16	6, 16	6, 16	6, 17	7, 17	7, 17	7, 17	7, 17	7, 17
	9	1, 6	2, 8	3, 10	3, 12	4, 13	4, 14	5, 14	5, 15	5, 16	6, 16	6, 16	6, 17	7, 17	7, 18	7, 18	7, 18	8, 18	8, 18	8, 18	8, 18
	10	1, 6	2, 8	3, 10	3, 12	4, 13	5, 14	5, 15	5, 16	6, 16	6, 17	7, 17	7, 18	7, 18	7, 18	8, 19	8, 19	8, 19	8, 19	8, 20	9, 20
	11	1, 6	2, 8	3, 10	4, 12	4, 13	5, 14	5, 15	6, 16	6, 17	7, 17	7, 18	7, 19	8, 19	8, 19	8, 20	9, 20	9, 20	9, 20	9, 21	9, 21
	12	2, 6	2, 8	3, 10	4, 12	4, 13	5, 14	6, 16	6, 16	7, 17	7, 18	7, 19	8, 19	8, 20	8, 20	9, 21	9, 21	9, 21	9, 21	10, 22	10, 22
	13	2, 6	2, 8	3, 10	4, 12	5, 14	5, 15	6, 16	6, 17	7, 18	7, 19	8, 19	8, 20	9, 20	9, 21	9, 21	10, 22	10, 22	10, 22	10, 23	10, 23
	14	2, 6	2, 8	3, 10	4, 12	5, 14	5, 15	6, 16	7, 17	7, 18	8, 19	8, 20	9, 20	9, 21	9, 22	10, 22	10, 23	10, 23	10, 23	11, 23	11, 24
	15	2, 6	3, 8	3, 10	4, 12	5, 14	6, 15	6, 16	7, 18	7, 18	8, 19	8, 20	9, 21	9, 22	10, 22	10, 23	11, 23	11, 24	11, 24	11, 24	12, 25
	16	2, 6	3, 8	4, 10	4, 12	5, 14	6, 16	6, 17	7, 18	8, 19	8, 20	9, 21	9, 21	10, 22	10, 23	11, 23	11, 24	11, 25	12, 15	12, 25	12, 25
	17	2, 6	3, 8	4, 10	4, 12	5, 14	6, 16	7, 17	7, 18	8, 19	9, 20	9, 21	10, 22	10, 23	11, 23	11, 24	11, 25	12, 25	12, 25	12, 26	13, 26
	18	2, 6	3, 8	4, 10	5, 12	5, 14	6, 16	7, 17	8, 18	8, 19	9, 20	9, 21	10, 22	10, 23	11, 24	11, 25	12, 25	12, 26	13, 26	13, 27	13, 27
	19	2, 6	3, 8	4, 10	5, 12	6, 14	6, 16	7, 17	8, 18	8, 20	9, 21	10, 22	10, 23	11, 23	11, 24	12, 25	12, 26	13, 26	13, 27	13, 27	13, 27
	20	2, 6	3, 8	4, 10	5, 12	6, 14	6, 16	7, 17	8, 18	9, 20	9, 21	10, 22	10, 23	11, 24	12, 25	12, 25	13, 26	13, 27	13, 27	13, 27	14, 28

