Critical values of R for the Mann-Whitney rank-sum test

The pairs of values below are approximate critical values of R for two-tailed tests at levels $P = 0.10$ (upper pair) and $P = 0.05$ (lower pair).

(Use relevant $P = 0.10$ entry for one-tailed test at level 0.05).

		larger sample size, n_2						
		4	5	6	7	8	9	10
smaller sample	4	12,24	13,27	14,30	15,33	16,36	17,39	18,42
size n_1		11,25	12,28	12,32	13,35	14,38	15,41	16,44
	5		19,36	20,40	22,43	23,47	25,50	26,54
			18,37	19,41	20,45	21,49	22,53	24,56
	6			28,50	30,54	32,58	33,63	35,67
				26,52	28,56	29,61	31,65	33,69
	7				39,66	41,71	43,76	46,80
					37,68	39,73	41,78	43,83
	8					52,84	54,90	57,95
						49,87	51,93	54,98
	9						66,105	69,111
							63,108	66,114
	10							83,127
								79,131