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TABLES FOR THE TWO-SAMPLE MEDIAN TEST

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Summary. The paper contains tables for the non-parametric median test for two samples whose sizes m, n satisfy $3 \leq m \leq n, m + n \leq 41$. We tabulate the probabilities of the upper tail of the distribution up to the point where 10% is exceeded for the first time.

Description of the test. Let us have two random samples X_1, \dots, X_m and Y_1, \dots, Y_n with densities f_1 and f_2 , respectively, and suppose that the notation is chosen so that $m \leq n$. Our aim is to test the hypothesis H_0 that f_1 and f_2 are identical but otherwise arbitrary against the alternatives of shift in location expressed by $f_1(x) = f(x - \Delta), f_2(x) = f(x)$, where $\Delta > 0$, or $\Delta < 0$ (one-sided alternatives), or $\Delta \neq 0$ (two-sided alternative).

The median test is performed very easily. First, we pool both samples and find the median of this pooled sample. (Since we assume the existence of densities, with probability 1 all the sample values are distinct and the median is defined uniquely.) More formally, if we put $X_{m+1} = Y_1, \dots, X_{m+n} = Y_n$, and if $X^{(1)} < X^{(2)} < \dots < X^{(m+n)}$ are the values of the pooled sample $X_1, \dots, X_m, X_{m+1}, \dots, X_{m+n}$ arranged in the order of their magnitude, then the median is $X^{((m+n+1)/2)}$ for $m+n$ odd, and $\frac{1}{2}[X^{((m+n)/2)} + X^{((m+n)/2+1)}]$ for $m+n$ even. The test statistic S of our median test is then equal to the number of the values $X_i, i = 1, \dots, m$, exceeding this median, increased in addition by 0.5 if and only if $m+n$ is odd and the median coincides with some value $X_i, i = 1, \dots, m$.

In a concise mathematical formula, we can write $S = \sum_{i=1}^m a_{m+n}(R_i)$, where R_i is the rank of X_i in the pooled sample $X_1, \dots, X_m, X_{m+1}, \dots, X_{m+n}$, and the scores a_{m+n} are given by $a_{m+n}(j) = \frac{1}{2}[\text{sign}(j - \frac{1}{2}(m+n+1)) + 1]$ for $j = 1, \dots, m+n$.

We may note that the median test is asymptotically optimum (in the class of all tests) for the above-mentioned two-sample problem of shift in location, if f is of the double-exponential type, i.e. if $f(x) = (2\sigma)^{-1} e^{-|x-\mu|/\sigma}$ (cf. Hájek-Šidák [1], Section III.1.1).

Description of the table. Table 1 should be read one double-column after the other, and we tabulate here the upper tails of the distribution of the statistic S , under H_0 , for all pairs m, n such that $3 \leq m \leq n, m + n \leq 41$. In each double-column, following the heading m, n , the left column shows possible critical values c_α of S , while the right column shows the corresponding one-sided significance levels $\alpha = 100P\{S \geq c_\alpha\}$ (i.e. in per cents) rounded off to three decimal places. The tabulation begins by the largest c_α for which the corresponding α (rounded off to three decimal places) is > 0.000 , and continues with all possible consecutive values c_α of S until such c_α is reached for which the corresponding α exceeds for the first time 10.000%.

For the computation of Table 1 we used the formula

$$P\{S = k\} = \binom{[\frac{1}{2}(m+n)]}{[k]} \binom{[\frac{1}{2}(m+n)]}{[m-k]} \binom{m+n}{m}^{-1}$$

(where $[x]$ denotes the largest integer not exceeding x), valid for $k = 0, 1, \dots, m$ whenever $m+n$ is even) and for $k = 0, \frac{1}{2}, \dots, m - \frac{1}{2}, m$ whenever $m+n$ is odd. (Cf. Hájek-Šidák [1], Theorem IV. 2.1.a.) The present author is deeply indebted to M. Nosál for programming the computation.

It may be observed further, that the distribution (under H_0) of S is symmetric about its mean value $ES = \frac{1}{2}m$, and its variance is

$$\begin{aligned} \text{var } S &= mn/[4(m+n-1)] \quad \text{for } m+n \text{ even,} \\ &= mn/[4(m+n)] \quad \text{for } m+n \text{ odd.} \end{aligned}$$

If we are testing H_0 against the one-sided alternative $\Delta > 0$ (i.e. f_1 is shifted to the right with respect to f_2), we use the critical region $\{S \geq c_\alpha\}$ and the corresponding significance level is the tabulated α . If we are testing against $\Delta < 0$ (i.e. f_1 is shifted to the left), we use the critical region $\{S \leq m - c_\alpha\}$ whose significance level is again α . If we are testing against the two-sided alternative $\Delta \neq 0$, we use the critical region $\{S \geq c_\alpha \text{ or } S \leq m - c_\alpha\}$ whose significance level is equal to 2α .

Example. Let one sample contain the values 81; 105; 33; 78; 126; 61; 88, the other sample the values 32; 83; 50; 59; 10; 45. For the application of our table we must have $m \leq n$, therefore the latter sample must be denoted as X_1, \dots, X_6 , and the former sample as Y_1, \dots, Y_7 . The median of the pooled sample is 61. The number of the values X_i exceeding 61 is 1; $m+n$ is odd but the median is one of the values Y_j , so that we shall not add the number 0.5. Therefore $S = 1$. In Table 1 we find for $m = 6, n = 7, c_\alpha = 5.0$ the one-sided significance level $\alpha = 2.506\%$. If we are testing against the one-sided alternative $\Delta < 0$, we use the critical region $\{S \leq 6 - 5\} = \{S \leq 1\}$ so that H_0 may be rejected at the level $\alpha = 2.506\%$. If we are testing against the two-sided alternative $\Delta \neq 0$, we use the critical region $\{S \geq 5 \text{ or } S \leq 1\}$ so that H_0 may be rejected at the level $2\alpha = 5.012\%$.

Remark on asymptotic normality. For large sizes m, n we may use the normal approximation, since the standardized test statistic $(S - ES)/(\text{var } S)^{1/2}$ has (under H_0) asymptotically the standardized normal distribution whenever $m \rightarrow \infty, n \rightarrow \infty$ in an arbitrary manner (cf. Hájek-Šidák [1], Section III.1.1).

Remark on ties. In practice, equal observations sometimes occur in the samples. In this case, we may use e.g. the following “method of average scores” (cf. Hájek-Šidák [1], Section III.8.1). First, in each group of equal observations, the observations are arranged in some auxiliary ordering, and the median is then found as usually. The only trouble in calculating the value of S arises with the group of observations that are equal to the median; this group will be called the median group, and let it contain a values X_i , and b values Y_j . Further, in our auxiliary ordering, let the median group contain r values preceding the median, and s values exceeding the median.

If $m + n$ is even, the median group has $a + b = r + s$ values, and the average score in it is $(r \cdot 0 + s \cdot 1)/(r + s)$; hence S equals the number of X_i 's larger than the median, plus $as/(r + s)$.

If $m + n$ is odd, the median group has $a + b = r + s + 1$ values, and the average score in it is $(r \cdot 0 + \frac{1}{2} + s \cdot 1)/(r + s + 1)$; hence S equals the number of X_i 's larger than the median, plus $a(s + \frac{1}{2})/(r + s + 1)$.

If the median group does not contain too many observations, we can still use our Table 1 as an approximation.

Remark on related tests. Several closely related tests have been introduced in the past under the name “median test”. E.g. many authors define the “median test” statistic S_0 simply as the number of X_i 's larger than the median of the pooled sample (without possible adding $\frac{1}{2}$); however, the distribution of S_0 for $m + n$ odd is not symmetric. In the book [1] and in the present tables we have preferred the statistic S defined above, because the calculation of S is practically not more difficult than that of S_0 but S has two advantages: its distribution is always symmetric, and it offers, for $m + n$ odd, a richer choice of possible significance levels.

Still some other forms of the “median test” statistic have been employed, e.g. those arising from the expression of the problem as a 2×2 contingency table, or the statistic being equal to the number of X_i 's exceeding the median of Y_j 's (cf. Hájek-Šidák [1], Section III.1.1).

Reference

[1] J. Hájek, Z. Šidák: Theory of rank tests. Academia, Prague & Academic Press, New York — London 1967.

Table 1. Critical values c_{α} of the median test statistic S and significance levels $100 P \{S \geq c_{\alpha}\}$ (i.e. in per cents)

$m = 3, n = 3$ 3.0 5.000 2.0 50.000	$m = 3, n = 16$ 3.0 8.669 2.5 12.384	$m = 3, n = 32$ 3.0 10.390	$m = 4, n = 11$ 4.0 2.564 3.5 5.128 3.0 23.077
$m = 3, n = 4$ 3.0 2.857 2.5 11.429	$m = 3, n = 17$ 3.0 10.526	$m = 3, n = 33$ 3.0 11.429	$m = 4, n = 12$ 4.0 3.846 3.0 28.462
$m = 3, n = 5$ 3.0 7.143 2.0 50.000	$m = 3, n = 18$ 3.0 9.023 2.5 12.406	$m = 3, n = 34$ 3.0 10.502	$m = 4, n = 13$ 4.0 2.941 3.5 5.294 3.0 24.118
$m = 3, n = 6$ 3.0 4.762 2.5 11.905	$m = 3, n = 19$ 3.0 10.714	$m = 3, n = 36$ 3.0 10.603	$m = 4, n = 14$ 4.0 4.118 3.0 28.824
$m = 3, n = 7$ 3.0 8.333 2.0 50.000	$m = 3, n = 20$ 3.0 9.317 2.5 12.422	$m = 3, n = 37$ 3.0 11.538	$m = 4, n = 15$ 4.0 3.251 3.5 5.418 3.0 24.923
$m = 3, n = 8$ 3.0 6.061 2.5 12.121	$m = 3, n = 21$ 3.0 10.870	$m = 3, n = 38$ 3.0 10.694	$m = 4, n = 16$ 4.0 4.334 3.0 29.102
$m = 3, n = 9$ 3.0 9.091 2.0 50.000	$m = 3, n = 22$ 3.0 9.565 2.5 12.435	$m = 4, n = 4$ 4.0 1.429 3.0 24.286	$m = 4, n = 17$ 4.0 3.509 3.5 5.514 3.0 25.564
$m = 3, n = 10$ 3.0 6.993 2.5 12.238	$m = 3, n = 23$ 3.0 11.000	$m = 4, n = 5$ 4.0 0.794 3.5 3.968 3.0 16.667	$m = 4, n = 18$ 4.0 4.511 3.0 29.323
$m = 3, n = 11$ 3.0 9.615 2.0 50.000	$m = 3, n = 24$ 3.0 9.778 2.5 12.444	$m = 4, n = 6$ 4.0 2.381 3.0 26.190	$m = 4, n = 19$ 4.0 3.727 3.5 5.590 3.0 26.087
$m = 3, n = 12$ 3.0 7.692 2.5 12.308	$m = 3, n = 25$ 3.0 11.111	$m = 4, n = 7$ 4.0 1.515 3.5 4.545 3.0 19.697	$m = 4, n = 20$ 4.0 4.658 3.0 29.503
$m = 3, n = 13$ 3.0 10.000 2.0 50.000	$m = 3, n = 26$ 3.0 9.962 2.5 12.452	$m = 4, n = 8$ 4.0 3.030 3.0 27.273	$m = 4, n = 21$ 4.0 3.913 3.5 5.652 3.0 26.522
$m = 3, n = 14$ 3.0 8.235 2.5 12.353	$m = 3, n = 27$ 3.0 11.207	$m = 4, n = 9$ 4.0 2.098 3.5 4.895 3.0 21.678	
$m = 3, n = 15$ 3.0 10.294	$m = 3, n = 28$ 3.0 10.122	$m = 4, n = 10$ 4.0 3.497 3.0 27.972	
	$m = 3, n = 29$ 3.0 11.290		
	$m = 3, n = 30$ 3.0 10.264		
	$m = 3, n = 31$ 3.0 11.364		

$m = 4, n = 22$ 4-0 4-783 3-0 29-652	$m = 4, n = 34$ 4-0 5-251 3-0 30-193	$m = 5, n = 12$ 5-0 0-905 4-5 2-036 4-0 11-086	$m = 5, n = 24$ 5-0 1-686 4-5 2-529 4-0 14-330
$m = 4, n = 23$ 4-0 4-074 3-5 5-704 3-0 26-889	$m = 4, n = 35$ 4-0 4-712 3-5 5-891 3-0 28-274	$m = 5, n = 13$ 5-0 1-471 4-0 14-706	$m = 5, n = 25$ 5-0 2-107 4-0 16-475
$m = 4, n = 24$ 4-0 4-889 3-0 29-778	$m = 4, n = 36$ 4-0 5-301 3-0 30-249	$m = 5, n = 14$ 5-0 1-084 4-5 2-167 4-0 11-920	$m = 5, n = 26$ 5-0 1-767 4-5 2-571 4-0 14-621
$m = 4, n = 25$ 4-0 4-215 3-5 5-747 3-0 27-203	$m = 4, n = 37$ 4-0 4-784 3-5 5-910 3-0 28-424	$m = 5, n = 15$ 5-0 1-625 4-0 15-170	$m = 5, n = 27$ 5-0 2-169 4-0 16-630
$m = 4, n = 26$ 4-0 4-981 3-0 29-885	$m = 5, n = 5$ 5-0 0-397 4-0 10-317	$m = 5, n = 16$ 5-0 1-238 4-5 2-270 4-0 12-590	$m = 5, n = 28$ 5-0 1-840 4-5 2-607 4-0 14-877
$m = 4, n = 27$ 4-0 4-338 3-5 5-784 3-0 27-475	$m = 5, n = 6$ 5-0 0-216 4-5 1-299 4-0 6-710 3-5 17-532	$m = 5, n = 17$ 5-0 1-754 4-0 15-539	$m = 5, n = 29$ 5-0 2-224 4-0 16-764
$m = 4, n = 28$ 4-0 5-061 3-0 29-978	$m = 5, n = 7$ 5-0 0-758 4-0 12-121	$m = 5, n = 18$ 5-0 1-373 4-5 2-354 4-0 13-142	$m = 5, n = 30$ 5-0 1-906 4-5 2-639 4-0 15-103
$m = 4, n = 29$ 4-0 4-448 3-5 5-816 3-0 27-713	$m = 5, n = 8$ 5-0 0-466 4-5 1-632 4-0 8-625 3-5 17-949	$m = 5, n = 19$ 5-0 1-863 4-0 15-839	$m = 5, n = 31$ 5-0 2-273 4-0 16-883
$m = 4, n = 30$ 4-0 5-132 3-0 30-059	$m = 5, n = 9$ 5-0 1-049 4-0 13-287	$m = 5, n = 20$ 5-0 1-491 4-5 2-422 4-0 13-602	$m = 5, n = 32$ 5-0 1-966 4-5 2-668 4-0 15-304
$m = 4, n = 31$ 4-0 4-545 3-5 5-844 3-0 27-922	$m = 5, n = 10$ 5-0 0-699 4-5 1-865 4-0 10-023	$m = 5, n = 21$ 5-0 1-957 4-0 16-087	$m = 5, n = 33$ 5-0 2-317 4-0 16-988
$m = 4, n = 32$ 4-0 5-195 3-0 30-130	$m = 5, n = 11$ 5-0 1-282 4-0 14-103	$m = 5, n = 22$ 5-0 1-594 4-5 2-480 4-0 13-994	$m = 5, n = 34$ 5-0 2-020 4-5 2-693 4-0 15-484
$m = 4, n = 33$ 4-0 4-633 3-5 5-869 3-0 28-108		$m = 5, n = 23$ 5-0 2-037 4-0 16-296	$m = 5, n = 35$ 5-0 2-356 4-0 17-082

$m = 5, n = 36$ 5.0 2.069 4.5 2.715 4.0 15.646	$m = 6, n = 14$ 6.0 0.542 5.0 7.043 4.0 31.424	$m = 6, n = 23$ 6.0 0.632 5.5 1.054 5.0 6.954 4.5 9.904 4.0 29.080	$m = 6, n = 32$ 6.0 0.983 5.0 8.986 4.0 32.994
$m = 6, n = 6$ 6.0 0.108 5.0 4.004 4.0 28.355	$m = 6, n = 15$ 6.0 0.387 5.5 0.851 5.0 5.495 4.5 9.365 4.0 26.780	$m = 6, n = 24$ 6.0 0.843 5.0 8.429 4.0 32.567	$m = 6, n = 33$ 6.0 0.832 5.5 1.188 5.0 7.960 4.5 10.217
$m = 6, n = 7$ 6.0 0.058 5.5 0.408 5.0 2.506 4.5 7.751 4.0 20.862	$m = 6, n = 16$ 6.0 0.619 5.0 7.430 4.0 31.756	$m = 6, n = 25$ 6.0 0.680 5.5 1.088 5.0 7.206 4.5 9.986 4.0 29.452	$m = 6, n = 34$ 6.0 1.010 5.0 9.088 4.0 33.071
$m = 6, n = 8$ 6.0 0.233 5.0 5.128 4.0 29.604	$m = 6, n = 17$ 6.0 0.458 5.5 0.915 5.0 5.950 4.5 9.546 4.0 27.525	$m = 6, n = 26$ 6.0 0.884 5.0 8.596 4.0 32.697	$m = 6, n = 35$ 6.0 0.862 5.5 1.207 5.0 8.103 4.5 10.258
$m = 6, n = 9$ 6.0 0.140 5.5 0.559 5.0 3.497 4.5 8.392 4.0 23.077	$m = 6, n = 18$ 6.0 0.686 5.0 7.748 4.0 32.020	$m = 6, n = 27$ 6.0 0.723 5.5 1.117 5.0 7.427 4.5 10.057	$m = 7, n = 7$ 7.0 0.029 6.0 1.457 5.0 14.307
$m = 6, n = 10$ 6.0 0.350 5.0 5.944 4.0 30.420	$m = 6, n = 19$ 6.0 0.522 5.5 0.969 5.0 6.335 4.5 9.689 4.0 28.137	$m = 6, n = 28$ 6.0 0.920 5.0 8.742 4.0 32.809	$m = 7, n = 8$ 7.0 0.016 6.5 0.124 6.0 0.886 5.5 3.170 5.0 10.023
$m = 6, n = 11$ 6.0 0.226 5.5 0.679 5.0 4.299 4.5 8.824 4.0 24.661	$m = 6, n = 20$ 6.0 0.745 5.0 8.012 4.0 32.236	$m = 6, n = 29$ 6.0 0.762 5.5 1.144 5.0 7.625 4.5 10.117	$m = 7, n = 9$ 7.0 0.070 6.0 2.028 5.0 15.734
$m = 6, n = 12$ 6.0 0.452 5.0 6.561 4.0 30.995	$m = 6, n = 21$ 6.0 0.580 5.5 1.014 5.0 6.667 4.5 9.807 4.0 28.647	$m = 6, n = 30$ 6.0 0.953 5.0 8.871 4.0 32.907	$m = 7, n = 10$ 7.0 0.041 6.5 0.185 6.0 1.337 5.5 3.640 5.0 11.703
$m = 6, n = 13$ 6.0 0.310 5.5 0.774 5.0 4.954 4.5 9.133 4.0 25.851	$m = 6, n = 22$ 6.0 0.797 5.0 8.237 4.0 32.415	$m = 6, n = 31$ 6.0 0.799 5.5 1.167 5.0 7.801 4.5 10.170	$m = 7, n = 11$ 7.0 0.113 6.0 2.489 5.0 16.742

$m = 7, n = 12$ 7.0 0.071 6.5 0.238 6.0 1.739 5.5 3.989 5.0 12.991	$m = 7, n = 21$ 7.0 0.290 6.0 3.841 5.0 19.227	$m = 7, n = 30$ 7.0 0.309 6.5 0.489 6.0 3.735 5.5 5.233 5.0 17.966	$m = 8, n = 11$ 8.0 0.012 7.5 0.060 7.0 0.488 6.5 1.488 6.0 5.489 5.5 11.491
$m = 7, n = 13$ 7.0 0.155 6.0 2.864 5.0 17.492	$m = 7, n = 22$ 7.0 0.220 6.5 0.412 6.0 3.106 5.5 4.902 5.0 16.574	$m = 7, n = 31$ 7.0 0.399 6.0 4.484 5.0 20.240	$m = 8, n = 12$ 8.0 0.036 7.0 0.988 6.0 8.490 5.0 32.496
$m = 7, n = 14$ 7.0 0.103 6.5 0.284 6.0 2.090 5.5 4.257 5.0 14.009	$m = 7, n = 23$ 7.0 0.316 6.0 4.004 5.0 19.492	$m = 7, n = 32$ 7.0 0.328 6.5 0.504 6.0 3.856 5.5 5.292 5.0 18.220	$m = 8, n = 13$ 8.0 0.022 7.5 0.081 7.0 0.671 6.5 1.703 6.0 6.347 5.5 11.920
$m = 7, n = 15$ 7.0 0.193 6.0 3.173 5.0 18.073	$m = 7, n = 24$ 7.0 0.245 6.5 0.435 6.0 3.290 5.5 5.003 5.0 16.994	$m = 7, n = 33$ 7.0 0.416 6.0 4.574 5.0 20.374	$m = 8, n = 14$ 8.0 0.052 7.0 1.187 6.0 9.133 5.0 32.972
$m = 7, n = 16$ 7.0 0.135 6.5 0.323 6.0 2.396 5.5 4.469 5.0 14.834	$m = 7, n = 25$ 7.0 0.340 6.0 4.147 5.0 19.719	$m = 7, n = 34$ 7.0 0.345 6.5 0.517 6.0 3.965 5.5 5.345 5.0 18.447	$m = 8, n = 15$ 8.0 0.034 7.5 0.101 7.0 0.841 6.5 1.878 6.0 7.060 5.5 12.243
$m = 7, n = 17$ 7.0 0.229 6.0 3.432 5.0 18.535	$m = 7, n = 26$ 7.0 0.268 6.5 0.455 6.0 3.454 5.5 5.090 5.0 17.360	$m = 8, n = 8$ 8.0 0.008 7.0 0.505 6.0 6.597 5.0 30.963	$m = 8, n = 16$ 8.0 0.067 7.0 1.360 6.0 9.651 5.0 33.342
$m = 7, n = 18$ 7.0 0.165 6.5 0.357 6.0 2.664 5.5 4.641 5.0 15.515	$m = 7, n = 27$ 7.0 0.362 6.0 4.272 5.0 19.916	$m = 8, n = 9$ 8.0 0.004 7.5 0.037 7.0 0.300 6.5 1.222 6.0 4.447 5.5 10.897	$m = 8, n = 17$ 8.0 0.046 7.5 0.119 7.0 0.998 6.5 2.023 6.0 7.661 5.5 12.494
$m = 7, n = 19$ 7.0 0.261 6.0 3.652 5.0 18.913	$m = 7, n = 28$ 7.0 0.289 6.5 0.473 6.0 3.602 5.5 5.166 5.0 17.681	$m = 8, n = 10$ 8.0 0.021 7.0 0.761 6.0 7.672 5.0 31.859	
$m = 7, n = 20$ 7.0 0.193 6.5 0.386 6.0 2.899 5.5 4.783 5.0 16.087	$m = 7, n = 29$ 7.0 0.381 6.0 4.384 5.0 20.088		

$m = 8, n = 18$ 8.0 0.082 7.0 1.510 6.0 10.078	$m = 8, n = 26$ 8.0 0.134 7.0 1.955 6.0 11.225	$m = 9, n = 9$ 9.0 0.002 8.0 0.169 7.0 2.834 6.0 17.347	$m = 9, n = 16$ 9.0 0.011 8.5 0.035 8.0 0.326 7.5 0.791 7.0 3.350 6.5 6.335 6.0 16.285
$m = 8, n = 19$ 8.0 0.058 7.5 0.135 7.0 1.140 6.5 2.145 6.0 8.174 5.5 12.696	$m = 8, n = 27$ 8.0 0.103 7.5 0.186 7.0 1.591 6.5 2.485 6.0 9.636 5.5 13.212	$m = 9, n = 10$ 9.0 0.001 8.5 0.011 8.0 0.099 7.5 0.449 7.0 1.852 6.5 5.126 6.0 12.764	$m = 9, n = 17$ 9.0 0.023 8.0 0.558 7.0 4.842 6.0 20.549
$m = 8, n = 20$ 8.0 0.097 7.0 1.643 6.0 10.435	$m = 8, n = 28$ 8.0 0.145 7.0 2.038 6.0 11.424	$m = 9, n = 11$ 9.0 0.006 8.0 0.274 7.0 3.489 6.0 18.492	$m = 9, n = 18$ 9.0 0.015 8.5 0.043 8.0 0.400 7.5 0.876 7.0 3.732 6.5 6.587 6.0 17.059
$m = 8, n = 21$ 8.0 0.070 7.5 0.150 7.0 1.269 6.5 2.249 6.0 8.616 5.5 12.860	$m = 8, n = 29$ 8.0 0.113 7.5 0.196 7.0 1.679 6.5 2.545 6.0 9.902 5.5 13.297	$m = 9, n = 12$ 9.0 0.003 8.5 0.019 8.0 0.172 7.5 0.580 7.0 2.417 6.5 5.632 6.0 14.206	$m = 9, n = 19$ 9.0 0.029 8.0 0.638 7.0 5.159 6.0 20.986
$m = 8, n = 22$ 8.0 0.110 7.0 1.759 6.0 10.738	$m = 8, n = 30$ 8.0 0.155 7.0 2.112 6.0 11.599	$m = 9, n = 13$ 9.0 0.011 8.0 0.376 7.0 4.025 6.0 19.350	$m = 9, n = 20$ 9.0 0.020 8.5 0.050 8.0 0.470 7.5 0.950 7.0 4.068 6.5 6.797 6.0 17.711
$m = 8, n = 23$ 8.0 0.082 7.5 0.163 7.0 1.387 6.5 2.338 6.0 9.000 5.5 12.997	$m = 8, n = 31$ 8.0 0.123 7.5 0.205 7.0 1.761 6.5 2.599 6.0 10.140	$m = 9, n = 14$ 9.0 0.007 8.5 0.027 8.0 0.249 7.5 0.693 7.0 2.914 6.5 6.024 6.0 15.352	$m = 9, n = 21$ 9.0 0.035 8.0 0.710 7.0 5.432 6.0 21.349
$m = 8, n = 24$ 8.0 0.122 7.0 1.863 6.0 10.999	$m = 8, n = 32$ 8.0 0.164 7.0 2.180 6.0 11.756	$m = 9, n = 15$ 9.0 0.017 8.0 0.471 7.0 4.469 6.0 20.016	$m = 9, n = 22$ 9.0 0.025 8.5 0.057 8.0 0.536 7.5 1.014 7.0 4.366 6.5 6.973 6.0 18.269
$m = 8, n = 25$ 8.0 0.093 7.5 0.175 7.0 1.493 6.5 2.416 6.0 9.338 5.5 13.113	$m = 8, n = 33$ 8.0 0.132 7.5 0.213 7.0 1.836 6.5 2.647 6.0 10.354		

$m = 9, n = 23$ 9.0 0.041 8.0 0.775 7.0 5.669 6.0 21.657	$m = 9, n = 30$ 9.0 0.044 8.5 0.079 8.0 0.757 7.5 1.209 7.0 5.275 6.5 7.464 6.0 19.870	8.0 1.011 7.5 2.597 7.0 7.356 6.5 14.019	$m = 10, n = 20$ 10.0 0.010 9.0 0.260 8.0 2.509 7.0 12.254
$m = 9, n = 24$ 9.0 0.030 8.5 0.063 8.0 0.597 7.5 1.072 7.0 4.631 6.5 7.123 6.0 18.750	$m = 9, n = 31$ 9.0 0.061 8.0 0.983 7.0 6.369 6.0 22.529	$m = 10, n = 14$ 10.0 0.003 9.0 0.138 8.0 1.804 7.0 10.688	$m = 10, n = 21$ 10.0 0.007 9.5 0.018 9.0 0.187 8.5 0.405 8.0 1.928 7.5 3.452 7.0 10.053
$m = 9, n = 25$ 9.0 0.046 8.0 0.834 7.0 5.877 6.0 21.922	$m = 9, n = 32$ 9.0 0.048 8.5 0.084 8.0 0.803 7.5 1.246 7.0 5.450 6.5 7.552 6.0 20.164	$m = 10, n = 15$ 10.0 0.002 9.5 0.009 9.0 0.090 8.5 0.271 8.0 1.271 7.5 2.870 7.0 8.200 6.5 14.419	$m = 10, n = 22$ 10.0 0.012 9.0 0.296 8.0 2.690 7.0 12.621
$m = 9, n = 26$ 9.0 0.034 8.5 0.069 8.0 0.654 7.5 1.122 7.0 4.868 6.5 7.252 6.0 19.171	$m = 10, n = 10$ 10.0 0.001 9.0 0.055 8.0 1.151 7.0 8.945 6.0 32.814	$m = 10, n = 16$ 10.0 0.005 9.0 0.180 8.0 2.070 7.0 11.310	$m = 10, n = 23$ 10.0 0.009 9.5 0.021 9.0 0.219 8.5 0.441 8.0 2.110 7.5 3.593 7.0 10.514
$m = 9, n = 27$ 9.0 0.052 8.0 0.888 7.0 6.060 6.0 22.151	$m = 10, n = 11$ 9.5 0.003 9.0 0.031 8.5 0.159 8.0 0.733 7.5 2.264 7.0 6.347 6.5 13.491	$m = 10, n = 17$ 10.0 0.003 9.5 0.012 9.0 0.122 8.5 0.320 8.0 1.510 7.5 3.097 7.0 8.914 6.5 14.732	$m = 10, n = 24$ 10.0 0.015 9.0 0.330 8.0 2.851 7.0 12.937
$m = 9, n = 28$ 9.0 0.039 8.5 0.074 8.0 0.707 7.5 1.168 7.0 5.082 6.5 7.365 6.0 19.542	$m = 10, n = 12$ 10.0 0.002 9.0 0.095 8.0 1.499 7.0 9.919 6.0 33.496	$m = 10, n = 18$ 10.0 0.008 9.0 0.221 8.0 2.304 7.0 11.823	$m = 10, n = 25$ 10.0 0.011 9.5 0.024 9.0 0.249 8.5 0.474 8.0 2.275 7.5 3.716 7.0 10.920
$m = 9, n = 29$ 9.0 0.057 8.0 0.938 7.0 6.223 6.0 22.352	$m = 10, n = 13$ 10.0 0.001 9.5 0.006 9.0 0.059 8.5 0.217	$m = 10, n = 19$ 10.0 0.005 9.5 0.015 9.0 0.155 8.5 0.365 8.0 1.729 7.5 3.288 7.0 9.525 6.5 14.983	$m = 10, n = 26$ 10.0 0.017 9.0 0.362 8.0 2.995 7.0 13.212

$m = 10, n = 27$	8-0 2-963 10-0 0-013 9-5 0-027 9-0 0-278 8-5 0-504 8-0 2-426 7-5 3-824 7-0 11-279	$m = 11, n = 13$	8-5 1-442 8-0 4-601 7-5 8-212 7-0 18-142	10-0 0-087 9-5 0-186 9-0 0-978 8-5 1-771 8-0 5-733 7-5 8-902 7-0 19-996
$m = 10, n = 28$	10-0 0-020 9-0 0-391 8-0 3-125 7-0 13-453	$m = 11, n = 14$	$m = 11, n = 19$	$m = 11, n = 25$
$m = 10, n = 29$	10-0 0-015 9-5 0-029 9-0 0-305 8-5 0-531 8-0 2-564 7-5 3-919 7-0 11-599	10-5 0-002 10-0 0-020 9-5 0-079 9-0 0-404 8-5 1-137 8-0 3-581 7-5 7-490 7-0 16-285	11-0 0-002 10-0 0-085 9-0 1-047 8-0 6-407 7-0 22-486	11-0 0-005 10-0 0-136 9-0 1-375 8-0 7-318 7-0 23-526
$m = 10, n = 30$	10-0 0-022 9-0 0-418 8-0 3-242 7-0 13-667	$m = 11, n = 15$	$m = 11, n = 20$	$m = 11, n = 26$
$m = 10, n = 31$	10-0 0-016 9-5 0-031 9-0 0-331 8-5 0-556 8-0 2-691 7-5 4-004 7-0 11-887	11-0 0-001 10-0 0-049 9-0 0-771 8-0 5-535 7-0 21-415	11-0 0-002 10-5 0-005 10-0 0-058 9-5 0-147 9-0 0-768 8-5 1-566 8-0 5-024 7-5 8-482 7-0 18-855	11-0 0-004 10-5 0-009 10-0 0-101 9-5 0-203 9-0 1-073 8-5 1-856 8-0 6-033 7-5 9-070 7-0 20-460
$m = 11, n = 11$	10-0 0-017 9-0 0-446 8-0 4-305 7-0 19-743	$m = 11, n = 16$	$m = 11, n = 21$	$m = 11, n = 27$
$m = 11, n = 12$	10-5 0-001 10-0 0-010 9-5 0-055 9-0 0-278 8-5 0-950	11-0 0-001 10-5 0-003 10-0 0-031 9-5 0-103 9-0 0-530 8-5 1-300 8-0 4-123 7-5 7-888 7-0 17-298	11-0 0-003 10-0 0-103 9-0 1-167 8-0 6-753 7-0 22-890	11-0 0-006 10-0 0-152 9-0 1-465 8-0 7-551 7-0 23-782
		$m = 11, n = 17$	$m = 11, n = 22$	$m = 11, n = 28$
		11-0 0-002 10-0 0-067 9-0 0-915 8-0 6-006 7-0 22-004	11-0 0-002 10-5 0-006 10-0 0-073 9-5 0-167 9-0 0-876 8-5 1-674 8-0 5-398 7-5 8-709 7-0 19-467	11-0 0-005 10-5 0-010 10-0 0-115 9-5 0-219 9-0 1-162 8-5 1-933 8-0 6-303 7-5 9-216 7-0 20-869
		$m = 11, n = 18$	$m = 11, n = 23$	$m = 11, n = 29$
		11-0 0-001 10-5 0-004 10-0 0-044 9-5 0-125 9-0 0-652	11-0 0-004 10-0 0-120 9-0 1-275 8-0 7-054 7-0 23-232	11-0 0-007 10-0 0-167 9-0 1-548 8-0 7-759 7-0 24-006
			$m = 11, n = 24$	
			11-0 0-003 10-5 0-008	

$m = 11, n = 30$ 11·0 0·005 10·5 0·011 10·0 0·128 9·5 0·234 9·0 1·244 8·5 2·002 8·0 6·547 7·5 9·344 7·0 21·232	$m = 12, n = 17$ 11·5 0·001 11·0 0·011 10·5 0·038 10·0 0·213 9·5 0·564 9·0 1·968 8·5 4·075 8·0 9·867 7·5 16·487	$m = 12, n = 23$ 12·0 0·001 11·5 0·002 11·0 0·027 10·5 0·067 10·0 0·384 9·5 0·780 9·0 2·761 8·5 4·742 8·0 11·676	$m = 12, n = 29$ 12·0 0·002 11·5 0·004 11·0 0·046 10·5 0·093 10·0 0·537 9·5 0·941 9·0 3·366 8·5 5·184 8·0 12·911
$m = 12, n = 12$ 11·0 0·005 10·0 0·166 9·0 1·956 8·0 11·017	$m = 12, n = 18$ 12·0 0·001 11·0 0·024 10·0 0·389 9·0 3·022 8·0 13·177	$m = 12, n = 24$ 12·0 0·001 11·0 0·047 10·0 0·582 9·0 3·752 8·0 14·449	$m = 13, n = 13$ 12·0 0·002 11·0 0·060 10·0 0·847 9·0 5·762 8·0 21·688
$m = 12, n = 13$ 11·0 0·003 10·5 0·018 10·0 0·102 9·5 0·381 9·0 1·312 8·5 3·406 8·0 8·118 7·5 15·657	$m = 12, n = 19$ 11·5 0·001 11·0 0·016 10·5 0·048 10·0 0·271 9·5 0·644 9·0 2·257 8·5 4·332 8·0 10·556	$m = 12, n = 25$ 12·0 0·001 11·5 0·003 11·0 0·034 10·5 0·076 10·0 0·438 9·5 0·839 9·0 2·981 8·5 4·908 8·0 12·136	$m = 13, n = 14$ 12·0 0·001 11·5 0·006 11·0 0·036 10·5 0·148 10·0 0·555 9·5 1·575 9·0 4·123 8·5 8·711 8·0 16·969
$m = 12, n = 14$ 11·0 0·011 10·0 0·242 9·0 2·359 8·0 11·887	$m = 12, n = 20$ 12·0 0·001 11·0 0·032 10·0 0·457 9·0 3·295 8·0 13·668	$m = 12, n = 26$ 12·0 0·002 11·0 0·055 10·0 0·638 9·0 3·945 8·0 14·765	$m = 13, n = 15$ 12·0 0·003 11·0 0·092 10·0 1·065 9·0 6·417 8·0 22·474
$m = 12, n = 15$ 11·5 0·001 11·0 0·006 10·5 0·028 10·0 0·156 9·5 0·477 9·0 1·653 8·5 3·771 8·0 9·064 7·5 16·122	$m = 12, n = 21$ 12·0 0·001 11·5 0·002 11·0 0·021 10·5 0·058 10·0 0·328 9·5 0·715 9·0 2·521 8·5 4·552 8·0 11·154	$m = 12, n = 27$ 12·0 0·001 11·5 0·003 11·0 0·040 10·5 0·085 10·0 0·489 9·5 0·893 9·0 3·182 8·5 5·054 8·0 12·545	$m = 13, n = 16$ 12·0 0·002 11·5 0·010 11·0 0·058 10·5 0·193 10·0 0·729 9·5 1·803 9·0 4·756 8·5 9·186 8·0 18·045
$m = 12, n = 16$ 11·0 0·017 10·0 0·316 9·0 2·712 8·0 12·593	$m = 12, n = 22$ 12·0 0·001 11·0 0·039 10·0 0·522 9·0 3·536 8·0 14·088	$m = 12, n = 28$ 12·0 0·002 11·0 0·062 10·0 0·691 9·0 4·118 8·0 15·042	$m = 13, n = 17$ 12·0 0·006 11·0 0·125 10·0 1·266 9·0 6·971 8·0 23·107

$m = 13, n = 18$	9.0 8.209 8.0 24.434	$m = 14, n = 14$	$m = 14, n = 20$
12.0 0.004 11.5 0.014 11.0 0.083 10.5 0.236 10.0 0.898 9.5 2.002 9.0 5.315 8.5 9.574 8.0 18.943	$m = 13, n = 24$	12.0 0.021 11.0 0.351 10.0 2.849 9.0 12.840	13.0 0.003 12.0 0.063 11.0 0.668 10.0 3.993 9.0 14.800
$m = 13, n = 19$	12.5 0.001 12.0 0.010 11.5 0.026 11.0 0.163 10.5 0.351 10.0 1.353 9.5 2.467 9.0 6.643 8.5 10.402	$m = 14, n = 15$	$m = 14, n = 21$
12.0 0.009 11.0 0.159 10.0 1.450 9.0 7.444 8.0 23.627	$m = 13, n = 25$	12.5 0.002 12.0 0.013 11.5 0.055 11.0 0.226 10.5 0.696 10.0 1.988 9.5 4.572 9.0 9.739 8.5 17.491	13.0 0.002 12.5 0.006 12.0 0.043 11.5 0.115 11.0 0.478 10.5 1.048 10.0 3.043 9.5 5.537 9.0 12.021
$m = 13, n = 20$	13.0 0.001 12.0 0.018 11.0 0.257 10.0 1.910 9.0 8.522 8.0 24.753	$m = 14, n = 16$	$m = 14, n = 22$
12.0 0.005 11.5 0.018 11.0 0.109 10.5 0.277 10.0 1.059 9.5 2.177 9.0 5.810 8.5 9.896 8.0 19.704	$m = 13, n = 26$	13.0 0.001 12.0 0.034 11.0 0.461 10.0 3.280 9.0 13.615	13.0 0.004 12.0 0.079 11.0 0.763 10.0 4.290 9.0 15.263
$m = 13, n = 21$	12.5 0.001 12.0 0.013 11.5 0.030 11.0 0.190 10.5 0.384 10.0 1.486 9.5 2.588 9.0 6.996 8.5 10.603	$m = 14, n = 17$	$m = 14, n = 23$
12.0 0.012 11.0 0.193 10.0 1.618 9.0 7.853 8.0 24.063	$m = 13, n = 27$	13.0 0.001 12.5 0.003 12.0 0.021 11.5 0.075 11.0 0.309 10.5 0.825 10.0 2.371 9.5 4.947 9.0 10.615	13.0 0.003 12.5 0.008 12.0 0.055 11.5 0.134 11.0 0.560 10.5 1.144 10.0 3.337 9.5 5.773 9.0 12.594
$m = 13, n = 22$	13.0 0.001 12.0 0.022 11.0 0.287 10.0 2.037 9.0 8.800 8.0 25.030	$m = 14, n = 18$	$m = 14, n = 24$
12.5 0.001 12.0 0.008 11.5 0.022 11.0 0.136 10.5 0.315 10.0 1.211 9.5 2.331 9.0 6.250 8.5 10.169	$m = 13, n = 28$	13.0 0.002 12.0 0.048 11.0 0.567 10.0 3.659 9.0 14.258	13.0 0.005 12.0 0.095 11.0 0.852 10.0 4.555 9.0 15.664
$m = 13, n = 23$	12.5 0.001 12.0 0.015 11.5 0.035 11.0 0.216 10.5 0.415 10.0 1.610 9.5 2.697 9.0 7.315 8.5 10.779	$m = 14, n = 19$	$m = 14, n = 25$
12.0 0.015 11.0 0.226 10.0 1.771	12.5 0.005 12.0 0.031 11.5 0.095 11.0 0.394 10.5 0.942 10.0 2.722 9.5 5.265 9.0 11.367	13.0 0.001 12.5 0.005 12.0 0.031 11.5 0.095 11.0 0.394 10.5 0.942 10.0 2.722 9.5 5.265 9.0 11.367	13.0 0.004 12.5 0.010 12.0 0.067 11.5 0.153 11.0 0.638 10.5 1.232 10.0 3.605 9.5 5.979 9.0 13.100

$m = 14, n = 26$	10.0 5.907 9.5 10.725	$m = 15, n = 24$	$m = 16, n = 18$
13.0 0.007		14.0 0.001	14.0 0.004
12.0 0.110	$m = 15, n = 19$	13.5 0.003	13.0 0.078
11.0 0.935	14.0 0.001	13.0 0.021	12.0 0.746
10.0 4.792	13.0 0.018	12.5 0.056	11.0 4.221
9.0 16.013	12.0 0.245	12.0 0.250	10.0 15.141
$m = 14, n = 27$	11.0 1.832	11.5 0.541	$m = 16, n = 19$
13.0 0.005	10.0 8.316	11.0 1.707	14.0 0.003
12.5 0.012	9.0 24.526	10.5 3.131	13.5 0.011
12.0 0.080		10.0 7.403	13.0 0.050
11.5 0.170	$m = 15, n = 20$	9.5 11.676	12.5 0.154
11.0 0.714	13.5 0.002	$m = 15, n = 25$	12.0 0.517
10.5 1.311	13.0 0.012	14.0 0.002	11.5 1.242
10.0 3.851	12.5 0.038	13.0 0.039	11.0 3.129
9.5 6.161	12.0 0.167	12.0 0.396	10.5 6.093
9.0 13.550	11.5 0.426	11.0 2.419	10.0 12.021
	11.0 1.333	10.0 9.540	$m = 16, n = 20$
$m = 15, n = 15$	10.5 2.758	9.0 25.724	14.0 0.007
13.0 0.007	10.0 6.463	$m = 15, n = 26$	13.0 0.102
12.0 0.141	9.5 11.095	14.0 0.001	12.0 0.880
11.0 1.342	$m = 15, n = 21$	13.5 0.004	11.0 4.611
10.0 7.156	14.0 0.001	13.0 0.027	10.0 15.726
9.0 23.305	13.0 0.025	12.5 0.065	$m = 16, n = 21$
$m = 15, n = 16$	12.0 0.297	12.0 0.291	14.5 0.001
13.5 0.001	11.0 2.046	11.5 0.593	14.0 0.004
13.0 0.004	10.0 8.779	11.0 1.876	13.5 0.014
12.5 0.020	9.0 24.990	10.5 3.287	13.0 0.069
12.0 0.089	$m = 15, n = 22$	10.0 7.803	12.5 0.186
11.5 0.296	14.0 0.001	9.5 11.908	12.0 0.627
11.0 0.916	13.5 0.002	$m = 16, n = 16$	11.5 1.384
10.5 2.280	13.0 0.016	14.0 0.002	11.0 3.501
10.0 5.280	12.5 0.047	13.0 0.055	10.5 6.413
9.5 10.281	12.0 0.208	12.0 0.606	10.0 12.722
$m = 15, n = 17$	11.5 0.486	11.0 3.780	$m = 16, n = 22$
13.0 0.012	11.0 1.526	10.0 14.449	14.0 0.009
12.0 0.192	10.5 2.956	$m = 16, n = 17$	13.0 0.127
11.0 1.598	10.0 6.959	14.0 0.001	12.0 1.006
10.0 7.781	9.5 11.408	13.5 0.007	11.0 4.957
9.0 23.974	$m = 15, n = 23$	13.0 0.034	10.0 16.227
$m = 15, n = 18$	14.0 0.001	12.5 0.121	
13.5 0.001	13.0 0.031	12.0 0.405	
13.0 0.008	12.0 0.347	11.5 1.087	
12.5 0.029	11.0 2.241	11.0 2.722	
12.0 0.127	10.0 9.184	10.5 5.720	
11.5 0.363	9.0 25.384	10.0 11.216	
11.0 1.129			
10.5 2.534			

$m = 16, n = 23$	$m = 17, n = 19$	$m = 17, n = 24$	$m = 18, n = 22$
14.5 0.001	15.0 0.001	15.0 0.002	16.0 0.001
14.0 0.006	14.0 0.031	14.5 0.007	15.0 0.016
13.5 0.018	13.0 0.335	14.0 0.036	14.0 0.182
13.0 0.088	12.0 2.186	13.5 0.095	13.0 1.242
12.5 0.218	11.0 9.057	13.0 0.342	12.0 5.548
12.0 0.735	10.0 25.254	12.5 0.745	11.0 17.032
11.5 1.512		12.0 2.033	
11.0 3.843	$m = 17, n = 20$	11.5 3.751	$m = 18, n = 23$
10.5 6.691	15.0 0.001	11.0 8.046	16.0 0.001
10.0 13.338	14.5 0.004	10.5 12.770	15.5 0.002
	14.0 0.020		15.0 0.011
$m = 16, n = 24$	13.5 0.063	$m = 18, n = 18$	14.5 0.033
15.0 0.001	13.0 0.228	15.0 0.008	14.0 0.125
14.0 0.012	12.5 0.585	14.0 0.111	13.5 0.311
13.0 0.153	12.0 1.585	13.0 0.920	13.0 0.906
12.0 1.124	11.5 3.300	12.0 4.717	12.5 1.872
11.0 5.267	11.0 7.014	11.0 15.877	12.0 4.288
10.0 16.661	10.5 12.121		11.5 7.509
		$m = 18, n = 19$	11.0 13.951
$m = 16, n = 25$	$m = 17, n = 21$	15.5 0.001	
14.5 0.001	15.0 0.002	15.0 0.005	$m = 19, n = 19$
14.0 0.008	14.0 0.042	14.5 0.019	16.0 0.003
13.5 0.023	13.0 0.407	14.0 0.072	15.0 0.045
13.0 0.108	12.0 2.443	13.5 0.220	14.0 0.428
12.5 0.248	11.0 9.568	13.0 0.635	13.0 2.511
12.0 0.840	10.0 25.741	12.5 1.535	12.0 9.694
11.5 1.629		12.0 3.486	11.0 25.856
11.0 4.155	$m = 17, n = 22$	11.5 6.828	
10.5 6.934	15.0 0.001	11.0 12.559	$m = 19, n = 20$
10.0 13.882	14.5 0.005		16.0 0.002
	14.0 0.027	$m = 18, n = 20$	15.5 0.007
$m = 17, n = 17$	13.5 0.079	16.0 0.001	15.0 0.029
15.0 0.001	13.0 0.285	15.0 0.012	14.5 0.094
14.0 0.021	12.5 0.668	14.0 0.146	14.0 0.290
13.0 0.263	12.0 1.816	13.0 1.085	13.5 0.748
12.0 1.904	11.5 3.539	12.0 5.157	13.0 1.816
11.0 8.468	11.0 7.558	11.0 16.499	12.5 3.800
10.0 24.675	10.5 12.471		12.0 7.484
		$m = 18, n = 21$	11.5 13.009
$m = 17, n = 18$	$m = 17, n = 23$	15.5 0.001	
14.5 0.003	15.0 0.003	15.0 0.007	$m = 19, n = 21$
14.0 0.013	14.0 0.053	14.5 0.025	16.0 0.004
13.5 0.048	13.0 0.477	14.0 0.098	15.0 0.062
13.0 0.173	12.0 2.678	13.5 0.266	14.0 0.519
12.5 0.498	11.0 10.014	13.0 0.772	13.0 2.808
12.0 1.342		12.5 1.712	12.0 10.246
11.5 3.029		12.0 3.904	
11.0 6.405		11.5 7.193	
10.5 11.709		11.0 13.300	

$m = 19, n = 22$	$m = 20, n = 20$	$m = 20, n = 21$	
16·0 0·003	17·0 0·001	17·0 0·001	
15·5 0·010	16·0 0·018	16·5 0·003	
15·0 0·041	15·0 0·192	16·0 0·011	
14·5 0·117	14·0 1·282	15·5 0·039	
14·0 0·363	13·0 5·642	15·0 0·129	
13·5 0·854	12·0 17·153	14·5 0·352	
13·0 2·082		14·0 0·910	
12·5 4·078		13·5 2·027	
12·0 8·069		13·0 4·259	
11·5 13·391		12·5 7·888	
		12·0 13·784	

Souhrn

TABULKY PRO DVOUVÝBĚROVÝ MEDIÁNOVÝ TEST

ZBYNĚK ŠIDÁK

Pro neparametrický mediánový test pro dva výběry, jejichž rozsahy m, n splňují $3 \leq m \leq n, m + n \leq 41$, se tabelují pravděpodobnosti horních konců rozložení až do bodu, kde je po prvé překročeno 10%.

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