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Raised conditional level of significance for the 2x2-table when testing teh equality of two probabilities.

(Statistica Neerlandica 24 (1970), p. 1-35)

# Raised conditional level of significance for the 2 × 2-table when testing the equality of two probabilities

by R. D. Boschloo *

**Summary** In this paper it is to be shown that Fisher's non-randomizing exact test for 2 × 2-tables, which is a conditional test, can by simple means be changed into an unconditional test using raised levels of significance; not seldom, especially for not too large samples, the level of significance can be doubled. This leads in many cases to a considerable increase of power of the test. A table with raised levels has been prepared up to sample sizes of 50 and a rule of thumb, which can be used if this table is not available, has been developed.

## 1. Introduction

The usual test for the hypothesis $H_0 : p_1 = p_2$, given the results of two independent sequences of experiments, is the exact test of Fisher (1925) in the 2 × 2-table.

| | | | |
|---|---|---|---|
| $p_1$ | $A$ | $C$ | $m$ |
| $p_2$ | $B$ | $D$ | $n$ |
| | $R$ | $S$ | $t$ |

Denoting the number of successes in the first sequence by $A$** and the number of successes in the second sequence by $B$, the test is based on the conditional distribution of $A$ under the condition $R = r$, where $R = A + B$ and where $r$ is the value actually found for $R$. The conditional distribution mentioned is, under $H_0$, a hypergeometric distribution.

The level of significance used for this non-randomized conditional test is further to be called the "conditional level of significance" and often shortly written as "conditional level". If $\alpha$ is this conditional level then the unconditional level of significance (being the true probability of unjustified rejection of $H_0$, in this paper often written as "unconditional level") depends on the common value $p$ of $p_1$ and $p_2$.

This unconditional level is denoted by $\alpha\,(p)$.

The use of the conditional test derives its justification from the fact that the inequality $\alpha\,(p) < \alpha$ holds for every value of $p$. Numerical calculations, however, show that not only for most values of $p$ the value of $\alpha\,(p)$ is much smaller than $\alpha$ but that even $\alpha_{max}$, the maximum value of $\alpha(p$ over all $p$, is often, especially with small samples, smaller than $\frac{1}{2}\alpha$. We shall call $\alpha_{max}$ the unconditional size of the test. The small value of the size leads to a regrettable loss of power of the test.

One possible method to overcome this disadventage is to use randomization in order

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** Capitals refer to random variables.

to make the conditional size equal to $\alpha$, for every $r$ separately. There are, however, well known objections of practical and fundamental character against randomization of this kind.

Another method was advocated for some time by BARNARD (1945). He abandoned his proposal later after a discussion with FISHER (1945). The idea of BARNARD is to use an unconditional test for $H_0$ instead of a contional one. This idea was taken up by GARSIDE and MACK (1967) in a slightly modified form. They give tables for sample sizes up to 15.

The test proposed in the present paper is another modification, more closely linked up with FISHER's original test and suitable for samples of all sizes: tables, with only two entrances for each $\alpha$, up to samples of size 50 and an approximation for larger samples.

## 2. The unconditional level of significance of the fisher test

The possible outcomes for the binomially distributed number of successes $A$ in the first sequence of experiments are $a = 0, 1, \ldots, m$. Likewise $B$ in the second sequence has the possible outcomes $b = 0, 1, \ldots, n$. Each of the possible results ($A = a$,

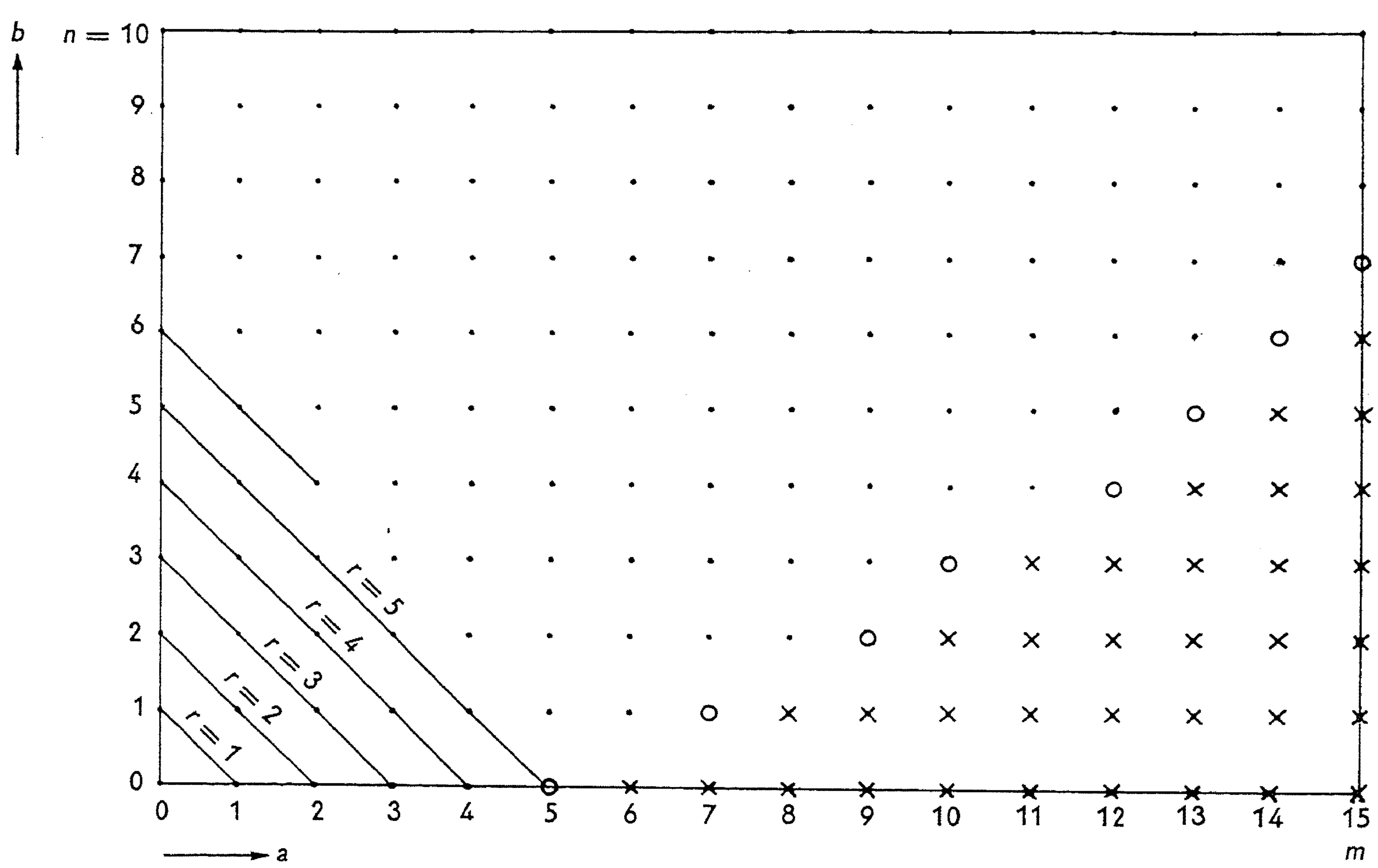


Fig. 1. The sample space of the $2 \times 2$-table with $m = 15$ and $n = 10$.
The points marked $\times$ are part of an one sided critical region with conditional level of significance $\alpha = .05$. The points marked $\bigcirc$ are part of an one sided critical region with conditional level of significance $\alpha = .09$.

$B = b$) of the $2 \times 2$-table corresponds with the point $(a, b)$ of the sample space representable by a rectangle as drawn in figure 1.

In figure 1 the sample space of the original FISHER test when $R = r$ consists of the points $(a, b)$ with $a+b = r$ being the points $(a, r-a)$ on the line $a+b = r$.

The critical region $K_r$ in this conditional sample space is to be found in the usual way by means of the hypergeometric distribution. One finds the overall critical region $K$ by taking all regions $K_r$ together.

In figure 1, where $m = 15$, $n = 10$, $\alpha = .05$ and $H_0 : p_1 \leqslant p_2$, the points marked $\times$ are in the critical region $K$.

It is interesting to know the true probability, under $H_0$, of finding an outcome that corresponds with a point of $K$. This probability, the unconditional level of significance, is

$$\alpha(p) = P[(A,B) \in K | H_0] = \sum_r \alpha_r \cdot p(r|H_0) \tag{1}$$

where

$$p(r|H_0) = P[R = r|H_0] = \binom{m+n}{r} p^r (1-p)^{m+n-r} \tag{2}$$

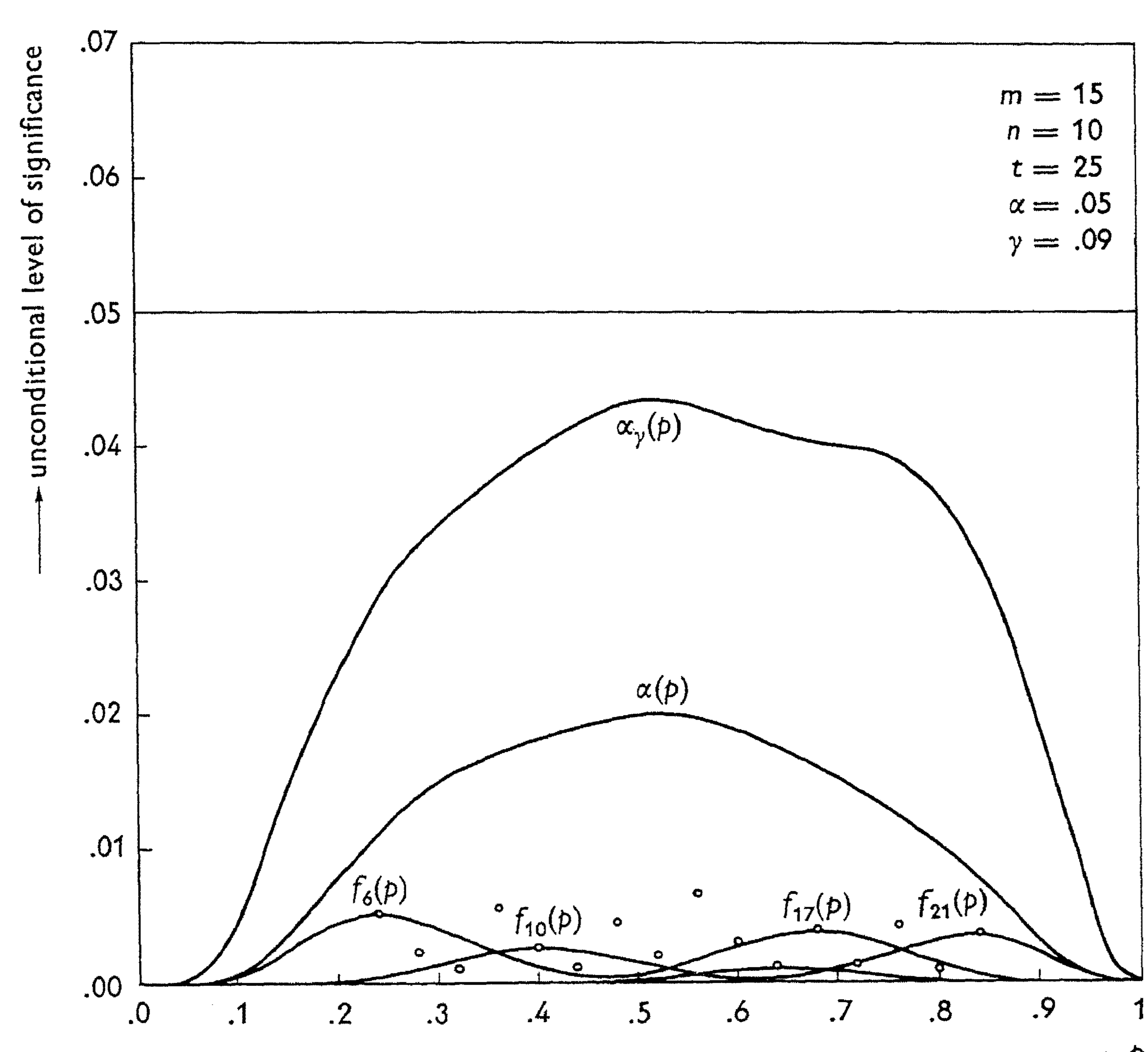


Fig. 2. The unconditional level of significance $\alpha(p) = \Sigma f_r(p)$ where $f_r(p) = \alpha_r \cdot p(r|H_0)$. $f_r(p)$ has its maximum for $p = r/t$. For all values of $r$ the maximum of $f_r(p)$ is marked with $\times$. For some values of $r$ the function $f_r(p)$ is also drawn. The function $\alpha_\gamma(p)$ is the unconditional level of significance using the raised conditional level of significance $\gamma$ instead of $\alpha$.

and where

$$\alpha_r = P[(A,B) \in K_r \mid R = r, H_0] \tag{3}$$

is the sum of some hypergeometric point probabilities which is usually smaller than $\alpha$.

In figure 2 this function $\alpha(p)$ and some of the functions $f_r(p) = \alpha_r \cdot p(r|H_0)$ are drawn; $m$, $n$ and $\alpha$ here have the same values as in figure 1.

It is striking in this diagram that even the maximum $\alpha_{max}$ of $\alpha(p)$, being the size of the test, remains considerably under the conditional level of significance $\alpha$ ($= .05$) and in this case amounts to about .02.

## 3. A raised conditional level of significance

The improvement of the test suggested in this paper is based on the following idea:

Seeing that the use of the conditional level $\alpha$ leads to a too small unconditional level $\alpha(p)$, a raised conditional level $\gamma$ is selected in such a way that the uncondional level $\alpha_\gamma(p)$ does not exceed for any value of $p$ the desired $\alpha$. Under this condition $\gamma$ is chosen as high as possible.

In the case of figure 1 and 2 the use of a raised level $\gamma = .09$ is allowed. Using $\gamma = .09$ instead of .05 as a conditional level, the critical region in figure 1 is extended with the points marked ○ and the unconditional level $\alpha_\gamma(p)$ drawn in figure 2 gives a much better approximation of the desired level $\alpha = .05$.

*It is stressed once more that the calculations for Fisher's test remain unchanged; only the level of significance used is raised.*

In the two sided test the critical region $K$ consists of two separate parts of the sample space lying diametrical with regard to each other. First only one part is taken into account: Suppose the conditional level $\gamma'/2$ corresponding to this part is chosen as high as possible but in such a way that the unconditional level does not exceed $\alpha/2$.

If $\alpha_{\gamma'/2}(p)$ is the unconditional level corresponding to this part of the critical region than $\alpha_{\gamma'/2}(1-p)$ is the unconditional level corresponding to the other part.

Since the maximum of the total unconditional level $\alpha_{\gamma'/2}(p)+\alpha_{\gamma'/2}(1-p)$ can be smaller than twice the maximum of $\alpha_{\gamma'/2}(p)$, it is sometimes possible to find in the two sided case a raised level $\gamma$ with $\gamma > \gamma'$. This opportunity, sometimes to add in the double sided test an extra increase to the raised conditional level, is utilized.

## 4. The power of the test

When using raised conditional levels of significance in most cases some points are added to the critical region $K$. This then leads to a considerable increase of the power of the test as appears from the following example.

| | | | | $\alpha = .01$ one sided | | | $\alpha = .05$ one sided | | |
|---|---|---|---|---|---|---|---|---|---|
| $m$ | $n$ | $p_1$ | $p_2$ | I | II | III | I | II | III |
| 15 | 15 | .3 | .1 | .0755 | .1493 | .1488 | .2558 | .3531 | .3739 |
| 15 | 15 | .6 | .1 | .6087 | .7394 | .7380 | .8451 | .9189 | .9151 |
| 15 | 15 | .7 | .2 | .5268 | .6796 | .6771 | .8066 | .8962 | .8796 |
| 15 | 15 | .8 | .2 | .7647 | .8723 | .8635 | .9391 | .9744 | .9660 |

In column I: the power of FISHER's original test.
In column II: the power of FISHER's test when raised levels of significance are used.
In column III: the power of the randomized FISHER test.

In this example $m$, $n$, $p_1$, $p_2$ and $\alpha$ have the same values as in the example given in an editorial note by PEARSON on a paper of BENNETT and HSU (1960), in which it is shown that the exact power is often much smaller than the power computed by means of the approximation formulas given bij PATNAIK (1948) and SILLITO (1949). These approximation formulas however seem to be useful for FISHER's test with raised levels of significance.

In general the power of the randomized test is higher than the power of our test. However, as illustrated by column II and III of the above table, this is sometimes the other way around (in the table in all cases but one). To understand this it may be pointed out that the randomized test is only uniformly most powerful amongst the class of unbiased test (see for example TOCHER (1950) or LEHMANN (1959)). FISHER's test with raised levels is just like FISHER's original test, a biased one.

## 5. Practical use of the test

Three methods for FISHER's test with raised levels are developed.

I. *A table.* Using the Electrologica X-8 computer of the Mathematical Centre, Amsterdam, tables of $\gamma$ for several values of $\alpha$ have been prepared, for the time being up to sample sizes of 50. This table is to be found at the end of this paper.

For the raised levels $\gamma$, which could freely be chosen in small intervals, rounded numbers were selected in such a way that the use of the $\chi^2$ approximation with correction for continuity * and the use of exact hypergeometric probabilities both lead, as much as possible, to the same conclusion about $H_0$.

If the use of the $\chi^2$-approximation with correction for continuity may, for some

* Under the condition $R = r$ and under $H_0$ the variate

$$\left(\left|A - \frac{m \cdot r}{t}\right| - \frac{1}{2}\right)^2 \times \frac{t^3}{m \cdot n \cdot r \cdot s}$$

has approximately a $\chi^2$ distribution with one degree of freedom.

value(s) of $r$, lead to discordance with the hypergeometric distribution the raised level $\gamma$ in the table is marked. For higher values of $m$ and $n$ this occurs frequently but it seems worse than it is in reality, because the discordancies only occur for a small fraction of the possible values of $r$.

II. *A rule of thumb.* If the outcome of a $2 \times 2$-table corresponds with a point of the sample space that is just outside the conditional critical region $K_r$ of FISHER's original test, one computes the probability $p'$ which would be used in the randomized FISHER test. This probability $p'$ is then compared with $\frac{2}{3}$; one rejects $H_0$ if $p' \geqslant \frac{2}{3}$.

The critical region that arises when this rule of thumb is used is almost always situated inside the critical region that arises if the table mentioned in I is used; so the use of this table yields more power.

The value $\frac{2}{3}$ has been found by numerical experimentation; a smaller value sometimes leads to an unconditional level of significance that exceeds $\alpha$.

As a matter of course the rule of thumb only could be controlled for sample sizes mentioned in I because for other sample sizes the value of $\gamma$ was not available. On this range for $m$ and $n$ there was no indication that the fitness of the rule of thumb depends on the sample sizes.

KLERK-GROBBEN and PRINS (1954) developed a similar rule of thumb for a problem closely related to our problem: testing the equality of two *small* probabilities in two samples of the same size. They arrive at the rule to reject $H_0$ if $p' > \frac{1}{2}$. Our more conservative value $\frac{2}{3}$ is valid for all probabilities and for equal and unequal sample sizes.

III. *A computer test.* There exists an ALGOL-60 program that computes for a given outcome of a $2 \times 2$-table the minimum critical region $K$ still containing this outcome. Then the maximum $\alpha_{\max}$ of the unconditional level of significance belonging to this region $K$ is computed and printed. This is an upper bound for the tailprobability and if $\alpha_{\max} \leqslant \alpha$ then $H_0$ is to be rejected.

## 6. Example

A $2 \times 2$-table of the type mentioned above exists of two samples with sample sizes 15 and 10. In each sample one finds 10 failures.

| | | |
|---|---|---|
| 5 | 10 | 15 |
| 0 | 10 | 10 |
| 0 | 20 | 25 |

The nullhypothesis $H_0 : p_1 = p_2$ is to be tested onesided, with a level of significance $\alpha = .05$, against the alternative hypothesis $p_1 > p_2$.

In the original test the exact hypergeometric probability

$$P[A \geqslant 5 \mid H_0, R = 5] = \binom{15}{5}\binom{10}{0}\Big/\binom{25}{5} = .0565$$

does not give reason to reject $H_0$ because $.0565 > .05$.

The table with raised unconditional levels of significance, however, gives $\gamma = .09$. So it is allowed, without further calculations, to reject $H_0$ because $.0565 < .09$.

Referring to this example some remarks can be made.

First it is to be shown that the use of the rule of thumb also leads to rejection of $H_0$:
The outcome of 10 failures in each sample is an outcome just outside the conditional critical region $K_r$ of the original FISHER test and in this one sided case $p' = (.05-0)/(.0565-0) = .88$ thus $p' > \frac{2}{3}$.

This outcome actually found in this $2 \times 2$-table is represented by the point $(a, b) = (5,0)$ in figure 1 and is one of the eight points added to the critical region by means of the raised level method. All these points except the point $(a, b) = (10,3)$ can also be found by means of the rule of thumb.

In the two sided test with $\alpha = .05$ the raised level of significance has the value $\gamma = .114$. Since the inequality $.565 < .144/2$ holds, this outcome even gives reason to reject $H_0$ in the two sided test with $\alpha = .05$. In that case, however, the use of the $\chi^2$-approximation (probability .63) does not lead to rejection of $H_0$. There is a warning against this at the bottom of the table. The use of the rule of thumb ($p' = .44$) does not lead to rejection either.

## 7. Other types of $2 \times 2$-tables and other conditional tests

An easy way to characterize each of the three best-known types of $2 \times 2$-tables is by means of the number of fixed marginal totals in the $2 \times 2$-table; the total $t$ is left out of consideration.

The type of $2 \times 2$-table of the present paper is then to be called the two-fixed-totals $2 \times 2$-table, for in this type $m$ and $n$ are fixed. It has been shown for this case that FISHER's test may be used with raised levels. Another type is the four-fixed-totals $2 \times 2$-table; all marginal totals $m$, $n$, $r$ and $s$ are fixed. This type is obtained if $A$ white balls are found in a sample of size $m$ drawn out of an urn containing $r$ white and $s$ black balls. In tests for this type the use of raised levels is not allowed.

In the test for the third type, the zero-fixed-totals $2 \times 2$-table, where all totals but $t$ are stochastic, it is permitted to use the rule of thumb in the same way as before while also a cautious use of the table with raised levels is allowed as is to be shown hereafter.

In the model corresponding with the zero-fixed-totals $2 \times 2$-table each of the items in a sample of size $t$ has or does not have property $V$ and also has or does not have property $W$.

The nullhypothesis $H_0$ to be tested is: $V$ and $W$ are stochastically independent.

Under the condition $M = m$ and under $H_0$, the distribution in this $2 \times 2$-table is the same as the distribution in the two-fixed-totals $2 \times 2$-table under $H_0$. Seeing that the use of the raised level $\gamma$ in the last mentioned $2 \times 2$-table leads to $\alpha_{\max}$ as the ultimate level of significance it is obvious that the level of significance in the first mentioned $2 \times 2$-table under the condition $M = m$ also is at most $\alpha_{\max}$. Since this holds for every $m$ it is clear that the overall level of significance does not exceed the chosen level $\alpha$. So the use of raised levels is allowed in this case too.

The only trouble is that there possibly are two different values of $\gamma$ to be found for besides the condition $M = m$ also the condition $R = r$ could have been considered; in the zero-fixed-totals $2 \times 2$-table the properties $V$ and $W$ are interchangeable and so are $R$ and $M$. It is, however, allowed to apply the smallest one of the two values for $\gamma$.

There are no problems with the application of the rule of thumb in case of the zero-fixed-totals $2 \times 2$-table, because in the calculations of $p'$, an interchange of $r$ and $m$ has no influence on the result.

Another approach to this problem would be to apply the process used for the two-fixed-totals $2 \times 2$-table in this paper in a generalized form to the zero-fixed-totals case. This would lead to a table of raised levels $\gamma$ as a function of $t$ only. The computational work involved is considerable and it is not certain that any further worthwhile increase of power would result. Further research on this point is desirable.

There are other tests based on discrete conditional distributions. These tests also derive their justification from the fact that the unconditional level of significance does not exceed the chosen conditional level $\alpha$. It is to be expected, however, that in the same way as described above raised conditional levels could be found.

In contrast with the case of the two-fixed-totals $2 \times 2$-table, where the unconditional size depends on the variable $p$, in other conditional tests the unconditional level often depends on several nuisance parameters. As in the case of the zero-fixed-totals $2 \times 2$-table, the computational work is then increased.

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Raised conditional level of significance for 2×2-tables (Fisher's test).

| Sample sizes | | Unconditional level of significance (one or two sided) : one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 2 | 1 | – | – | – | – | – | – | – | – |
| 2 | 2 | – | – | – | – | – | – | – | .3 |
| 3 | 1 | – | – | – | – | – | – | – | – |
| 3 | 2 | – | – | – | – | – | .2 | .4 | .2 |
| 3 | 3 | – | – | – | .1 | .2 | .1 | .2 | .10 |
| 4 | 1 | – | – | – | – | – | – | .6 | .3 |
| 4 | 2 | – | – | – | .1 | .2 | .1 | .2 | .3 |
| 4 | 3 | – | – | .1 | .1 | .2 | .13 | .26 | .2 |
| 4 | 4 | .04 | .08 | .04 | .025 | .050 | .1 | .2 | .23 |
| 5 | 1 | – | – | – | – | – | – | .6 | .2 |
| 5 | 2 | – | – | – | .1 | .2 | .05 | .4 | .2 |
| 5 | 3 | – | .10 | .05 | .09 | .18 | .14 | .28 | .2 |
| 5 | 4 | .02 | .04 | .02 | .1 | .2 | .14 | .28 | .2 |
| 5 | 5 | .01 | .02 | .01 | .05 | .10 | .09 | .18 | .24 |
| 6 | 1 | – | – | – | – | – | – | .4 | .2 |
| 6 | 2 | – | – | – | .07 | .14 | .16 | .32 | .23 |
| 6 | 3 | .03 | .06 | .03 | .06 | .2 | .2 | .4 | .2 |
| 6 | 4 | .01 | .02 | .03 | .05 | .10 | .1 | .248 | .2 |
| 6 | 5 | .014' | .028' | .03 | .064 | .128 | .15 | .30 | .19 |
| 6 | 6 | .02 | .04 | .02 | .07 | .14 | .11 | .22 | .25 |
| 7 | 1 | – | – | – | – | .4 | .2 | .4 | .2 |
| 7 | 2 | – | .10 | .05 | .05 | .2 | .1 | .2 | .2 |
| 7 | 3 | .02 | .04 | .01 | .05 | .16 | .1 | .2 | .2 |
| 7 | 4 | .02 | .04 | .03 | .07 | .14 | .108" | .30 | .20 |
| 7 | 5 | .02 | .04 | .04 | .06 | .12 | .1 | .2 | .2 |
| 7 | 6 | .020 | .040 | .024 | .074 | .148 | .1 | .2 | .20 |
| 7 | 7 | .014 | .028 | .03 | .04 | .08 | .11 | .22 | .2 |
| 8 | 1 | – | – | – | – | .4 | .2 | .4 | .2 |
| 8 | 2 | – | .08 | .04 | .1 | .2 | .1 | .42 ' | .21 ' |
| 8 | 3 | .01 | .08 | .04 | .058 | .2 | .14 | .28 | .24 |
| 8 | 4 | .014 | .04 | .02 | .05 | .138 | .12 | .24 | .2 |
| 8 | 5 | .01 | .02 | .03 | .07 | .14 | .11 | .22 | .184 |
| 8 | 6 | .016' | .032' | .02 | .06 | .12 | .1 | .2 | .17 |
| 8 | 7 | .014 | .028 | .03 | .07 | .16 | .09 | .18 | .21 |
| 8 | 8 | .018 | .036 | .018 | .05 | .10 | .12 | .24 | .15 |
| 9 | 1 | – | – | – | – | .30 | .15 | .52 | .26 |
| 9 | 2 | – | .06 | .03 | .08 | .28 | .14 | .28 | .23 |
| 9 | 3 | .005 | .06 | .03 | .07 | .14 | .11 | .28 | .2 |
| 9 | 4 | .017 | .034 | .04 | .06 | .18 | .11 | .22 | .21 |
| 9 | 5 | .02 | .04 | .025 | .05 | .10 | .10 | .24 | .17 |
| 9 | 6 | .009 | .028 | .03 | .07 | .14 | .11 | .22 | .2 |
| 9 | 7 | .016 | .040' | .023 | .066 | .140' | .1 | .2 | .18 |
| 9 | 8 | .013' | .026' | .034 | .0443 | .10 | .10 | .20 | .21 |
| 9 | 9 | .01 | .02 | .02 | .06 | .12 | .12 | .24 | .17 |
| 10 | 1 | – | – | – | – | .28 | .14 | .46 | .23 |
| 10 | 2 | .03 | .06 | .03 | .07 | .24 | .12 | .4 | .2 |
| 10 | 3 | .02 | .04 | .02 | .05 | .18 | .11 | .22 | .20 |
| 10 | 4 | .013 | .06 | .03 | .05 | .136 | .11 | .22 | .24 |
| 10 | 5 | .01 | .036 | .03 | .06 | .16 | .098 | .26 | .17 |
| 10 | 6 | .02 | .04 | .026 | .059 ' | .118' | .117" | .234" | .2147" |

If the chi-square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not-rejection (needless not-rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2-tables (Fisher's test).

| Sample sizes | | Unconditional level of significance (one or two sided) : one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 10 | 7 | .014 ' | .032 | .03 | .056 | .112 | .10 | .20 | .160 |
| 10 | 8 | .02 | .04 | .027 | .06 | .12 | .08 | .2 | .1833 |
| 10 | 9 | .014 | .034 | .021 | .053 | .1090' | .10 | .20 | .215 |
| 10 | 10 | .0114 | .0228 | .024 | .06 | .12 | .087 | .174 | .18 |
| 11 | 1 | – | – | – | – | .2 | .1 | .4 | .2 |
| 11 | 2 | .02 | .04 | .02 | .05 | .2 | .1 | .34 | .22 |
| 11 | 3 | .02 | .06 " | .03 " | .07 | .190 | .12 | .24 | .2 |
| 11 | 4 | .02 | .04 | .029 | .07 | .14 | .12 | .24 | .2 |
| 11 | 5 | .01 | .04 | .034 | .059 ' | .14 | .12 | .24 | .2 |
| 11 | 6 | .013 | .0346' | .024 | .06 | .12 | .10 | .24 | .18 |
| 11 | 7 | .012 ' | .024 ' | .02 | .045 | .110 ' | .111 | .222 | .18 |
| 11 | 8 | .012 | .024 | .023 | .05 | .10 | .1 | .2 | .173 |
| 11 | 9 | .0122' | .0244' | .029 | .05 | .10 | .09 | .18 | .17 |
| 11 | 10 | .016 | .032 | .0225 | .0562' | .1124' | .11 | .22 | .217 |
| 11 | 11 | .014 | .028 | .03 | .042 | .084 | .096 | .192 | .17 |
| 12 | 1 | – | – | – | – | .2 | .1 | .4 | .2 |
| 12 | 2 | .02 | .04 | .02 | .09 | .26 | .13 | .4 | .2 |
| 12 | 3 | .01 | .050 " | .025 " | .06 | .16 " | .1 | .28 | .23 |
| 12 | 4 | .01 | .044 | .022 | .055 | .132 | .117 " | .234 " | .19 |
| 12 | 5 | .0115 | .036 | .025 | .056 | .148 | .1 | .2 | .196 |
| 12 | 6 | .012 ' | .034 | .0219 | .06 | .12 | .11 | .236 | .19 |
| 12 | 7 | .017 ' | .034 ' | .025 | .05 | .10 | .11 | .250 | .2 |
| 12 | 8 | .0153 | .0306 | .024 ' | .053 ' | .106 ' | .105 | .22 | .17 |
| 12 | 9 | .013 | .026 | .023 | .05 | .10 | .079 ' | .2 | .18 |
| 12 | 10 | .014 ' | .028 ' | .02 | .047 | .094 | .09 | .18 | .17 |
| 12 | 11 | .010 ' | .020 ' | .0257 ' | .058 ' | .116 ' | .11 | .22 | .152 |
| 12 | 12 | .011 | .022 | .0194 ' | .048 ' | .096 ' | .10 | .20 | .17 |
| 13 | 1 | – | – | – | – | .2 | .1 | .4 | .2 |
| 13 | 2 | .014 | .08 | .04 | .07 | .22 | .11 | .34 | .23 |
| 13 | 3 | .01 | .06 | .03 | .07 " | .18 | .12 | .28 | .20 ' |
| 13 | 4 | .017 | .052 | .026 | .07 | .14 | .11 | .26 | .21 |
| 13 | 5 | .019 | .038 | .026 | .062 " | .16 | .094 ' | .24 | .175 |
| 13 | 6 | .013 | .026 | .023 | .06 | .12 | .093 | .20 | .2 |
| 13 | 7 | .011 ' | .022 ' | .028 | .055 | .110 | .1014 | .208 | .1751 |
| 13 | 8 | .013 | .0286 | .024 | .044 | .1268' | .1 | .234 | .18 |
| 13 | 9 | .015 | .030 | .02304' | .05 ' | .106 ' | .099 ' | .212 | .16 |
| 13 | 10 | .012 ' | .024 ' | .0257 | .05 | .10 | .09 | .18 | .18 |
| 13 | 11 | .012 ' | .0336 | .021 ' | .053 | .106 | .09 | .18 | .17 |
| 13 | 12 | .0126' | .0252' | .023 | .062 | .124 | .0818 | .1636 | .16 |
| 13 | 13 | .013 | .026 | .0234 | .053 | .106 | .09 | .18 | .17 |
| 14 | 1 | – | – | – | – | .2 | .1 | .48 | .24 |
| 14 | 2 | .01 | .06 | .03 | .06 | .2 | .1 | .30 | .2 |
| 14 | 3 | .02 " | .050 | .025 | .052 | .14 | .1 | .244 | .21 |
| 14 | 4 | .013 | .04 | .027 | .06 | .12 | .09 | .24 | .204 |
| 14 | 5 | .014 | .04 | .03 | .06 | .138 ' | .116 | .232 | .2 |
| 14 | 6 | .0120' | .0356 | .032 | .054 | .132 | .1 | .2 | .19 |
| 14 | 7 | .016 ' | .032 ' | .023 | .06 ' | .12 ' | .099 " | .22 | .19 |
| 14 | 8 | .010 ' | .022 ' | .026 | .05 | .10 | .093 | .186 | .17 |
| 14 | 9 | .016 ' | .032 ' | .02 | .05 | .116 | .10 | .222 | .17 |
| 14 | 10 | .016 | .032 | .023 ' | .049 ' | .108 | .095 ' | .190 ' | .166 |

If the chi-square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not-rejection (needless not-rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2–tables (Fisher's test).

| Sample sizes | | Unconditional level of significance (one or two sided) : one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 14 | 11 | .013 | .0288 ' | .027 ' | .043 ' | .10 | .097 | .194 | .17 |
| 14 | 12 | .0090 ' | .0242 ' | .023 | .0525' | .114 | .09 | .18 | .17 |
| 14 | 13 | .0129 ' | .030 | .024 | .041 ' | .082 ' | .088 | .176 | .165 |
| 14 | 14 | .0104 ' | .0208 ' | .022 ' | .05 ' | .10 ' | .09 | .18 | .18 |
| 15 | 1 | – | – | – | .1 | .2 | .1 | .46 | .23 |
| 15 | 2 | .01 | .06 | .03 | .06 | .26 | .13 | .36 | .22 |
| 15 | 3 | .016 " | .06 | .03 | .06 | .18 | .13 | .26 | .22 |
| 15 | 4 | .010 | .044 | .022 | .06 | .16 | .11 | .24 | .2 |
| 15 | 5 | .011 | .030 | .023 | .055 ' | .110 ' | .11 | .22 | .20 |
| 15 | 6 | .0115 | .032 | .025 | .0551' | .1102' | .10 | .20 | .183 |
| 15 | 7 | .011 ' | .030 | .022 " | .056 | .112 | .104 | .22 | .17 |
| 15 | 8 | .015 ' | .030 ' | .023 | .057 | .12 | .097 | .208 | .17 |
| 15 | 9 | .012 ' | .024 ' | .0244 | .047 " | .12 | .10 | .20 | .18 |
| 15 | 10 | .011 | .022 | .02 | .0526 | .114 ' | .09 | .18 | .154 |
| 15 | 11 | .0107 ' | .0214 ' | .024 ' | .048 ' | .108 | .083 | .184 ' | .167 " |
| 15 | 12 | .012 | .030 | .0192 ' | .047 | .094 | .1019 | .2038 | .17 |
| 15 | 13 | .011 ' | .022 ' | .025 | .05 | .10 | .10 | .20 | .141 |
| 15 | 14 | .012 ' | .0286 | .0194 ' | .0459' | .0918' | .09 | .188 | .16 |
| 15 | 15 | .012 | .024 | .02505 | .054 | .108 | .10 | .20 | .134 |
| 16 | 1 | – | – | – | .1 | .2 | .1 | .42 | .21 |
| 16 | 2 | .008 | .048 | .024 | .05 | .24 | .12 | .32 | .2 |
| 16 | 3 | .014 " | .06 | .03 | .07 | .14 | .11 | .22 | .2 |
| 16 | 4 | .014 | .036 | .03 " | .05 | .128 | .13 | .26 | .21 ' |
| 16 | 5 | .02 | .04 | .023 " | .05 | .1262 | .11 | .24 | .1828 |
| 16 | 6 | .012 " | .04 | .02304" | .05 | .132 | .097 | .230 | .173 |
| 16 | 7 | .011 | .026 | .0243 ' | .05 ' | .10 ' | .091 | .22 | .17 |
| 16 | 8 | .01 ' | .026 | .024 | .054 | .108 | .093 | .186 | .18 |
| 16 | 9 | .011 | .028 ' | .024 ' | .0529 | .12 | .0976 | .20 | .174 |
| 16 | 10 | .0133 | .0266 | .0177 ' | .049 | .104 | .10 | .20 | .17 |
| 16 | 11 | .0129 ' | .0258 ' | .022 | .05 | .110 ' | .09 | .202 | .168 |
| 16 | 12 | .0114 ' | .0228 ' | .023 ' | .053 | .106 | .089 ' | .1854' | .163 |
| 16 | 13 | .013 | .026 | .021 ' | .05 | .10 | .09 | .20 | .17 |
| 16 | 14 | .012 | .02614 | .024 | .05 | .10 | .0775 | .16 | .147 |
| 16 | 15 | .0091 ' | .0182 ' | .022 | .048 | .1002' | .093 | .196 | .16 |
| 16 | 16 | .010 ' | .020 ' | .0157 | .0376 | .0752 | .076 | .152 | .144 |
| 17 | 1 | – | – | – | .08 | .28 | .14 | .4 | .2 |
| 17 | 2 | .007 | .04 | .02 | .07 | .22 | .11 | .416 " | .208 " |
| 17 | 3 | .01 " | .04 | .02 | .06 | .20 | .12 | .282 | .20 |
| 17 | 4 | .014 | .050 " | .025 " | .065 | .162 | .1 | .26 | .212 |
| 17 | 5 | .014 | .028 | .022 " | .0489' | .12 | .103 | .22 | .19 |
| 17 | 6 | .015 | .030 | .026 | .058 " | .1188 | .11 | .22 | .19 |
| 17 | 7 | .011 ' | .036 | .01947' | .058 " | .1188' | .11 | .22 | .17 |
| 17 | 8 | .014 ' | .028 ' | .0205 ' | .05 | .124 | .10 | .22 | .189 |
| 17 | 9 | .0118 | .024 ' | .023 | .0483 | .0966 | .10 | .226 | .17 |
| 17 | 10 | .013 ' | .028 ' | .023 ' | .044 ' | .106 | .0897 | .198 ' | .161 " |
| 17 | 11 | .013 | .026 | .0216 ' | .051 | .112 | .09 | .18 | .16 |
| 17 | 12 | .0106 ' | .024 | .024 | .053 ' | .1070' | .078 | .196 | .164 |
| 17 | 13 | .011 ' | .024 ' | .017 | .044 ' | .092 ' | .092 | .184 | .16 |
| 17 | 14 | .01064' | .02128' | .023 | .046 | .092 | .09 | .20 | .17 |
| 17 | 15 | .013 | .026 | .0171 ' | .0405' | .0810' | .0829' | .1658' | .154 |

If the chi–square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not–rejection (needless not–rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2–tables (Fisher's test).

Unconditional level of significance (one or two sided) :

| Sample sizes | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 17 | 16 | .0108 ' | .0216 ' | .0214' | .049 | .104 ' | .096 | .192 | .16 |
| 17 | 17 | .0125 | .0250 | .0187' | .041 | .082 | .081 | .162 | .15 |
| 18 | 1 | – | – | – | .07 | .26 | .13 | .4 | .2 |
| 18 | 2 | .006 | .036 | .018 | .06 | .26 | .13 | .34 | .21 ' |
| 18 | 3 | .0147 " | .054 | .027 | .067 | .170 | .11 | .22 | .20 |
| 18 | 4 | .012 | .050 " | .025 " | .06 | .12 | .11 | .272 | .205 |
| 18 | 5 | .014 ' | .044 | .0279 | .05 | .116 | .10 | .24 | .204 |
| 18 | 6 | .013 ' | .026 ' | .025 ' | .063 ' | .126 ' | .10 | .230 | .18 |
| 18 | 7 | .014 " | .028 " | .025 ' | .06 | .12 | .09 | .206 | .180 ' |
| 18 | 8 | .01225 | .028 | .0214" | .06 | .12 | .09 | .2014 | .169 |
| 18 | 9 | .013 ' | .026 ' | .021 ' | .047 | .110 | .096 ' | .208 | .168 |
| 18 | 10 | .0111 ' | .0222 ' | .022 ' | .053 ' | .106 ' | .094 | .20 | .17 |
| 18 | 11 | .014 ' | .028 ' | .018 " | .048 | .102 | .092 ' | .184 ' | .17 |
| 18 | 12 | .009 ' | .026 | .0204' | .05 | .112 | .09 | .198 | .1618 |
| 18 | 13 | .011 | .022 | .026 ' | .051 ' | .106 ' | .085 | .18 | .169 |
| 18 | 14 | .011 ' | .026 ' | .020 ' | .048 ' | .096 ' | .092 | .184 | .162 " |
| 18 | 15 | .0111 | .0222 | .019 ' | .047 | .094 | .09 | .18 | .17 |
| 18 | 16 | .0119 | .028 ' | .0196' | .0445 | .0890 | .0871' | .1742' | .156 |
| 18 | 17 | .011 ' | .024 ' | .0227 | .051 | .102 | .093 | .20 | .16 |
| 18 | 18 | .009 ' | .018 ' | .0204' | .04608 | .09216 | .085 | .170 | .155 |
| 19 | 1 | – | – | – | .07 | .24 | .12 | .36 | .18 |
| 19 | 2 | .016 | .032 | .016 | .06 | .22 | .11 | .40 ' | .20 ' |
| 19 | 3 | .008 " | .046 | .023 | .06 | .18 | .11 | .280 | .2 |
| 19 | 4 | .0147 " | .044 " | .022 " | .061 " | .14 | .11 | .22 | .192 |
| 19 | 5 | .014 " | .0370 | .023 | .06 | .12 | .11 | .22 | .185 |
| 19 | 6 | .014 " | .032 | .024 | .055 | .122 | .097 " | .194 " | .17 |
| 19 | 7 | .012 " | .032 | .0236 | .052 ' | .118 " | .097 | .194 | .170 |
| 19 | 8 | .013 ' | .026 ' | .024 ' | .050 | .110 | .089 | .196 | .17 |
| 19 | 9 | .0114 | .0256 | .0242" | .0513 | .1026 | .088 | .176 | .192 |
| 19 | 10 | .010 " | .0286 | .02 ' | .055 | .110 | .09 | .18 | .18 |
| 19 | 11 | .0104 ' | .0208 ' | .021 ' | .046 " | .10 ' | .092 | .20 | .164 |
| 19 | 12 | .013 ' | .026 ' | .0218" | .0498 ' | .0996 ' | .0861' | .188 | .16 |
| 19 | 13 | .0105 ' | .0210 ' | .0200' | .05 | .10 | .08 | .16 | .16 |
| 19 | 14 | .012 ' | .024 ' | .0168' | .0414 | .100 ' | .091 | .182 | .16 |
| 19 | 15 | .0097 ' | .0194 ' | .0218' | .050 | .100 | .09 | .18 | .1593" |
| 19 | 16 | .012 | .024 | .02 ' | .05 | .10 | .0747' | .18 | .14 |
| 19 | 17 | .0093 ' | .01950 ' | .021 | .0469 ' | .096 ' | .086 | .180 | .16 |
| 19 | 18 | .011 ' | .023350' | .0156' | .048 ' | .1010 | .0701 | .190 | .16 |
| 19 | 19 | .0099 ' | .0198 ' | .021 | .045 ' | .090 ' | .088 | .176 | .15 |
| 20 | 1 | – | – | – | .06 | .24 | .12 | .44 | .22 |
| 20 | 2 | .014 | .06 | .03 | .05 | .20 | .10 | .36 ' | .22 |
| 20 | 3 | .014 | .040 | .020 | .05 | .16 | .12 | .24 | .208 |
| 20 | 4 | .012 " | .050 | .025 | .052 " | .128 | .10 | .24 | .2 |
| 20 | 5 | .014 " | .038 | .024 " | .06 ' | .12 ' | .10 | .230 | .18 |
| 20 | 6 | .011 " | .0350 | .023 " | .052 | .1068 | .10 | .230 | .18 |
| 20 | 7 | .0094 " | .030 ' | .0237" | .049 " | .136 | .09 " | .20 | .20 |
| 20 | 8 | .010 ' | .032 " | .0222" | .052 | .12 | .104 ' | .208 ' | .18 |
| 20 | 9 | .0114 ' | .0228 ' | .0224" | .051 ' | .102 ' | .10 | .20 | .17 |
| 20 | 10 | .0113 ' | .0234 ' | .023 ' | .0448 ' | .0896 ' | .097 | .2072" | .17 |
| 20 | 11 | .011 ' | .0270 | .024 | .0501 | .1002 | .0857 | .1714 | .16 |

If the chi–square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not–rejection (needless not–rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2–tables (Fisher's test).

Unconditional level of significance (one or two sided) :

| Sample sizes | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 20 | 12 | .0114 ' | .0228 ' | .01849" | .046 ' | .112 | .09 | .18 | .162 |
| 20 | 13 | .0091 " | .024 ' | .021 ' | .047 ' | .100 ' | .09 | .18 | .157 " |
| 20 | 14 | .011 ' | .022 ' | .0202 ' | .05 | .10 | .080 | .174 | .15 |
| 20 | 15 | .012 ' | .024 ' | .0191 ' | .043 | .098 ' | .08 | .180 | .16 |
| 20 | 16 | .01056' | .02112' | .01993' | .046 ' | .102 | .09 | .1906' | .157 " |
| 20 | 17 | .013 | .026 | .0178 ' | .0399 ' | .084 | .079 | .160 | .1469 |
| 20 | 18 | .0106 ' | .0212 ' | .0204 ' | .046 | .0994 | .087 | .18 | .154 |
| 20 | 19 | .0113 | .0240 ' | .018 ' | .0388 ' | .0776 ' | .0754' | .1508' | .1332 |
| 20 | 20 | .011 ' | .022 ' | .0216 | .047 ' | .094 ' | .08 | .16 | .155 |
| 21 | 1 | – | – | – | .06 | .22 | .11 | .42 | .21 |
| 21 | 2 | .012 | .052 | .026 | .063 | .20 | .12 | .40 | .20 |
| 21 | 3 | .012 | .06 " | .03 " | .060 " | .20 | .12 | .26 | .21 |
| 21 | 4 | .0101 " | .044 | .03 " | .055 " | .14 | .112 | .224 | .20 |
| 21 | 5 | .01435" | .032 | .025 " | .0554 | .128 | .096 ' | .22 | .20 ' |
| 21 | 6 | .014 | .032 | .0243 " | .053 " | .130 ' | .105 | .210 | .185 |
| 21 | 7 | .012 ' | .030 | .020 " | .057 | .1204 | .092 ' | .184 ' | .16 |
| 21 | 8 | .011 " | .022 " | .02 ' | .054 ' | .108 ' | .10 | .20 | .1795 |
| 21 | 9 | .0118 ' | .0236 ' | .0206 " | .052 | .104 | .093 ' | .196 | .155 |
| 21 | 10 | .015 " | .030 " | .01930" | .056 | .112 | .095 " | .196 | .153 |
| 21 | 11 | .0106 " | .0228 ' | .020 ' | .046 | .106 | .088 | .204 ' | .1626" |
| 21 | 12 | .0123 " | .0254 | .024 ' | .047 " | .094 " | .093 | .186 | .165 |
| 21 | 13 | .0115 ' | .0230 ' | .0205 ' | .049 | .106 | .085 | .170 | .16 |
| 21 | 14 | .0105 ' | .0210 ' | .0208 ' | .0446 ' | .098 | .086 | .184 | .16 |
| 21 | 15 | .012 | .024 | .0203 ' | .0393 " | .090 | .085 | .1752' | .168 |
| 21 | 16 | .0091 ' | .0194 | .019 | .0468 ' | .096 ' | .0866 | .176 | .15 |
| 21 | 17 | .01131' | .0228 ' | .0199 ' | .0469 ' | .0938 ' | .09 | .18 | .154 |
| 21 | 18 | .0086 ' | .020 ' | .0192 ' | .0425 ' | .0850 ' | .083 | .166 | .147 |
| 21 | 19 | .0113 | .0236 ' | .0210 | .047 | .102 | .08 | .184 | .154 |
| 21 | 20 | .00908' | .01816' | .0197 ' | .0424 | .0848 | .0786 | .160 | .139 |
| 21 | 21 | .0102 ' | .0204 ' | .02 | .049 | .098 | .085 | .170 | .16 |
| 22 | 1 | – | – | – | .06 | .2 | .1 | .4 | .2 |
| 22 | 2 | .02 " | .046 | .023 | .06 | .22 | .11 | .38 | .19 |
| 22 | 3 | .011 | .054 " | .027 " | .06 | .186 | .11 | .244 | .21 |
| 22 | 4 | .0143 " | .052 " | .026 " | .06 | .12 | .10 | .22 | .21 |
| 22 | 5 | .014 | .04 " | .026 " | .055 " | .128 | .10 | .208 | .187 " |
| 22 | 6 | .011 | .042 " | .0215 " | .053 ' | .106 ' | .094 | .22 | .193 " |
| 22 | 7 | .013 ' | .026 ' | .024 ' | .050 " | .100 " | .09 | .18 | .18 |
| 22 | 8 | .0132 " | .0278 " | .023 ' | .0547 " | .1094 " | .103 " | .210 | .17 |
| 22 | 9 | .0134 | .0268 | .025 " | .0498 ' | .0996 ' | .087 | .208 ' | .17 |
| 22 | 10 | .0113 ' | .028 ' | .024 " | .048 | .102 ' | .0835' | .172 " | .17 |
| 22 | 11 | .013 ' | .026 ' | .0234 ' | .050 | .1012 ' | .086 | .172 | .17 |
| 22 | 12 | .0104 " | .0208 " | .0196 ' | .0551 | .1102 | .09 | .186 | .16 |
| 22 | 13 | .012 ' | .024 ' | .017 ' | .042 " | .1004 ' | .085 ' | .18 | .16 |
| 22 | 14 | .0091 " | .022 ' | .022 ' | .048 | .1022 | .091 ' | .1834' | .17 |
| 22 | 15 | .010 ' | .020 ' | .0204 ' | .048 | .096 | .077 ' | .176 | .16 |
| 22 | 16 | .0100 ' | .024 | .0185 ' | .0435 | .094 | .085 ' | .170 ' | .161 |
| 22 | 17 | .01015' | .02030' | .020 | .048 ' | .096 ' | .086 | .172 | .15 |
| 22 | 18 | .00997' | .024 ' | .0159 ' | .047 ' | .094 ' | .072 | .18 | .1351" |
| 22 | 19 | .0099 ' | .0198 ' | .020 ' | .04475 | .08950 | .084 | .168 | .15 |
| 22 | 20 | .0110 | .024 | .01548' | .048 | .098 ' | .0882' | .180 | .155 |

If the chi–square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not–rejection (needless not–rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2–tables (Fisher's test).

Unconditional level of significance (one or two sided) :

| Sample sizes | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 22 | 21 | .0097 ' | .0204 ' | .020 ' | .043 | .088 | .0822 | .168 | .144 |
| 22 | 22 | .0107 ' | .0214 ' | .0166 ' | .051 | .102 | .09267 ' | .18534' | .16 |
| 23 | 1 | – | – | – | .05 | .2 | .1 | .38 | .19 |
| 23 | 2 | .015 " | .042 | .021 | .054 | .20 | .10 | .356 | .2 |
| 23 | 3 | .016 " | .056 | .028 | .06 | .14 | .118 | .26 | .19 |
| 23 | 4 | .015 " | .044 " | .022 " | .063 " | .14 | .12 | .24 | .19 |
| 23 | 5 | .014 " | .034 " | .022 " | .056 | .1238 | .11 | .240 ' | .2071 |
| 23 | 6 | .01397" | .02794" | .028 " | .05 | .134 | .09 | .22 | .180 ' |
| 23 | 7 | .011 ' | .030 " | .025 " | .058 " | .120 ' | .098 | .196 | .18 |
| 23 | 8 | .0122 " | .0274 ' | .023 " | .050 " | .110 " | .087 ' | .174 ' | .171 |
| 23 | 9 | .0115 " | .0252 " | .022 " | .044 " | .10 ' | .089 | .20 | .17 |
| 23 | 10 | .0115 | .0238 ' | .0217 " | .048 | .1154 ' | .099 | .20136' | .16 |
| 23 | 11 | .010 ' | .0248 ' | .021 ' | .043 | .094 ' | .09 | .192 " | .162 |
| 23 | 12 | .0117 " | .02356" | .023 ' | .0473 | .0946 | .09 | .188 | .164 |
| 23 | 13 | .0094 ' | .0196 ' | .021 ' | .0467 " | .096 ' | .087 ' | .174 ' | .17 |
| 23 | 14 | .0112 ' | .0224 ' | .0189 | .0469 ' | .0938 ' | .09 | .18 | .1612 |
| 23 | 15 | .0103 ' | .0212 ' | .020 ' | .046 | .092 | .086 ' | .174 ' | .156 |
| 23 | 16 | .0101 ' | .0202 ' | .020 ' | .047 | .094 | .081 | .1696 | .1581" |
| 23 | 17 | .0085 ' | .02046' | .020 ' | .0469 | .096 | .0824 ' | .1648 ' | .156 |
| 23 | 18 | .010 | .0212 ' | .020 | .0492 ' | .0984 ' | .084 | .172 ' | .15 |
| 23 | 19 | .0103 ' | .0206 ' | .018 | .0391 ' | .0952 | .076 | .162 ' | .1412 |
| 23 | 20 | .0104 ' | .0208 ' | .022 | .046 | .092 | .082 | .172 | .152 |
| 23 | 21 | .0078 ' | .022 ' | .0173 ' | .0365 ' | .0974 ' | .06921 ' | .178 ' | .155 |
| 23 | 22 | .0103 ' | .0206 ' | .020 ' | .045 | .0932 | .0848 | .1708 | .144 |
| 23 | 23 | .0086 ' | .0172 ' | .0178 ' | .03787 | .07574 | .069 | .138 | .16 |
| 24 | 1 | – | – | – | .05 | .2 | .1 | .38 | .19 |
| 24 | 2 | .014 " | .0370 | .0185 | .05 | .20 | .10 | .36 | .18 |
| 24 | 3 | .014 " | .0506 | .0253 | .06 | .18 | .113 " | .24 | .20 |
| 24 | 4 | .013 " | .056 | .028 | .055 " | .12 | .10 | .232 | .194 ' |
| 24 | 5 | .012 " | .036 " | .023 " | .06 " | .1372 | .105 | .210 | .19 |
| 24 | 6 | .014 " | .028 " | .021 ' | .056 | .112 | .10 | .228 | .174 |
| 24 | 7 | .0123 " | .0246 " | .0218 " | .054 | .108 | .102 | .204 | .174 |
| 24 | 8 | .0114 " | .0236 ' | .023 " | .048 " | .096 " | .102 ' | .2070 " | .17 |
| 24 | 9 | .00916' | .0250 " | .0203 " | .0527 | .112 ' | .10 | .20 | .178 " |
| 24 | 10 | .00963' | .022 ' | .0195 " | .0503 | .112 | .095 | .190 | .1544 |
| 24 | 11 | .0104 ' | .024 ' | .0196 " | .053 ' | .106 ' | .089027" | .186 " | .18 |
| 24 | 12 | .0102 " | .0228 ' | .021 " | .053 | .106 | .09 | .188 | .17 |
| 24 | 13 | .0114 ' | .0228 ' | .021 ' | .041 " | .082 " | .093 | .186 | .156 |
| 24 | 14 | .012 ' | .024 ' | .01868" | .049 " | .098 " | .080 ' | .172 ' | .16 |
| 24 | 15 | .0087 ' | .0212 ' | .0194 ' | .046 ' | .104 | .084 | .168 | .154 |
| 24 | 16 | .0111 ' | .0222 ' | .0202 ' | .047 ' | .0958 " | .082 ' | .172 | .156 |
| 24 | 17 | .0101 ' | .0202 ' | .0174 ' | .041 ' | .082 ' | .081 | .162 | .155 |
| 24 | 18 | .01004' | .0202 ' | .020 ' | .044 | .0952 ' | .080 ' | .170 | .156 |
| 24 | 19 | .0103 | .022 ' | .0202 | .049 ' | .098 ' | .083 | .1712 | .157 |
| 24 | 20 | .00911' | .020 ' | .018 | .041 ' | .086 ' | .080 ' | .1646 ' | .1454 |
| 24 | 21 | .011 ' | .0230 ' | .01997' | .0436 ' | .094 | .0837 | .174 | .153 |
| 24 | 22 | .00887' | .01774' | .0188 ' | .0395 | .0796 ' | .0737 | .1474 | .155 |
| 24 | 23 | .0104 ' | .022 ' | .0202 ' | .0447 | .092 | .082 | .174 | .147 |
| 24 | 24 | .0093 ' | .0186 ' | .019 ' | .0407 | .0814 | .073 | .146 | .15 |
| 25 | 1 | – | – | – | .05 | .18 | .09 | .36 | .18 |

If the chi–square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not–rejection (needless not–rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2–tables (Fisher's test).

| Sample sizes | | Unconditional level of significance (one or two sided) : | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
| 25 | 2 | .01 " | .04 " | .02 " | .046 | .22 | .11 | .34 | .2 |
| 25 | 3 | .012 " | .056 | .028 | .06 | .16 | .107 " | .24 | .207 " |
| 25 | 4 | .014 " | .048 | .024 | .065 | .1526 " | .11 | .256 | .21 |
| 25 | 5 | .013 " | .040 " | .0225 " | .061 " | .1360 " | .096 | .24 | .191 |
| 25 | 6 | .012 " | .0332 | .0255 " | .061 | .122 | .099 | .198 | .18 " |
| 25 | 7 | .011 " | .028 | .0256 " | .048 | .120 | .093 | .210 ' | .196 |
| 25 | 8 | .0148 " | .0296 " | .0202 " | .055 ' | .110 ' | .092 | .184 | .174 |
| 25 | 9 | .013 " | .0284 ' | .02339' | .049 | .106 | .091 ' | .182 ' | .169 |
| 25 | 10 | .011 " | .026 ' | .02 ' | .048 ' | .1054 " | .0887" | .1780 | .17 |
| 25 | 11 | .010 ' | .026 ' | .022 " | .0483 " | .098 | .081 " | .1826' | .16 |
| 25 | 12 | .012 ' | .024 ' | .021 ' | .048 ' | .096 ' | .080 ' | .160 ' | .162 |
| 25 | 13 | .010 ' | .020 ' | .01906' | .048 | .0986 | .085 ' | .170 ' | .166 |
| 25 | 14 | .0109 " | .0226 ' | .019 ' | .0442 | .104 ' | .0856 | .186 ' | .17 |
| 25 | 15 | .0126 | .0260 ' | .018 ' | .04586 " | .09172" | .09 | .190 | .158 |
| 25 | 16 | .0101 ' | .0212 " | .020 ' | .045 ' | .098 | .088 | .176 | .15 |
| 25 | 17 | .0106 ' | .0212 ' | .019 ' | .046 ' | .092 ' | .0798' | .1596' | .157 " |
| 25 | 18 | .00819' | .0204 ' | .0194 ' | .04424 " | .090 | .081 | .178 | .15 |
| 25 | 19 | .0102 ' | .02106' | .020 ' | .0454 | .094 ' | .084 | .168 | .15 |
| 25 | 20 | .0105 ' | .0210 ' | .0163 ' | .049 ' | .098 ' | .0704 | .164 | .154 |
| 25 | 21 | .0101 ' | .0202 ' | .0193 ' | .044 ' | .088 ' | .0819 | .1638 | .147 |
| 25 | 22 | .0104 ' | .024 | .0153 ' | .0443 ' | .096 | .08 | .18 | .153 |
| 25 | 23 | .0098 ' | .0196 ' | .01935' | .042 | .08534' | .077 ' | .1550' | .131 |
| 25 | 24 | .0109 ' | .0218 ' | .01565' | .0436 ' | .092 | .084 | .178 | .150 |
| 25 | 25 | .0103 | .0206 | .0188 ' | .041 | .082 | .076 | .152 | .1285 |
| 26 | 1 | – | – | – | .04 | .18 | .09 | .42 | .21 |
| 26 | 2 | .01 " | .054 | .027 | .06 " | .20 | .10 | .38 | .19 |
| 26 | 3 | .010 " | .050 | .025 | .05 | .18 | .11 | .22 | .21 ' |
| 26 | 4 | .013 " | .04 | .029 " | .06 | .12 | .1144 | .24 | .19 |
| 26 | 5 | .015 " | .0348 " | .027 " | .053 " | .130 | .10 | .2236" | .18 |
| 26 | 6 | .012 " | .032 ' | .022 " | .053 | .122 " | .093 | .2318 | .196 " |
| 26 | 7 | .013 ' | .026 ' | .0230 " | .0514 " | .12 ' | .097 | .194 | .175 |
| 26 | 8 | .0115 ' | .0230 ' | .020 ' | .051 " | .106 | .10 | .22 | .172 |
| 26 | 9 | .0112 " | .0224 " | .022 ' | .04868 ' | .09736' | .0950" | .192 ' | .17 |
| 26 | 10 | .0112 ' | .0224 ' | .023 " | .046 " | .0932 ' | .09 | .18 | .176 |
| 26 | 11 | .012 ' | .024 ' | .021 " | .042 " | .090 ' | .087 | .174 | .156 |
| 26 | 12 | .009 ' | .0228 ' | .0205 " | .0416 ' | .1044 ' | .092 " | .184 " | .153 |
| 26 | 13 | .010 " | .026 ' | .021 ' | .043 ' | .086 ' | .094 | .188 | .152 |
| 26 | 14 | .0092 ' | .0184 ' | .0207 ' | .0478 | .0956 | .083 | .1984 | .159 |
| 26 | 15 | .0102 ' | .0218 ' | .0188 " | .047 ' | .094 ' | .085 | .170 | .15 |
| 26 | 16 | .009 " | .0238 | .01967 | .04275 ' | .08954' | .086 | .172 | .15 |
| 26 | 17 | .0102 ' | .0204 ' | .019 ' | .0461 | .094 | .083 | .166 | .157 |
| 26 | 18 | .0107 ' | .0214 ' | .0166 ' | .03897 ' | .09110' | .082 | .1694 | .148 |
| 26 | 19 | .0095 ' | .0194 ' | .019 ' | .044 | .088 | .08 | .174 | .16 |
| 26 | 20 | .0104 ' | .0208 ' | .02006 | .0456 ' | .0912 ' | .08 | .16 | .153 |
| 26 | 21 | .00826' | .02054' | .018 | .0389 | .086 ' | .0745 | .160 | .1357 |
| 26 | 22 | .0102 ' | .0204 ' | .0205 ' | .0426 ' | .0852 ' | .079 ' | .158 ' | .15036 |
| 26 | 23 | .0079 ' | .02210' | .017 ' | .0455 ' | .0910 ' | .08 | .16 | .153 |
| 26 | 24 | .0099 ' | .0212 ' | .0192 ' | .043016' | .088 | .0781' | .1618' | .135 |
| 26 | 25 | .00823' | .01646' | .01716' | .0452 ' | .094 | .083 | .172 | .153 |
| 26 | 26 | .0097 ' | .0194 ' | .0196 ' | .043 | .086 | .078 | .156 | .133 |

If the chi–square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not–rejection (needless not–rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2-tables (Fisher's test).

Unconditional level of significance (one or two sided) :

| Sample sizes | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 27 | 1 | – | – | – | .04 | .16 | .08 | .42 | .21 |
| 27 | 2 | .01 " | .04934 | .02467 | .056 " | .20 | .10 | .34 | .17 |
| 27 | 3 | .015 " | .046 | .023 | .06 " | .16 | .11 | .26 | .197 " |
| 27 | 4 | .014 " | .052 " | .026 " | .0623 " | .146 | .104 | .24 | .20 |
| 27 | 5 | .01165" | .0410 | .023 " | .0565 " | .14 | .103 " | .22 | .18 |
| 27 | 6 | .012 " | .032 " | .0246 " | .05336" | .12 | .105 | .210 | .185 ' |
| 27 | 7 | .0136 " | .028 " | .021 " | .055 | .12 " | .0896 ' | .22 | .17 |
| 27 | 8 | .014 " | .0310 " | .022 ' | .05 ' | .10 ' | .096 ' | .192 ' | .16 |
| 27 | 9 | .012 " | .0276 | .022 " | .0463 " | .116 " | .087 " | .174 " | .166 |
| 27 | 10 | .0113 " | .028 " | .022 " | .043 ' | .106 | .095 | .190 | .162 |
| 27 | 11 | .0109 " | .0218 " | .0194 " | .048 ' | .096 ' | .0868 ' | .1764 " | .166 |
| 27 | 12 | .0104 ' | .0208 ' | .0198 ' | .050 | .100 | .0866 " | .1786 | .17 |
| 27 | 13 | .0096 " | .0232 ' | .020 " | .050 ' | .1050 ' | .087 | .174 | .167 |
| 27 | 14 | .0102 ' | .022 " | .0204 " | .050 | .100 | .0909 | .1818 | .16 |
| 27 | 15 | .0107 ' | .0226 " | .021 ' | .0435 " | .0870 " | .087 ' | .192 ' | .152 |
| 27 | 16 | .0102 ' | .0204 ' | .0187 ' | .04865" | .09730" | .082 ' | .164 ' | .155 |
| 27 | 17 | .0098 ' | .0224 | .019 | .045 ' | .090 ' | .086 | .172 | .151 |
| 27 | 18 | .0098 ' | .02004 ' | .018 ' | .0448 | .09056 | .07674 | .158 | .148 |
| 27 | 19 | .010 ' | .0210 ' | .0183 ' | .04196" | .0872 ' | .085 " | .174 | .15 |
| 27 | 20 | .0105 ' | .0210 ' | .0198 ' | .044 | .088 | .08 | .170 | .15 |
| 27 | 21 | .0104 ' | .0208 ' | .015 ' | .045 ' | .0922 ' | .08 | .16 | .150 |
| 27 | 22 | .0093 ' | .0190 ' | .019 | .0416 | .084 | .077 ' | .1588 | .141 |
| 27 | 23 | .0107 ' | .022 ' | .018 ' | .043 ' | .086 ' | .0807 | .1614 | .151 |
| 27 | 24 | .00902' | .01804 ' | .01753' | .0375 ' | .086 ' | .0685 | .16 | .15 |
| 27 | 25 | .0102 ' | .020864' | .020 ' | .043 | .094 ' | .08053' | .166 | .139 |
| 27 | 26 | .0092 ' | .0184 ' | .0184 | .0369 ' | .0738 ' | .084 | .1746 ' | .147 |
| 27 | 27 | .010 ' | .020 ' | .019 | .041 | .082 | .077 | .154 | .136 |
| 28 | 1 | – | – | – | .04 | .24 | .12 | .40 | .20 |
| 28 | 2 | .02 " | .06 " | .03 " | .05 " | .22 | .11 | .40 ' | .20 ' |
| 28 | 3 | .014 " | .04 | .02 | .05 " | .20 | .11 | .244 | .19 ' |
| 28 | 4 | .014 " | .046 " | .023 " | .06 " | .12 " | .1054 " | .26 | .18 |
| 28 | 5 | .013 " | .034 " | .028 " | .053 " | .12 | .104 | .230 | .19 |
| 28 | 6 | .0123 " | .0274 " | .028 " | .05 " | .12 ' | .09 | .22 | .174 |
| 28 | 7 | .0118 " | .026 " | .022 ' | .0516 " | .1032 " | .099 ' | .198 ' | .1765" |
| 28 | 8 | .012 " | .024 " | .0235 " | .053 " | .112 " | .090 " | .208 ' | .170 |
| 28 | 9 | .011 " | .024 ' | .0193 " | .048 " | .1012 " | .094 | .202 | .17 |
| 28 | 10 | .0095 " | .0236 " | .019 " | .046 " | .092 " | .095 ' | .190 ' | .167 |
| 28 | 11 | .0094 ' | .0188 ' | .023 ' | .047 ' | .096 ' | .087 " | .18 | .174 |
| 28 | 12 | .0102 ' | .0204 ' | .0206 " | .0471 " | .0952 ' | .0781 " | .18 | .163 |
| 28 | 13 | .00916' | .024 " | .020 ' | .046 | .092 | .087 ' | .186 " | .156 |
| 28 | 14 | .0094 " | .02024 " | .0182 " | .046 ' | .0952 ' | .07703' | .15406' | .157 |
| 28 | 15 | .00976" | .0224 ' | .0192 ' | .0398 ' | .098 ' | .0842 | .1684 | .1641" |
| 28 | 16 | .0105 ' | .0210 ' | .0187 " | .045 | .0990 " | .086 | .178 | .154 |
| 28 | 17 | .0090 " | .0198 ' | .0173 ' | .043 ' | .0926 " | .083 ' | .176 | .15 |
| 28 | 18 | .0109 ' | .0218 ' | .0196 ' | .043 ' | .094 ' | .08 | .16 | .152 |
| 28 | 19 | .0094 ' | .020 ' | .0159 ' | .0376 " | .092 | .079 ' | .166 ' | .15 |
| 28 | 20 | .00907' | .0206 ' | .0193 ' | .0427 ' | .0900 ' | .08 | .16 | .146 |
| 28 | 21 | .01023' | .02108 ' | .0196 ' | .043 | .086 | .08 | .168 | .15 |
| 28 | 22 | .0096 ' | .0192 ' | .0171 ' | .045 ' | .090 ' | .0691 | .1726 ' | .15 |
| 28 | 23 | .010 | .02052 ' | .018 | .0436 ' | .08766' | .080 ' | .1648 ' | .145 |

If the chi-square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not-rejection (needless not-rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2–tables (Fisher's test).

Unconditional level of significance (one or two sided) :

| Sample sizes | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 28 | 24 | .0099 ' | .022 ' | .01521' | .0444 ' | .0888 ' | .0818 ' | .1636 ' | .1454 |
| 28 | 25 | .0094 ' | .0188 ' | .0186 ' | .0402 ' | .0804 ' | .0719 ' | .156 | .15 |
| 28 | 26 | .0105 ' | .0218 ' | .0148 ' | .0426 ' | .090 | .0806 ' | .170 | .143 |
| 28 | 27 | .0093 ' | .0190 ' | .0184 | .0391 | .0788 ' | .069 | .138 | .148 |
| 28 | 28 | .00769' | .01538' | .0156 ' | .043 | .086 | .08 | .16 | .14 |
| 29 | 1 | – | – | – | .036 | .24 | .12 | .38 | .19 |
| 29 | 2 | .016 " | .06 " | .03 " | .048 " | .22 | .11 | .378 ' | .189 ' |
| 29 | 3 | .012 " | .054 " | .027 " | .07 | .18 " | .10 | .24 | .21 ' |
| 29 | 4 | .013 " | .054 " | .027 " | .0623 " | .148 | .11 | .22 | .191 ' |
| 29 | 5 | .014 " | .0390 | .024 " | .056 ' | .128 | .096 ' | .22 | .20 |
| 29 | 6 | .0156 " | .0328 " | .026 " | .055 | .114 | .10 | .20 | .19 |
| 29 | 7 | .01049' | .0276 " | .023 " | .048 " | .12 ' | .1065 ' | .2130 ' | .175 |
| 29 | 8 | .0129 " | .0264 " | .0212 " | .051 " | .102 " | .093 | .186 | .16 |
| 29 | 9 | .0104 ' | .028 ' | .020 " | .055 | .110 | .091 ' | .182 ' | .1722 |
| 29 | 10 | .012 " | .0276 " | .022 ' | .051 " | .102 " | .097 " | .20 | .1565' |
| 29 | 11 | .012 " | .024 " | .019 ' | .0470 " | .096 | .094 | .188 | .17 |
| 29 | 12 | .0118 ' | .0236 ' | .0204 " | .0424 " | .102 ' | .0868 ' | .180 ' | .159 |
| 29 | 13 | .0108 ' | .024 ' | .0214 " | .0461 " | .104 | .087 " | .174 " | .17 |
| 29 | 14 | .0096 " | .0226 ' | .0195 ' | .0408 ' | .092 | .0884 | .1768 | .16 |
| 29 | 15 | .00896' | .01792' | .0216 | .0441 " | .0882 " | .087 ' | .188 | .1452 |
| 29 | 16 | .010 ' | .020 ' | .01835" | .0447 " | .0938 ' | .076 ' | .1816 ' | .155 |
| 29 | 17 | .010 ' | .0212 ' | .0199 " | .046 | .092 | .081 | .162 | .153 |
| 29 | 18 | .00915" | .0192 ' | .019 ' | .043 ' | .086 ' | .086 | .172 | .154 |
| 29 | 19 | .0095 ' | .0210 ' | .0195 ' | .042 ' | .090 ' | .075 " | .16 | .155 |
| 29 | 20 | .0092 ' | .0204 ' | .0175 ' | .0404 ' | .088 | .0804 ' | .166 | .155 |
| 29 | 21 | .0098 ' | .0204 ' | .0187 ' | .043 ' | .086 ' | .08 | .16 | .154 |
| 29 | 22 | .0102 ' | .0210 ' | .0193 ' | .04302' | .08604' | .082 | .164 | .15 |
| 29 | 23 | .00865' | .01730' | .0175 ' | .0384 | .084 | .0733 " | .164 | .15 |
| 29 | 24 | .0099 ' | .0198 ' | .019 | .042 ' | .084 ' | .0816 ' | .1632 ' | .1433 |
| 29 | 25 | .00794' | .020 ' | .01678' | .0455 | .0910 | .080 | .164 | .1445 |
| 29 | 26 | .00960' | .020 ' | .0182 ' | .0407 ' | .0814 ' | .0748 ' | .1496 ' | .1476 |
| 29 | 27 | .0080 ' | .0160 ' | .0163 ' | .043 | .0958 ' | .079 | .170 | .141 |
| 29 | 28 | .0101 | .02050' | .019 | .0403 | .0826 ' | .072 | .1452 ' | .15 |
| 29 | 29 | .0085 ' | .0170 ' | .0171 | .044 | .088 | .08 | .16 | .14 |
| 30 | 1 | – | – | – | .034 | .22 | .11 | .36 | .18 |
| 30 | 2 | .015 " | .050 " | .025 " | .063 | .20 | .10 | .364 " | .19 ' |
| 30 | 3 | .011 " | .048 " | .024 " | .06 | .192 | .12 | .24 | .19 ' |
| 30 | 4 | .013 | .048 " | .024 " | .057 " | .12 | .11 | .24 | .20 |
| 30 | 5 | .0137 " | .0346 | .021 " | .057 | .114 | .11 | .22 | .18 |
| 30 | 6 | .0142 " | .0294 " | .024 " | .052 ' | .1318 | .10 | .22 | .17 ' |
| 30 | 7 | .012 " | .0330 | .025 " | .053 ' | .106 ' | .098 " | .202 | .17 |
| 30 | 8 | .011 " | .026 ' | .024 " | .0484 " | .12 | .098 | .196 | .17 |
| 30 | 9 | .011 ' | .022 ' | .023 " | .0487 ' | .1052 ' | .097 ' | .194 ' | .155 |
| 30 | 10 | .0115 " | .0244 " | .020 ' | .0482 " | .0964 " | .0893 " | .190 | .17 |
| 30 | 11 | .012 " | .024 " | .0181 ' | .0449 ' | .0898 ' | .092 ' | .184 ' | .1607 |
| 30 | 12 | .0106 " | .0236 " | .0194 " | .047 ' | .1028 ' | .08835" | .18 | .17 |
| 30 | 13 | .0110 " | .0224 ' | .0192 " | .047 ' | .094 ' | .0865 " | .1730 " | .163 |
| 30 | 14 | .0106 ' | .0212 ' | .0203 " | .0465 ' | .100 | .081 | .162 | .16 |
| 30 | 15 | .01001" | .0226 " | .020 " | .046 ' | .098 ' | .08296" | .16592" | .156 |
| 30 | 16 | .0105 " | .0228 ' | .019 ' | .042 " | .096 | .084 | .1730 | .16 |

If the chi–square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not–rejection (needless not–rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2–tables (Fisher's test).

| Sample sizes | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| | | Unconditional level of significance (one or two sided) : | | | | | | | |
| 30 | 17 | .0096 ' | .0192 ' | .0188 " | .0446 | .0898 ' | .088 | .176 | .149 |
| 30 | 18 | .0090 " | .0208 ' | .0196 " | .045 ' | .0974 ' | .0814 ' | .1670 ' | .15 |
| 30 | 19 | .0095 ' | .0190 ' | .0196 | .0427 ' | .0868 ' | .08 ' | .16 ' | .148 |
| 30 | 20 | .0100 ' | .0204 ' | .01575" | .046 | .092 | .0795 " | .170 | .16 |
| 30 | 21 | .00868" | .0176 ' | .0189 ' | .0430 | .0876 | .0803 | .166 | .15 |
| 30 | 22 | .009 ' | .0200 ' | .0187 ' | .04248' | .08496' | .078 | .156 | .15 |
| 30 | 23 | .010 ' | .020 ' | .0157 ' | .0422 ' | .0850 ' | .081 | .162 | .146 |
| 30 | 24 | .00935' | .0194 ' | .0186 ' | .0405 | .0828 | .0759 | .1542 | .136 |
| 30 | 25 | .0103 ' | .021190' | .0195 | .043 ' | .086 ' | .0783 ' | .1566 ' | .144 |
| 30 | 26 | .0088 ' | .0176 ' | .0175 ' | .0358 ' | .0816 ' | .080 | .164 | .1437 |
| 30 | 27 | .0095 ' | .01966 ' | .018 ' | .0424 | .0848 | .077 ' | .154 ' | .129 |
| 30 | 28 | .0088 ' | .0176 ' | .01735' | .044 | .088 | .08056 | .170 | .143 |
| 30 | 29 | .0094 ' | .0192 ' | .0180 ' | .041 | .0842 ' | .075 | .1510 ' | .151 |
| 30 | 30 | .009 | .018 | .017 | .0348 ' | .0696 ' | .082 | .164 | .142 |
| 31 | 1 | – | – | – | .032 | .22 | .11 | .36 | .18 |
| 31 | 2 | .014 " | .04 " | .02 " | .064 " | .18 | .09 | .36 ' | .18 ' |
| 31 | 3 | .0095 " | .044 " | .022 " | .055 | .18 | .11 | .266 | .196 ' |
| 31 | 4 | .0117 | .042 " | .028 " | .06 " | .14 | .10 | .22860 | .18 |
| 31 | 5 | .014 " | .0390 " | .024 " | .061 " | .1236 | .10 | .22 | .1945 |
| 31 | 6 | .012 " | .032 " | .0219 " | .058 " | .116 " | .100 " | .2026 ' | .185 |
| 31 | 7 | .010 " | .028 " | .0222 " | .053 ' | .106 ' | .0940 ' | .210 | .19 ' |
| 31 | 8 | .011 ' | .0236 ' | .0221 " | .053 ' | .106 ' | .097 " | .194 " | .1712 |
| 31 | 9 | .012 " | .0246 " | .0205 " | .048 ' | .096 ' | .090 | .194 | .176 ' |
| 31 | 10 | .0102 " | .024 " | .022 " | .047 " | .112 " | .085 ' | .170 ' | .1586 |
| 31 | 11 | .0104 " | .0254 " | .0205 " | .04867" | .1072 ' | .084 | .1944 ' | .17 |
| 31 | 12 | .0098 " | .0252 ' | .018 " | .047 | .1024 " | .086 " | .186 | .16 |
| 31 | 13 | .00939" | .0204 " | .021 " | .046 ' | .096 " | .08625' | .17250' | .157 |
| 31 | 14 | .0095 ' | .020 ' | .021 " | .0446 ' | .0892 ' | .091 " | .186 ' | .152 |
| 31 | 15 | .010 " | .020 " | .01748" | .0453 " | .0906 " | .0897 | .184 " | .148 |
| 31 | 16 | .0105 " | .02132 " | .0186 ' | .04566" | .0918 " | .0746 " | .1492 " | .1516 |
| 31 | 17 | .00997' | .02172 ' | .0168 " | .0455 " | .0946 | .081 ' | .162 ' | .152 |
| 31 | 18 | .0088 ' | .0214 ' | .0184 ' | .0413 " | .090 | .080 ' | .168 | .151 |
| 31 | 19 | .0096 ' | .0208 ' | .0185 ' | .042 ' | .086 ' | .078 ' | .164 ' | .1513 |
| 31 | 20 | .00983' | .02272 | .0194 ' | .0404 ' | .090 ' | .081 | .162 | .151 |
| 31 | 21 | .010 ' | .020 ' | .0169 ' | .0387 ' | .088 ' | .081 | .1668 " | .15 |
| 31 | 22 | .00960" | .01920 " | .0185 ' | .042 | .084 | .079 | .162 | .149 |
| 31 | 23 | .0100 ' | .0200 ' | .018 ' | .0413 ' | .0826 ' | .082 | .164 | .15 |
| 31 | 24 | .0080 ' | .01888 ' | .0172 ' | .0355 ' | .084 ' | .08045' | .16090' | .15 |
| 31 | 25 | .0100 ' | .0200 ' | .0188 | .041 | .0862 ' | .077 | .1608 " | .1397 |
| 31 | 26 | .0094 ' | .0208 ' | .01503' | .043 ' | .088 ' | .079 | .158 | .144 |
| 31 | 27 | .0089 ' | .0192 ' | .0184 ' | .038 ' | .0790 ' | .0680 ' | .160 | .146 |
| 31 | 28 | .0099 ' | .02022 ' | .0156 | .0412 ' | .0876 ' | .0763 ' | .1592 ' | .1336 |
| 31 | 29 | .0093 ' | .0190 ' | .01787' | .0363 ' | .0726 ' | .08 | .16444' | .146 |
| 31 | 30 | .0098 ' | .0196 ' | .0144 ' | .042 | .086 ' | .074 | .1568 | .1258 |
| 31 | 31 | .0097 | .0194 | .018 | .0371 ' | .0742 ' | .078 | .156 | .144 |
| 32 | 1 | – | – | – | .0305 | .22 | .11 | .34 | .17 |
| 32 | 2 | .012 " | .04 " | .02 " | .06 " | .22 | .11 | .36 ' | .18 ' |
| 32 | 3 | .013 " | .054 " | .027 " | .056 | .20 | .11 | .2488 " | .20 " |
| 32 | 4 | .0124 " | .052 " | .026 " | .056 " | .12 | .114 | .2432 | .19 |
| 32 | 5 | .013 " | .0338 " | .025 | .054 " | .118 | .105 | .24 | .178 ' |

If the chi–square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not–rejection (needless not–rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2–tables (Fisher's test).

| Sample sizes | | Unconditional level of significance (one or two sided) : one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 32 | 6 | .012 " | .0288 " | .021 " | .053 " | .128 " | .108 " | .228 | .185 |
| 32 | 7 | .0121 " | .030 ' | .02216" | .047 ' | .112 " | .0937 " | .22 | .180 ' |
| 32 | 8 | .011 ' | .0280 " | .02034" | .057 " | .114 " | .0893 " | .210 ' | .182 |
| 32 | 9 | .01064" | .024 " | .023 " | .046 ' | .10890" | .090 | .20 | .17 |
| 32 | 10 | .0107 " | .024 ' | .022 " | .049 " | .1048 ' | .091 ' | .20 | .167 |
| 32 | 11 | .0112 " | .024 " | .018 " | .046 ' | .092 ' | .085 | .1812 " | .16 |
| 32 | 12 | .01134' | .02268' | .020 ' | .045 " | .090 " | .090 ' | .180 ' | .156 |
| 32 | 13 | .011 ' | .022 ' | .020 " | .0423 " | .092 " | .087 | .174 | .154 |
| 32 | 14 | .011 ' | .022 ' | .0206 " | .0514 | .1028 | .085 " | .170 " | .164 |
| 32 | 15 | .009 " | .024 ' | .0187 " | .048 | .096 | .087 " | .174 " | .159 |
| 32 | 16 | .0088 " | .02228" | .019 ' | .0407 ' | .0814 ' | .087 | .174 | .158 |
| 32 | 17 | .0099 ' | .0198 ' | .017 ' | .043 " | .0878 ' | .087 | .174 | .153 |
| 32 | 18 | .0094 " | .0210 ' | .018 " | .0417 " | .090 ' | .076 ' | .166 | .151 |
| 32 | 19 | .0090 " | .020 ' | .018 ' | .042 | .084 | .0845 | .1690 | .15 |
| 32 | 20 | .00945' | .0200 ' | .0176 ' | .0427 ' | .0926 ' | .079 ' | .172 | .15 |
| 32 | 21 | .0097 ' | .02204' | .019 | .043 ' | .086 ' | .0757 ' | .168 | .154 |
| 32 | 22 | .00834" | .02028' | .0183 " | .0415 " | .0836 ' | .0815 " | .16508' | .146 |
| 32 | 23 | .0101 ' | .0202 ' | .0184 ' | .0408 | .08386' | .080 | .160 | .147 |
| 32 | 24 | .010 ' | .020 ' | .018 ' | .043 | .086 | .080 | .162 ' | .145 |
| 32 | 25 | .0089 ' | .01810' | .0175 ' | .0381 | .0816 ' | .0719 " | .1578 ' | .152 |
| 32 | 26 | .0094 ' | .0188 ' | .0178 ' | .042 ' | .084 ' | .0795 | .1590 | .141 |
| 32 | 27 | .0080 ' | .0168 ' | .01636' | .043 ' | .090 ' | .0793 ' | .1586 ' | .144 |
| 32 | 28 | .0090 ' | .0186 ' | .0178 ' | .0402 ' | .0804 ' | .0713 | .150 ' | .146 |
| 32 | 29 | .00774' | .01776' | .01556' | .0419 ' | .0902 ' | .0778 ' | .162 | .1363" |
| 32 | 30 | .00922' | .0200 ' | .018 ' | .0382 | .0764 | .06604' | .1654 ' | .1475 |
| 32 | 31 | .00803' | .01606' | .01576' | .042 | .08594 | .076 | .1564 | .129 |
| 32 | 32 | .0094 | .0188 | .0176 | .0384 | .0768 | .0662 | .1324 | .146 |
| 33 | 1 | – | – | – | .04 " | .2 | .1 | .40 | .20 |
| 33 | 2 | .011 " | .052 " | .026 " | .059 " | .20 | .10 | .38 ' | .19 ' |
| 33 | 3 | .015 " | .050 " | .025 " | .052 | .186 | .10 | .26 | .20 |
| 33 | 4 | .011 " | .048 " | .024 " | .055 | .144 " | .109 | .224 " | .195 |
| 33 | 5 | .0123 " | .044 | .0234 ' | .062 | .124 | .095 | .222 | .20 |
| 33 | 6 | .012 " | .0328 " | .0230 " | .058 " | .1210 ' | .0978 | .1956 | .19 |
| 33 | 7 | .01082" | .0274 ' | .0203 " | .053 " | .12 | .096 | .210 | .1786" |
| 33 | 8 | .0117 " | .0246 " | .021 " | .0514 " | .112 | .097 | .194 | .171 |
| 33 | 9 | .0123 " | .0272 ' | .0183 " | .052 " | .104 " | .0956 | .206 | .16 |
| 33 | 10 | .010 " | .022 ' | .0198 " | .045 " | .104 ' | .089 | .178 | .164 |
| 33 | 11 | .0106 " | .0212 " | .021 ' | .051 " | .1076 " | .091 " | .192 | .16 |
| 33 | 12 | .0100 ' | .0200 ' | .020 " | .0428 " | .106 ' | .08 | .196 ' | .162 |
| 33 | 13 | .010 ' | .020 ' | .019 " | .052 ' | .104 ' | .0868 ' | .18 | .16 |
| 33 | 14 | .0107 " | .0214 " | .0187 " | .046 ' | .1004 ' | .082 " | .1716 ' | .157 |
| 33 | 15 | .011 " | .0224 ' | .0189 ' | .0457 " | .0914 " | .0781 " | .158 | .15 |
| 33 | 16 | .010 " | .0226 " | .0195 ' | .0455 | .0970 | .0779 " | .1558 " | .152 |
| 33 | 17 | .00997" | .02068' | .01937" | .04735" | .09470" | .0806 | .1626 | .154 |
| 33 | 18 | .00902' | .01804' | .017 " | .0397 ' | .0794 ' | .0802 | .172 ' | .15 |
| 33 | 19 | .0097 ' | .0194 ' | .0181 ' | .0448 | .0896 | .078 | .168 ' | .1468 |
| 33 | 20 | .0095 ' | .0190 ' | .019 ' | .042 | .092 ' | .0819 ' | .1638 ' | .1495 |
| 33 | 21 | .0093 ' | .0188 ' | .0169 ' | .0434 ' | .090 ' | .08 ' | .1656 | .151 |
| 33 | 22 | .0096 ' | .02114' | .0168 " | .038 " | .086 ' | .078 | .164 | .147 |
| 33 | 23 | .00917" | .020 ' | .0178 ' | .040 ' | .080 ' | .07923' | .15846' | .152 |

If the chi–square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not–rejection (needless not–rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2–tables (Fisher's test).

| Sample sizes | | Unconditional level of significance (one or two sided) : one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 33 | 24 | .0095 ' | .02034 ' | .01816 ' | .0415 ' | .090 ' | .07774 | .16 | .156 |
| 33 | 25 | .010 ' | .020 ' | .0161 ' | .043 | .086 | .078 | .160 | .146 |
| 33 | 26 | .0091 ' | .0194 ' | .0177 ' | .039 | .080 ' | .073 | .154 | .1324 |
| 33 | 27 | .0100 ' | .0200 ' | .0184 | .0430 | .0864' | .075 | .160 ' | .14 |
| 33 | 28 | .00892 ' | .01784 ' | .0173 ' | .0344 | .0868' | .079 ' | .158 ' | .143 |
| 33 | 29 | .0091 ' | .02014 ' | .0185 ' | .040 ' | .080 ' | .0741 ' | .1494' | .145 |
| 33 | 30 | .00844 ' | .01688 ' | .0167 ' | .0415 | .0858' | .0792 | .164 | .138 |
| 33 | 31 | .0096 ' | .020 ' | .0179 ' | .0401 ' | .0802' | .0689 ' | .1378' | .141 |
| 33 | 32 | .00866 ' | .0174 ' | .0165 ' | .041 | .0866 | .078 | .160 | .132 |
| 33 | 33 | .010 | .020 | .018 | .040 | .080 | .069 | .138 | .14 |
| 34 | 1 | – | – | – | .06 | .20 | .10 | .38 | .19 |
| 34 | 2 | .010 " | .048 " | .024 " | .056 " | .18 | .09 | .36 ' | .18 ' |
| 34 | 3 | .014 " | .0530 " | .0265 " | .048 | .20 | .106 | .24 | .187 |
| 34 | 4 | .014 " | .048 " | .024 " | .058 | .130 " | .106 " | .230 | .19 ' |
| 34 | 5 | .0128 " | .040 | .0205 ' | .059 ' | .118 ' | .10 | .2282 | .18 |
| 34 | 6 | .011 " | .0284 " | .022 " | .05474" | .114 | .0986 " | .2296 | .194 |
| 34 | 7 | .0116 " | .030 " | .023 " | .0493 " | .106 ' | .095 " | .22 | .183 " |
| 34 | 8 | .011 " | .030 " | .023 " | .0497 " | .110 ' | .091 ' | .20 | .18 |
| 34 | 9 | .0123 " | .0252 " | .0219 " | .047 " | .1048" | .0935 " | .1896' | .1673 |
| 34 | 10 | .0105 " | .022 ' | .021 ' | .049 " | .098 " | .081 ' | .18 | .153 |
| 34 | 11 | .011 " | .0248 " | .021 " | .0479 " | .098 " | .0852 " | .188 | .166 |
| 34 | 12 | .011 " | .0236 " | .0203 " | .045 " | .090 " | .08646' | .176 ' | .159 |
| 34 | 13 | .01055 " | .022 " | .019 " | .0444 ' | .092 " | .082 ' | .176 ' | .159 |
| 34 | 14 | .00965 " | .0240 ' | .0173 " | .044 " | .088 " | .087 | .182 ' | .1605" |
| 34 | 15 | .0095 ' | .0190 ' | .0167 " | .0426 ' | .0934' | .090 | .180 | .144 |
| 34 | 16 | .0098 " | .0200 ' | .0170 ' | .0429 " | .0858" | .0849 ' | .1754" | .162 " |
| 34 | 17 | .0097 " | .0206 ' | .018 ' | .0423 | .090 | .0839 " | .18 | .16 |
| 34 | 18 | .01027 ' | .02054 ' | .0184 ' | .043 " | .0890" | .08 | .176 ' | .146 |
| 34 | 19 | .0100 ' | .0200 ' | .0189 " | .04225" | .090 | .080 ' | .160 ' | .155 |
| 34 | 20 | .0090 " | .0198 ' | .0164 ' | .0428 ' | .0866' | .085 | .170 | .15 |
| 34 | 21 | .01003 ' | .02006 ' | .018 ' | .0426 " | .0868' | .078 ' | .1570' | .152 |
| 34 | 22 | .00903 ' | .01806 ' | .0185 ' | .042 ' | .084 ' | .0734 ' | .166 | .1489" |
| 34 | 23 | .00804 " | .02030 ' | .018 ' | .0409 " | .0824' | .0791 " | .1582" | .151 |
| 34 | 24 | .00981 " | .01962 " | .0172 ' | .042 | .0856' | .076 ' | .1640 | .151 |
| 34 | 25 | .0099 ' | .01994 ' | .0177 ' | .041 ' | .0888' | .08 | .16 | .151 |
| 34 | 26 | .0082 ' | .0188 ' | .01701 ' | .0356 " | .084 | .079 | .158 | .155 |
| 34 | 27 | .0095 ' | .0196 ' | .0174 ' | .0405 ' | .0810' | .07612' | .1564 | .1366 |
| 34 | 28 | .0103 | .0206 | .01494 ' | .0404 ' | .0808' | .076 | .1626 | .143 |
| 34 | 29 | .00920 ' | .01840 ' | .0172 ' | .0364 ' | .0830' | .0803 ' | .1606' | .142 |
| 34 | 30 | .0092 ' | .0188 ' | .0170 ' | .0416 ' | .0832' | .074 ' | .148 ' | .145 |
| 34 | 31 | .009197' | .018394' | .017 ' | .0335 ' | .0874' | .0801 | .168 | .1408 |
| 34 | 32 | .0089 ' | .0202 ' | .0186 ' | .040 ' | .0838 | .0715 | .1430 | .143 |
| 34 | 33 | .0093 ' | .0186 ' | .017378' | .0333 ' | .0878' | .076 | .16 | .135 |
| 34 | 34 | .0072 ' | .0144 ' | .0141 ' | .0398 | .0796 | .071 | .142 | .143 |
| 35 | 1 | – | – | – | .06 | .18 | .09 | .38 | .19 |
| 35 | 2 | .010 " | .0454 " | .0227 " | .056 | .22 | .11 | .38 | .19 |
| 35 | 3 | .013 " | .050 " | .025 " | .055 " | .18 | .098 | .268 " | .19 |
| 35 | 4 | .013 " | .048 | .024 | .052 | .1452 | .104 " | .232 | .20 ' |
| 35 | 5 | .014 " | .046 " | .026 " | .053 ' | .12 " | .107 " | .22 | .182 |
| 35 | 6 | .0124 " | .03318 " | .023 " | .051 " | .122 | .10 | .20 | .17 |

If the chi–square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not–rejection (needless not–rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2–tables (Fisher's test).

Unconditional level of significance (one or two sided) :

| Sample sizes | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 35 | 7 | .0125 " | .0250 " | .0248 " | .058 " | .116 " | .10 ' | .2094 ' | .185 |
| 35 | 8 | .012 " | .024 " | .0215 " | .055 ' | .110 ' | .0958 ' | .202 ' | .173 |
| 35 | 9 | .0106 " | .026 ' | .02259 " | .046 " | .096 " | .086 " | .172 " | .16 |
| 35 | 10 | .012 " | .024 " | .02025 " | .048 ' | .0992 ' | .085 ' | .1872 | .1723 " |
| 35 | 11 | .01146" | .02292" | .018 " | .04574" | .10 " | .084 | .168 | .1524 |
| 35 | 12 | .01038" | .0214 " | .0196 " | .049 | .098 | .089 | .188 " | .158 |
| 35 | 13 | .00905" | .0204 " | .0208 ' | .045 " | .0954 " | .078 " | .192 ' | .157 |
| 35 | 14 | .01067' | .02134' | .0196 " | .042 " | .092 " | .084 ' | .168 ' | .151 |
| 35 | 15 | .0113 ' | .0226 ' | .0198 " | .046 ' | .092 ' | .083 " | .166 " | .157 |
| 35 | 16 | .01012" | .0210 ' | .0195 " | .0467 ' | .096 " | .08 | .16 | .154 |
| 35 | 17 | .0086 " | .0210 " | .0195 " | .045 | .092 " | .081 ' | .1668 ' | .15 |
| 35 | 18 | .00946" | .01892" | .0197 " | .040 " | .080 " | .081 " | .166 | .153 |
| 35 | 19 | .0096 ' | .0210 " | .0172 " | .041 ' | .0868 " | .081 ' | .172 | .1534 |
| 35 | 20 | .0094 " | .02228' | .0177 " | .043 " | .090 ' | .0756 ' | .158 | .148 |
| 35 | 21 | .0091 " | .0182 " | .018 ' | .0399 ' | .0834 ' | .080 | .162 ' | .148 |
| 35 | 22 | .00956' | .01912' | .0176 ' | .04574' | .09148' | .0761 ' | .158 ' | .1475 |
| 35 | 23 | .0088 ' | .0196 ' | .0163 " | .0406 ' | .0846 ' | .079 " | .16114 | .149 |
| 35 | 24 | .0088 " | .0192 ' | .0176 ' | .0421 ' | .0876 " | .0755 ' | .1510 ' | .15 |
| 35 | 25 | .0095 ' | .0198 ' | .01758 ' | .042 ' | .084 ' | .0793 | .1586 | .146 |
| 35 | 26 | .0097 ' | .0198 ' | .0150 ' | .0412 ' | .086 ' | .077 | .154 | .147 |
| 35 | 27 | .009 ' | .01844' | .0174 ' | .03785" | .084 | .070825" | .16 | .1516 |
| 35 | 28 | .0091 ' | .0182 ' | .0176 ' | .041 | .082 | .0773 | .1546 | .140 |
| 35 | 29 | .00807' | .01648' | .0161 ' | .0406 ' | .0812 ' | .075 | .150 | .144 |
| 35 | 30 | .0089 ' | .01956' | .0177 ' | .0383 | .07808 | .0675 | .160 ' | .14 |
| 35 | 31 | .00754' | .0190 ' | .0149 ' | .040 ' | .0860 ' | .07608 ' | .15216' | .1291 |
| 35 | 32 | .00922' | .0194 ' | .0176 ' | .03582' | .07164' | .0763 ' | .1630 | .138 |
| 35 | 33 | .00756' | .01512' | .01462 ' | .0416 | .0852 | .072 | .148 | .144 |
| 35 | 34 | .00934' | .01906' | .0176 ' | .0353 ' | .0706 ' | .077 | .1588 | .136 |
| 35 | 35 | .0079 ' | .0158 ' | .0152 ' | .041 | .082 | .073 | .146 | .145 |
| 36 | 1 | – | – | – | .057 | .18 | .09 | .36 | .18 |
| 36 | 2 | .009 " | .048 " | .024 " | .053 | .210 | .105 | .36 | .18 |
| 36 | 3 | .0134 " | .052 " | .026 " | .058 " | .16 | .104 | .22 | .193 " |
| 36 | 4 | .014 " | .048 " | .024 " | .06 " | .12 " | .11 | .230 | .195 ' |
| 36 | 5 | .0136 " | .0410 " | .0247 " | .06 " | .132 " | .1043 | .2114 | .18 |
| 36 | 6 | .012 " | .028 " | .022 " | .054 | .1126 ' | .094 ' | .22 | .19 |
| 36 | 7 | .012 " | .028 " | .024 " | .049 ' | .098 ' | .093 | .2130 ' | .178 |
| 36 | 8 | .01254" | .02508" | .0190 " | .049 ' | .1072 " | .0945 | .1890 | .1645 ' |
| 36 | 9 | .0105 " | .024 ' | .020 " | .052 ' | .104 ' | .093 " | .198 | .165 |
| 36 | 10 | .0112 " | .0224 " | .02002 " | .046 " | .096 ' | .088 ' | .176 ' | .17 |
| 36 | 11 | .01037" | .0208 " | .0213 " | .0495 " | .1032 ' | .0905 | .1928 ' | .1637 " |
| 36 | 12 | .0105 " | .0246 " | .0203 " | .044 ' | .0926 " | .0857 " | .1722 ' | .1588 " |
| 36 | 13 | .0107 " | .0214 " | .020 " | .044 " | .08826' | .086 | .172 | .151 |
| 36 | 14 | .0104 " | .0228 " | .019795" | .0438 " | .092 ' | .086 ' | .172 ' | .158 |
| 36 | 15 | .0097 ' | .0194 ' | .020 " | .0451 ' | .0902 ' | .0812 " | .172 | .15 |
| 36 | 16 | .0102 " | .0204 " | .0187 " | .044 ' | .088 ' | .07445 " | .184 | .150 |
| 36 | 17 | .0101 " | .0220 ' | .0181 ' | .045 " | .092 " | .086 ' | .172 ' | .144 |
| 36 | 18 | .0104 " | .0216 " | .019 ' | .044 | .0920 | .0739 ' | .1478 ' | .1445 |
| 36 | 19 | .0098 " | .0196 " | .0182 " | .0413 " | .092 ' | .078 | .156 | .1498 |
| 36 | 20 | .0096 ' | .0192 ' | .01617 ' | .0403 " | .0806 " | .079 | .158 | .145 |
| 36 | 21 | .00897" | .020 ' | .0186 ' | .042 ' | .084 ' | .077 | .154 | .14476' |

If the chi–square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not–rejection (needless not–rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2–tables (Fisher's test).

| Sample sizes | | Unconditional level of significance (one or two sided) : | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
| 36 | 22 | .0085 ' | .0202 ' | .018 ' | .0447 ' | .0894 ' | .0765 | .16 | .15 |
| 36 | 23 | .0092 ' | .0192 ' | .0181 ' | .041 ' | .0868 ' | .0826 | .1652 | .1446 " |
| 36 | 24 | .00779 " | .0192 ' | .0172 ' | .03955" | .0806 ' | .0764 " | .1528 " | .15 |
| 36 | 25 | .0094 " | .0194 ' | .017 ' | .042 ' | .0852 ' | .077 | .1666 ' | .147 |
| 36 | 26 | .00922 ' | .0194 ' | .0173 ' | .0420 | .0840 | .076 ' | .162 | .144 |
| 36 | 27 | .0077 ' | .0190 ' | .0163 ' | .041 ' | .084 ' | .076 | .152 | .144 |
| 36 | 28 | .0088 ' | .01856' | .0174 ' | .0393 | .080 | .07317 | .1474 ' | .1488 |
| 36 | 29 | .0092 ' | .01902' | .01757' | .041 | .082 | .077 | .1564 ' | .1421 |
| 36 | 30 | .0087 ' | .01786' | .0166 ' | .04136' | .08272' | .0772 ' | .1544 ' | .14 |
| 36 | 31 | .00934 ' | .01868' | .0184 ' | .0384 | .080 ' | .0703 ' | .146 | .14 |
| 36 | 32 | .00829 ' | .01658' | .01606' | .041 ' | .0882 ' | .077 | .1548 ' | .1322 |
| 36 | 33 | .00937 ' | .0192 ' | .017 ' | .0374 ' | .0748 ' | .0774 | .1548 | .140 |
| 36 | 34 | .00822 ' | .01644' | .01572' | .0402 ' | .0870 | .074 | .1524 | .145 |
| 36 | 35 | .0098 | .0196 | .0176 ' | .0369 ' | .07476' | .078 | .162 | .138 |
| 36 | 36 | .00868 ' | .01736' | .0159 ' | .0424 ' | .0848 ' | .073 | .146 | .146 |
| 37 | 1 | – | .08 " | .04 " | .055 | .18 | .09 | .36 | .18 |
| 37 | 2 | .014 " | .046 " | .023 " | .056 " | .206 " | .103 " | .352 | .176 |
| 37 | 3 | .01216 " | .048 " | .024 " | .055 " | .194 | .11 | .26 | .19 |
| 37 | 4 | .0126 " | .052 " | .026 " | .056 " | .14 | .106 " | .24 | .19 ' |
| 37 | 5 | .013 " | .0326 " | .025 " | .057 " | .124 " | .102 " | .22 | .189 ' |
| 37 | 6 | .0123 " | .0328 " | .023 " | .052 ' | .116 | .098 " | .202 ' | .183 |
| 37 | 7 | .0133 " | .0266 " | .0224 " | .0534 " | .1230 " | .09 ' | .2004 " | .168 ' |
| 37 | 8 | .012 " | .026 " | .022 " | .048 " | .098 ' | .0882 ' | .20 | .1685 " |
| 37 | 9 | .0113 " | .0226 " | .0199 " | .050 ' | .100 ' | .089 " | .178 " | .174 |
| 37 | 10 | .011 " | .026 " | .020 " | .050 " | .1056 " | .0832 | .186 ' | .1607 |
| 37 | 11 | .0101 " | .0226 ' | .020 " | .0456 " | .100 | .088 | .176 | .163 |
| 37 | 12 | .01085 " | .02188" | .0182 ' | .0445 ' | .1028 " | .087 " | .18 ' | .169 |
| 37 | 13 | .01048 " | .02096" | .022 " | .041 ' | .094 " | .087 | .184 " | .162 ' |
| 37 | 14 | .0104 " | .02094" | .019 " | .045 ' | .0962 " | .081 | .1732 | .1526 |
| 37 | 15 | .010 " | .020 " | .01768" | .0450 " | .094 " | .09 | .18 | .156 |
| 37 | 16 | .0098 " | .0208 " | .0167 " | .043 " | .086 " | .085 " | .1748 ' | .1615 |
| 37 | 17 | .0093 " | .0192 ' | .0165 ' | .0416 " | .0832 " | .085 " | .1742 ' | .16 |
| 37 | 18 | .00965 " | .0198 " | .0171 ' | .04164' | .0844 ' | .083 ' | .166 ' | .156 |
| 37 | 19 | .0098 " | .0214 ' | .018 ' | .042 ' | .0874 | .081 ' | .172 | .156 |
| 37 | 20 | .0102 ' | .0204 ' | .017 " | .045 " | .090 " | .077 | .168 ' | .1407 |
| 37 | 21 | .0089 ' | .0178 ' | .0180 " | .0444 | .0888 | .0783 ' | .1566 ' | .147 |
| 37 | 22 | .009 " | .0190 " | .0177 ' | .0416 ' | .0832 ' | .08 ' | .1634 ' | .146 |
| 37 | 23 | .0093 ' | .0186 ' | .017 ' | .041 | .082 | .080 ' | .162 ' | .148 |
| 37 | 24 | .0093 ' | .0186 ' | .01592" | .041 ' | .0826 ' | .0754 ' | .1564 ' | .148 " |
| 37 | 25 | .0087 " | .01950' | .01757" | .041 " | .08432" | .077 ' | .166 | .147 |
| 37 | 26 | .0095 ' | .0190 ' | .0175 ' | .04118" | .0828 " | .081 ' | .1638 ' | .14484 |
| 37 | 27 | .00896 ' | .0194 ' | .0169 ' | .041 | .082 | .076 | .16350 | .1445 |
| 37 | 28 | .00857 ' | .01734' | .0168 ' | .0354 ' | .084 ' | .078 | .156 | .145 |
| 37 | 29 | .0093 ' | .0186 ' | .0172 ' | .040 | .084 | .074 | .1528 | .133 |
| 37 | 30 | .007346' | .01956' | .01486' | .040 | .082 | .079 | .158 | .1427 |
| 37 | 31 | .00873 ' | .0186 ' | .01726' | .0353 ' | .0830 | .077 ' | .154 ' | .14 |
| 37 | 32 | .0088 ' | .0192 ' | .0173 ' | .0396 ' | .0792 ' | .072 | .1470 | .14 |
| 37 | 33 | .0086 ' | .0172 ' | .0164 ' | .0417 ' | .0834 ' | .074 ' | .1570 | .1350 |
| 37 | 34 | .0092 ' | .01986' | .018 ' | .0386 ' | .0772 ' | .0662 ' | .156 | .14 |
| 37 | 35 | .00870 ' | .0176 ' | .0162 ' | .041 ' | .086 | .076 | .1566 | .1238 |

If the chi–square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not–rejection (needless not–rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2-tables (Fisher's test).

Unconditional level of significance (one or two sided) :

| Sample sizes | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 37 | 36 | .009 ' | .0190 ' | .0174 ' | .0385 ' | .0770 ' | .0643 ' | .1286 ' | .137 |
| 37 | 37 | .0088 ' | .0176 ' | .0168 | .0404 ' | .0808 ' | .0762 ' | .1524 ' | .122 |
| 38 | 1 | – | .08 " | .04 " | .053 | .16 | .08 | .34 | .17 |
| 38 | 2 | .013 " | .042 " | .021 " | .054 " | .22 | .11 | .36 | .18 |
| 38 | 3 | .013 " | .044 " | .022 " | .055 " | .16 | .10 | .24 | .18 |
| 38 | 4 | .014 " | .0446 " | .0223 " | .06 " | .128 | .11 | .22 | .19 ' |
| 38 | 5 | .0124 " | .0388 " | .024 " | .0554 " | .128 | .108 | .216 | .183 ' |
| 38 | 6 | .0114 " | .0284 " | .0253 " | .047 ' | .108 ' | .112 | .224 | .192 |
| 38 | 7 | .0119 " | .028 " | .02123" | .047 " | .104 " | .0942 " | .194 ' | .17 ' |
| 38 | 8 | .011916" | .023832" | .0205 " | .054 " | .1122 ' | .095 ' | .190 ' | .16 |
| 38 | 9 | .012 " | .024 " | .0225 " | .0519 " | .1070 " | .095 ' | .2004 | .166 |
| 38 | 10 | .012 " | .024 " | .021 " | .0494 " | .0988 " | .087 | .174 | .16 |
| 38 | 11 | .0113 " | .02400 " | .01867" | .05 " | .1070 | .083 " | .184 | .151 |
| 38 | 12 | .0098 " | .024 " | .02023" | .047 " | .095484" | .084 ' | .184 ' | .156 |
| 38 | 13 | .0100 " | .0228 " | .0196 " | .0443 " | .0886 " | .0844 " | .1706 ' | .148 |
| 38 | 14 | .0097 " | .0230 " | .017 " | .0426 ' | .0852 ' | .078 " | .164 ' | .158 |
| 38 | 15 | .0087 " | .022 ' | .0193 " | .0414 " | .08672 " | .084 ' | .168 ' | .148 |
| 38 | 16 | .011 ' | .022 ' | .01978" | .045 ' | .0942 ' | .0816 " | .1632 " | .15 |
| 38 | 17 | .0102 ' | .0204 ' | .0186 " | .044 ' | .094 " | .0793 " | .1594 " | .152 |
| 38 | 18 | .00848 " | .0202 " | .01848" | .0438 ' | .0932 " | .077 | .1562 " | .148 |
| 38 | 19 | .00905 " | .01810 " | .0185 " | .044 " | .096 " | .0789 ' | .1578 ' | .148 |
| 38 | 20 | .00982 ' | .01964 ' | .0164 ' | .0396 " | .0792 " | .078 | .162 ' | .15 |
| 38 | 21 | .0096 ' | .0202 " | .0181 " | .0424 " | .08716 " | .083 | .166 | .15 |
| 38 | 22 | .00893 " | .01854 " | .018 ' | .0453 " | .0916 " | .0755 ' | .158 | .146 |
| 38 | 23 | .0097 " | .01962 ' | .01664' | .04046' | .08092 ' | .0753 ' | .1656 | .148 |
| 38 | 24 | .0092 ' | .0184 ' | .017 ' | .042 ' | .0864 ' | .0776 ' | .1606 ' | .151 |
| 38 | 25 | .0094 ' | .0188 ' | .0166 ' | .038 " | .0784 ' | .077 ' | .1576 " | .146 |
| 38 | 26 | .0088 ' | .0188 " | .0174 ' | .040 ' | .082 ' | .08105" | .1630 ' | .1431 |
| 38 | 27 | .0094 ' | .0188 ' | .01708' | .0408 ' | .086 | .079 ' | .15912' | .151 |
| 38 | 28 | .00872 ' | .0188 ' | .0156 " | .040 | .080 | .079 ' | .158 ' | .145 |
| 38 | 29 | .0090 ' | .0186 ' | .0168 ' | .0372 ' | .082 ' | .0697 " | .154 | .145 |
| 38 | 30 | .0092 ' | .0184 ' | .01730' | .041 | .082 | .0755 | .154 | .136 |
| 38 | 31 | .00808 ' | .01616 ' | .0160 ' | .040 | .080 | .0749 | .156 | .142 |
| 38 | 32 | .0091 ' | .0182 ' | .0169 ' | .037 | .0768 | .077 ' | .154 ' | .1437 |
| 38 | 33 | .00736 ' | .0176 ' | .0143 ' | .041 ' | .082 ' | .0738 ' | .1482 ' | .14 |
| 38 | 34 | .0088 ' | .018246' | .0173 ' | .0334 ' | .0852 ' | .076 ' | .1598 ' | .1349 |
| 38 | 35 | .00717 ' | .01914 ' | .0171 ' | .038 ' | .0802 | .0687 ' | .1380 ' | .14 |
| 38 | 36 | .0089 ' | .01866 ' | .01709' | .0422 | .0844 | .074 | .1594 ' | .1271 |
| 38 | 37 | .00742 ' | .01484 ' | .01388' | .0387 ' | .080 ' | .0669 ' | .1338 ' | .138 |
| 38 | 38 | .0088 ' | .0176 ' | .0168 ' | .03282' | .06564 ' | .073 | .146 | .1255 |
| 39 | 1 | – | .08 " | .04 " | .051 | .22 | .11 | .394 | .197 |
| 39 | 2 | .0125 " | .04 " | .02 " | .05 " | .20 | .10 | .34 | .17 |
| 39 | 3 | .012 " | .0410 " | .0205 " | .05 " | .18 | .102 | .24 | .18 |
| 39 | 4 | .013 " | .0490 " | .0245 " | .0524 " | .134 | .11 | .24 | .182 ' |
| 39 | 5 | .013 " | .034 " | .0246 " | .057 " | .1216 ' | .105 | .210 | .19 |
| 39 | 6 | .0125 " | .0330 " | .023 " | .049 ' | .118 " | .10 | .20 | .182 ' |
| 39 | 7 | .0105 " | .028 " | .024 ' | .0504 " | .122 " | .094 | .188 | .175 |
| 39 | 8 | .0114 " | .0266 " | .0268 " | .049 " | .098 " | .097 ' | .200 " | .16 |
| 39 | 9 | .0116 " | .026 " | .020 " | .049 " | .102 ' | .091 " | .186 ' | .17 |
| 39 | 10 | .0117 " | .0238 " | .021 " | .045 " | .100 " | .0911 " | .186 | .160 |

If the chi-square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not-rejection (needless not-rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2-tables (Fisher's test).

Unconditional level of significance (one or two sided) :

| Sample sizes | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 39 | 11 | .0103 " | .024 " | .023 " | .049 ' | .098 ' | .087 ' | .174 ' | .16 |
| 39 | 12 | .0107 " | .022 " | .0203 " | .0426 " | .0948 " | .084 " | .170 | .16 |
| 39 | 13 | .0100 " | .0228 " | .0188 " | .047 ' | .1002 " | .087 " | .180 " | .161 |
| 39 | 14 | .0105 " | .0210 " | .0185 ' | .0443 " | .092 " | .084 | .168 | .15 |
| 39 | 15 | .0106 " | .0212 " | .0198 " | .046 ' | .092 ' | .081 " | .176 ' | .1595 |
| 39 | 16 | .0097 ' | .0194 ' | .019 " | .043 ' | .0950 " | .078 " | .18 | .154 |
| 39 | 17 | .01036 " | .0216 " | .018 " | .044 " | .088 " | .080 ' | .170 " | .145 |
| 39 | 18 | .0095 " | .022 " | .0187 ' | .0435 " | .088 ' | .08 | .174 " | .15 |
| 39 | 19 | .01052 " | .02104" | .0188 ' | .0433 ' | .0898 ' | .087 ' | .174 ' | .154 |
| 39 | 20 | .0103 " | .0214 " | .0182 ' | .04176 | .086 | .084 " | .170 | .136 |
| 39 | 21 | .0089 " | .0178 " | .0172 " | .041 ' | .090 " | .0767' | .1534 ' | .144 |
| 39 | 22 | .0099 " | .0198 " | .0169 " | .0406 " | .0812 " | .0771 | .162 | .146 |
| 39 | 23 | .00875 " | .0204 ' | .0190 " | .0413 ' | .0844 " | .0804' | .1620 ' | .1431 ' |
| 39 | 24 | .0091 ' | .0186 ' | .0174 ' | .03855 ' | .084 | .08 | .16 | .14739" |
| 39 | 25 | .00907 ' | .01814' | .0154 " | .0407 ' | .0814 ' | .075 " | .152 ' | .149 |
| 39 | 26 | .0084 " | .0188 ' | .0170 " | .0400 " | .082 ' | .079 " | .162 | .143 |
| 39 | 27 | .0092 ' | .01900' | .0172 | .04213 ' | .086 ' | .0784' | .15746' | .149 |
| 39 | 28 | .0091 ' | .01890' | .01657' | .0404 ' | .0846 | .078 ' | .156 ' | .14 |
| 39 | 29 | .0081 ' | .0170 ' | .0166 ' | .041 ' | .084 ' | .0765' | .156 | .145 |
| 39 | 30 | .00880 ' | .01760' | .01764' | .039 ' | .0802 " | .0721" | .150 | .145 |
| 39 | 31 | .00896 ' | .0188 ' | .0171 ' | .039 | .084 | .075 | .150 | .1383 " |
| 39 | 32 | .0087 ' | .0174 ' | .0163 ' | .040 | .0820 ' | .0749' | .156 | .143 |
| 39 | 33 | .00963 ' | .01926' | .0170 ' | .0386 ' | .0772 ' | .0672 | .1548 | .143 |
| 39 | 34 | .0080 ' | .01622' | .01546' | .039 ' | .0840 ' | .0727 | .148 ' | .125 |
| 39 | 35 | .00885 ' | .0190 ' | .01709' | .0352 | .0784 ' | .076 | .160 | .1363 |
| 39 | 36 | .00782 ' | .01564' | .01475' | .0395 ' | .0830 ' | .0705' | .1410 ' | .14 |
| 39 | 37 | .0088 ' | .0184 ' | .01684' | .03390 ' | .06780' | .0754 | .1608 ' | .1296 " |
| 39 | 38 | .0080 ' | .01614' | .01485' | .040 ' | .080 ' | .0691 | .1388 | .140 |
| 39 | 39 | .00917 ' | .01834' | .0176 | .0346 ' | .0692 ' | .075 | .150 | .1283 |
| 40 | 1 | – | .08 " | .04 " | .06 " | .22 | .11 | .38 | .19 |
| 40 | 2 | .01164 " | .054 " | .027 " | .053 | .194 | .097 | .38 ' | .19 ' |
| 40 | 3 | .012 " | .050 " | .025 " | .06 " | .18 | .096 | .24 | .19 |
| 40 | 4 | .011 " | .052 " | .026 " | .057 " | .12 | .10 | .2150 | .19 ' |
| 40 | 5 | .011 " | .0428 " | .022 " | .056 ' | .130 | .104 | .2224 | .18 |
| 40 | 6 | .012 " | .024 " | .0226 " | .053 " | .120 " | .0969' | .22 | .18 |
| 40 | 7 | .012 " | .028 " | .021 ' | .0543 " | .1086 " | .101 | .202 | .18 |
| 40 | 8 | .0115 " | .024 " | .022 " | .049 " | .106 ' | .0937" | .192 | .175 ' |
| 40 | 9 | .0108 " | .026 " | .0212 " | .048 " | .1150 | .085 ' | .1992 | .172 |
| 40 | 10 | .0102 " | .0252 ' | .0196 " | .046023" | .098 ' | .0884' | .1768 ' | .17 |
| 40 | 11 | .0104 " | .0208 " | .0207 " | .045 ' | .10 " | .087 " | .1854 " | .1613 |
| 40 | 12 | .011 " | .022 " | .0197 " | .045 " | .090 " | .086 | .172 | .1616 |
| 40 | 13 | .0097 " | .0252 " | .020 " | .0463 " | .0926 " | .0869" | .1742 " | .1502 |
| 40 | 14 | .01088 " | .022 " | .019 " | .0424 " | .0848 " | .080 ' | .160 ' | .164 |
| 40 | 15 | .011 " | .0224 " | .0186 " | .04197 ' | .08394' | .080 ' | .1714 | .153 |
| 40 | 16 | .0102 " | .0212 " | .0179 " | .0429 " | .0872 " | .083 ' | .166 ' | .1527 ' |
| 40 | 17 | .00927 " | .01912" | .0165 " | .0423 " | .090 ' | .083 " | .166 " | .153 |
| 40 | 18 | .0096 " | .01964" | .0163 " | .0399 " | .0850 ' | .082 " | .164 " | .15 |
| 40 | 19 | .0092 " | .01932" | .01641" | .0394 ' | .0788 ' | .0795' | .1608 ' | .151 |
| 40 | 20 | .009486" | .01992" | .0172 ' | .0407 ' | .0814 ' | .081 ' | .162 ' | .150 |
| 40 | 21 | .0096 " | .0208 ' | .018 ' | .04275 " | .0856 " | .08 | .166 " | .149 |

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Raised conditional level of significance for 2×2-tables (Fisher's test).

Unconditional level of significance (one or two sided) :

| Sample sizes | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 40 | 22 | .0101 ' | .0202 ' | .0164 ' | .0436 " | .0872 " | .085 | .170 | .15 |
| 40 | 23 | .00896 " | .0186 " | .0171 " | .042 ' | .084 ' | .078 ' | .1614 ' | .15 |
| 40 | 24 | .0096 " | .0192 " | .018 ' | .0392 " | .084 ' | .0744 | .152 | .1488 |
| 40 | 25 | .0088 ' | .0186 ' | .017 ' | .041 | .08590" | .077 | .1578 " | .148 |
| 40 | 26 | .0092 ' | .01926' | .0161 ' | .037 " | .0868 ' | .0774 " | .166 | .145 |
| 40 | 27 | .00895 ' | .01790' | .0172 " | .0393 ' | .0796 ' | .0784 | .158 | .148 |
| 40 | 28 | .00934 ' | .01868' | .01678' | .041 ' | .082 ' | .077 ' | .154 ' | .14535 " |
| 40 | 29 | .00924 ' | .0186 ' | .01475" | .0402 | .082 | .076 ' | .1548 ' | .1408 |
| 40 | 30 | .0087 ' | .01766' | .0170 ' | .0355 " | .082 ' | .076 | .1564 | .141 |
| 40 | 31 | .00882 ' | .01764' | .0177 ' | .039 ' | .0796 ' | .072 | .1514 " | .1308 |
| 40 | 32 | .007405' | .018 ' | .01473' | .039 | .0844 ' | .074 | .1530 | .1386 |
| 40 | 33 | .0088 ' | .0176 ' | .0171 ' | .0341 | .0812 ' | .074 ' | .158 | .1435 |
| 40 | 34 | .00899 ' | .01798' | .0171 ' | .0385 ' | .0796 ' | .06969' | .154 | .142 |
| 40 | 35 | .0084 ' | .0168 ' | .0160 ' | .040 ' | .080 ' | .07401 | .14802 | .1283 |
| 40 | 36 | .0092 ' | .01852' | .0176 ' | .0369 ' | .0738 ' | .077 | .1552 ' | .137 |
| 40 | 37 | .00842 ' | .01688' | .01565' | .0406 | .08560' | .0713 ' | .1426 ' | .144 |
| 40 | 38 | .0090 ' | .0192 ' | .017 ' | .03558' | .07116' | .0767 | .1610 ' | .1322 |
| 40 | 39 | .0084 ' | .01724' | .0156 ' | .0393 ' | .0828 | .0706 | .1426 ' | .141 |
| 40 | 40 | .0092 | .0184 | .01697' | .0359 | .0718 | .0774 ' | .1548 ' | .130 |
| 41 | 1 | – | .06 " | .03 " | .06 " | .22 | .11 | .374 | .187 |
| 41 | 2 | .013 " | .050 " | .025 " | .050 | .186 | .093 | .364 ' | .182 ' |
| 41 | 3 | .013 " | .046 " | .023 " | .056 " | .18 | .11 | .2670 " | .196 " |
| 41 | 4 | .0126 " | .04232" | .02116" | .057 | .134 | .106 " | .22 | .19 ' |
| 41 | 5 | .012 " | .038 " | .0247 " | .05486" | .114 " | .096 | .2072 " | .18 |
| 41 | 6 | .013 " | .030 " | .022 ' | .054 " | .1110 " | .094 | .2068 ' | .19 |
| 41 | 7 | .0113 " | .0266 " | .023 " | .053 " | .1166 " | .0963 " | .1926 " | .173 |
| 41 | 8 | .0132 " | .0264 " | .021 " | .0525 " | .1050 " | .097 | .194 | .166 " |
| 41 | 9 | .0114 " | .0228 " | .0216 " | .051 ' | .1054 " | .092 " | .1994 | .166 |
| 41 | 10 | .011 " | .024 " | .021 " | .0524 ' | .1048 ' | .089 " | .190 ' | .1611 |
| 41 | 11 | .0108 " | .02368" | .0195 " | .0439 " | .100 " | .0864 " | .1734 " | .162 |
| 41 | 12 | .0097 " | .0226 ' | .0195 " | .0455 " | .0924 " | .086 ' | .172 ' | .158 |
| 41 | 13 | .0107 " | .0214 " | .01863' | .048 " | .102 " | .084 " | .184 " | .16 |
| 41 | 14 | .0108 " | .0220 " | .0211 " | .048 ' | .096 ' | .083 ' | .176 ' | .1565 ' |
| 41 | 15 | .0102 " | .0204 " | .0181 " | .044 " | .0962 " | .079 " | .164 | .152 |
| 41 | 16 | .009 " | .0208 " | .0191 " | .042 " | .094 ' | .081 | .162 | .145 |
| 41 | 17 | .0085 " | .0216 ' | .01864" | .046 | .092 | .0806 " | .1612 " | .155 |
| 41 | 18 | .0098 ' | .0196 ' | .0186 ' | .0465 " | .0930 " | .077 " | .162 ' | .1480 " |
| 41 | 19 | .00832 " | .0208 ' | .0187 ' | .04444" | .0894 ' | .0733 " | .16 | .1411 " |
| 41 | 20 | .0087 " | .0174 " | .018 ' | .0436 ' | .0872 ' | .0729 ' | .1458 ' | .1382 |
| 41 | 21 | .00923 " | .01846" | .019 ' | .042 ' | .092 ' | .0755 ' | .1510 ' | .141 |
| 41 | 22 | .0099 " | .0198 " | .01688" | .0394 " | .0788 " | .078 ' | .160 | .145 |
| 41 | 23 | .0095 ' | .020 " | .01666' | .0405 " | .08506' | .0780 " | .164 | .148 |
| 41 | 24 | .0088 " | .01806" | .018 ' | .0424 " | .0848 " | .07546' | .158 | .143 |
| 41 | 25 | .0096 " | .0200 ' | .017 ' | .0414 ' | .084 ' | .077 ' | .160 | .14420 " |
| 41 | 26 | .0083 ' | .01830' | .017 ' | .0401 | .0802 | .0717 | .156 " | .1472 |
| 41 | 27 | .0081 " | .018 ' | .0170 ' | .0394 " | .0868 ' | .0793 | .160 " | .144 |
| 41 | 28 | .0086 ' | .0180 " | .01701' | .0402 ' | .0830 ' | .077 | .1548 ' | .146047" |
| 41 | 29 | .0091 ' | .0182 ' | .0171 ' | .040 ' | .080 ' | .0744 ' | .1506 ' | .143 |
| 41 | 30 | .00760 ' | .0182 ' | .01574' | .03993" | .07992" | .074 ' | .15010' | .142 |
| 41 | 31 | .00889 ' | .0182 ' | .0170 ' | .03731 | .0788 ' | .0688 " | .1526 | .145 |

If the chi-square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not-rejection (needless not-rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2-tables (Fisher's test).

| Sample sizes | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| | | Unconditional level of significance (one or two sided) : | | | | | | | |
| 41 | 32 | .0088 ' | .0176 ' | .0176 ' | .039307' | .078614' | .0743 " | .1526 ' | .134 |
| 41 | 33 | .00805 ' | .01628 ' | .0158 ' | .039 | .078 | .0772 ' | .1544 ' | .138 |
| 41 | 34 | .00893 ' | .01786 ' | .0166 ' | .03587 | .074 ' | .0747 | .1494 | .14 |
| 41 | 35 | .00723 ' | .01690 ' | .01385' | .0394 ' | .0788 ' | .0716 ' | .1446 | .142 |
| 41 | 36 | .00898 ' | .01796 ' | .0164 ' | .0405 ' | .0810 ' | .0749 ' | .1498 ' | .131 |
| 41 | 37 | .0094 ' | .0188 ' | .0166 ' | .0374 ' | .0748 ' | .0639 ' | .1552 ' | .137 |
| 41 | 38 | .0086 ' | .0180 ' | .0160 ' | .0392 ' | .0834 | .072 | .144 | .138 |
| 41 | 39 | .0091 ' | .0184 ' | .0166 ' | .0370 ' | .07438 ' | .078 | .156 | .1327 |
| 41 | 40 | .00882 ' | .01764 ' | .0162 ' | .0402 ' | .0804 ' | .0707 | .1464 ' | .142 |
| 41 | 41 | .00727 ' | .01454 ' | .0174 ' | .0373 | .0746 | .0789 | .1578 | .1325 |
| 42 | 1 | – | .06 " | .03 " | .06 " | .20 | .10 | .36 | .18 |
| 42 | 2 | .012 " | .048 " | .024 " | .05 " | .20 | .10 | .352 ' | .176 ' |
| 42 | 3 | .012 " | .042 " | .021 " | .05 " | .170 | .10 | .244 | .194 ' |
| 42 | 4 | .0114 " | .052 " | .026 " | .06 " | .126 | .106 | .222 | .1844' |
| 42 | 5 | .012 " | .042 " | .0263 " | .055 " | .1276 | .109 | .218 | .183 |
| 42 | 6 | .0124 " | .0270 " | .026 " | .051 " | .122 " | .10 | .216 " | .17 |
| 42 | 7 | .0116 " | .0278 " | .024 " | .050 " | .108 ' | .099 ' | .2110 | .17 |
| 42 | 8 | .0113 " | .0226 " | .0204 " | .048 ' | .096 ' | .094 ' | .198 ' | .17 ' |
| 42 | 9 | .0127 " | .02634 " | .024 " | .050 " | .106 " | .090 " | .18962' | .17 |
| 42 | 10 | .01065 ' | .0230 " | .0196 " | .046 ' | .1000 " | .088 " | .1826 ' | .169 |
| 42 | 11 | .0113 " | .02272 " | .0221 " | .050 " | .100 " | .0897 | .192 | .156 |
| 42 | 12 | .0094 " | .0240 " | .0186 " | .043 " | .098 " | .084 " | .172 ' | .1494 |
| 42 | 13 | .0103 " | .02190 " | .019 " | .045 " | .09748 " | .0886 ' | .1776 ' | .155 |
| 42 | 14 | .0095 " | .0238 " | .0199 " | .043 " | .086 " | .081 | .16288 | .164 |
| 42 | 15 | .0091 " | .0216 " | .0198 " | .0409 " | .0930 " | .09 | .18 | .15 |
| 42 | 16 | .0101 ' | .0202 ' | .0193 " | .042 " | .084 " | .084 | .168 | .16 |
| 42 | 17 | .0099 " | .0198 " | .0185 " | .0425 ' | .088 " | .0773 " | .160 ' | .152 |
| 42 | 18 | .0097 " | .0196 " | .0184 " | .0435 " | .0870 " | .0802 " | .1736 | .139 |
| 42 | 19 | .009 " | .0202 " | .0184 " | .0425 ' | .0850 ' | .0856 | .1712 | .152 |
| 42 | 20 | .0097 " | .0214 " | .01803" | .0414 ' | .08630 ' | .081 ' | .168 " | .150 |
| 42 | 21 | .00996 " | .0202 " | .0182 ' | .0415 ' | .086 ' | .079 " | .164 ' | .15 |
| 42 | 22 | .0084 " | .0168 " | .0175 ' | .043 " | .0898 " | .0847 | .1694 | .1518 |
| 42 | 23 | .00898 ' | .01896 ' | .0183 " | .0436 ' | .090 " | .075 ' | .150 ' | .1418' |
| 42 | 24 | .00897 " | .0194 " | .0174 " | .0404 ' | .082 ' | .081 ' | .162 ' | .144 |
| 42 | 25 | .0082 " | .0170 " | .0182 ' | .03908 " | .0784 ' | .076 | .152 | .1417" |
| 42 | 26 | .0092 ' | .01938 " | .01652' | .0399 ' | .0824 ' | .078 | .156 | .1451 |
| 42 | 27 | .00876 ' | .01752 ' | .01563' | .044 ' | .088 ' | .0754 " | .16 ' | .140 |
| 42 | 28 | .0089 " | .0182 ' | .0170 ' | .0412 " | .0832 " | .0774 ' | .1548 ' | .1483 |
| 42 | 29 | .0090 ' | .0186 " | .01644' | .0407 " | .0814 " | .0737 | .1474 | .142 |
| 42 | 30 | .0090 ' | .0180 ' | .017 ' | .0392 ' | .0784 ' | .080 ' | .1624 ' | .143 |
| 42 | 31 | .0083 " | .01808 ' | .0166 ' | .03883 ' | .078 ' | .074 ' | .16 | .1451 |
| 42 | 32 | .0091 ' | .0182 ' | .0169 ' | .0390 " | .0784 ' | .0713 ' | .1492 | .142 |
| 42 | 33 | .008855' | .017710' | .0179 ' | .0389 ' | .0778 ' | .0747 ' | .152 | .136 |
| 42 | 34 | .00855 ' | .01764 ' | .0163 ' | .040 | .080 | .077 ' | .154 ' | .1383 |
| 42 | 35 | .00897 ' | .01794 ' | .017 ' | .037 ' | .07606 ' | .074 | .148 | .14 |
| 42 | 36 | .00789 ' | .0164 ' | .01491' | .04033 ' | .08066 ' | .0715 ' | .1464 ' | .141 |
| 42 | 37 | .0088 ' | .0176 ' | .0163 ' | .03324 ' | .0762 ' | .074 | .1510 ' | .1325 |
| 42 | 38 | .00748 ' | .01774 ' | .0138 ' | .03871 ' | .07742 ' | .0663 ' | .146 ' | .1359 |
| 42 | 39 | .00852 ' | .018 ' | .01624' | .040 | .0850 ' | .0719 | .148 | .138 |
| 42 | 40 | .0075 ' | .0150 ' | .01365' | .0376 ' | .0770 | .06268' | .1582 | .1345 |

If the chi-square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not-rejection (needless not-rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2-tables (Fisher's test).

Unconditional level of significance (one or two sided) :

| Sample sizes | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 42 | 41 | .0087 ' | .01790' | .01624 ' | .0404 ' | .082 ' | .0724 ' | .1474 ' | .139 |
| 42 | 42 | .0078 ' | .0156 ' | .0141 ' | .0375 | .0750 | .0630 ' | .1260 ' | .133 |
| 43 | 1 | – | .06 " | .03 " | .06 " | .20 | .10 | .36 | .18 |
| 43 | 2 | .011 " | .044 " | .022 " | .05 " | .192 | .096 | .36 ' | .18 ' |
| 43 | 3 | .012 " | .0486 " | .0243 " | .06 " | .20 | .10 | .26 ' | .188 ' |
| 43 | 4 | .0127 " | .048 " | .024 " | .056 " | .130 " | .103 | .22 | .18 ' |
| 43 | 5 | .015 " | .038 " | .026 " | .05403" | .116 " | .105 | .210 | .18 |
| 43 | 6 | .011 " | .032 " | .024 " | .053 ' | .106 ' | .0966 ' | .200 ' | .18 |
| 43 | 7 | .012 " | .030 " | .0223 " | .048 " | .114 ' | .098 " | .196 " | .169 |
| 43 | 8 | .0118 " | .0296 " | .0222 " | .048 " | .1106 " | .0904 " | .184 | .1724 ' |
| 43 | 9 | .0108 " | .02370" | .0222 " | .048 " | .104 " | .086 " | .20 ' | .164 |
| 43 | 10 | .010 " | .0244 " | .021 " | .0458 ' | .112 | .09 | .18 | .164 ' |
| 43 | 11 | .0099 " | .022 " | .0195 " | .047 " | .100 " | .087 " | .174 " | .169 |
| 43 | 12 | .0108 " | .0224 " | .022 " | .0484 " | .098 ' | .089 " | .178 " | .160 |
| 43 | 13 | .0094 " | .0210 " | .0208 " | .044 " | .1030 " | .08 ' | .176 | .1604 |
| 43 | 14 | .00982" | .022 " | .018 " | .0452 ' | .0904 ' | .08435" | .184 ' | .157 |
| 43 | 15 | .0107 " | .0214 " | .019 " | .042 " | .09418" | .0848 " | .1708 ' | .149 |
| 43 | 16 | .0102 " | .0204 " | .0184 " | .0443 " | .092 ' | .0824 " | .1648 " | .149 |
| 43 | 17 | .0099 " | .0202 " | .018 " | .0429 " | .0926 " | .0804 " | .1608 " | .1494 |
| 43 | 18 | .0099 " | .0202 " | .0166 " | .041 " | .092 | .079 " | .158 " | .149 |
| 43 | 19 | .0095 " | .0196 " | .0159 " | .0384 " | .0852 ' | .0763 | .1636 " | .150 |
| 43 | 20 | .0095 " | .01914" | .0158 ' | .0375 " | .088 " | .07760" | .15520 " | .144 |
| 43 | 21 | .0096 " | .0202 " | .0161 ' | .0377 ' | .0754 ' | .0772 ' | .1544 ' | .142 |
| 43 | 22 | .00946' | .01892' | .0168 " | .0395 " | .0790 " | .078 " | .158 " | .1459 |
| 43 | 23 | .0094 " | .0212 " | .0172 " | .0405 " | .08350' | .077 | .1610 ' | .144 |
| 43 | 24 | .00864' | .01728' | .0183 " | .0409 " | .086 ' | .0788 ' | .1576 ' | .147 |
| 43 | 25 | .0089 " | .0186 " | .0163 " | .038 ' | .08534" | .07890 | .15780 | .144 |
| 43 | 26 | .0095 " | .0190 " | .0176 " | .040 ' | .0852 ' | .078 ' | .1588 ' | .14135' |
| 43 | 27 | .0091 ' | .0182 ' | .0165 ' | .0395 ' | .0812 " | .0798 ' | .1596 ' | .1437 ' |
| 43 | 28 | .0079 " | .0190 ' | .0168 " | .03837" | .0854 ' | .076 ' | .1544 ' | .147 |
| 43 | 29 | .0089 ' | .01872" | .016276' | .040 ' | .0812 ' | .074 ' | .148 ' | .143 |
| 43 | 30 | .0087 ' | .0180 ' | .01705 | .0390 ' | .0780 ' | .0791 " | .1582 " | .140 |
| 43 | 31 | .00889' | .01778' | .01511 " | .040 ' | .08116' | .0784 ' | .1568 ' | .139 |
| 43 | 32 | .00885" | .0180 ' | .0164 ' | .03554" | .0822 | .076 | .152 | .1414 ' |
| 43 | 33 | .0086 ' | .0180 ' | .0166 ' | .0386 ' | .0800 ' | .0736 | .1482 | .142 |
| 43 | 34 | .00747' | .0176 ' | .0145 ' | .0384 ' | .0768 ' | .075 | .1507444" | .1383 |
| 43 | 35 | .00847' | .01806' | .0163 ' | .0406 ' | .0818 ' | .0773 | .1546 | .1417 |
| 43 | 36 | .0091 ' | .01854' | .0172 ' | .0384 | .0788 ' | .0668 | .148 | .14 |
| 43 | 37 | .0083 ' | .01694' | .0158 ' | .0387 ' | .0774 ' | .0726 ' | .14968 | .14 |
| 43 | 38 | .0084 ' | .0184 ' | .0168 ' | .0350 ' | .0758 ' | .074 | .1526 ' | .133 |
| 43 | 39 | .00804' | .01608' | .01477 ' | .038 ' | .0796 ' | .0683 | .1380 ' | .136 |
| 43 | 40 | .0089 ' | .01792' | .01655 ' | .0327 ' | .0812 | .072 | .1516 ' | .12244 |
| 43 | 41 | .0080 ' | .0160 ' | .01455 ' | .0377 ' | .07824' | .0648 ' | .1296 ' | .135 |
| 43 | 42 | .0086 ' | .01822' | .0164 ' | .0323 ' | .0646 ' | .073 ' | .1504 | .1404 |
| 43 | 43 | .00815' | .01630' | .015 ' | .039 | .078 | .0652 | .1304 | .134 |
| 44 | 1 | – | .06 " | .03 " | .06 " | .20 | .10 | .34 | .17 |
| 44 | 2 | .011 " | .042 " | .021 " | .0534 | .18 | .09 | .34 ' | .17 ' |
| 44 | 3 | .011 " | .0454 " | .0227 " | .056 " | .184 | .10 | .24 | .19 ' |
| 44 | 4 | .013 " | .04908" | .02454 " | .055 " | .12 " | .097 | .22 | .186 ' |
| 44 | 5 | .013 " | .042 " | .025 " | .0516 ' | .118 | .106 " | .216 " | .184 ' |

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Raised conditional level of significance for 2×2-tables (Fisher's test).

Unconditional level of significance (one or two sided) :

| Sample sizes | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 44 | 6 | .013 " | .028 " | .0238 " | .0575 " | .1150 " | .105 ' | .224 | .18 |
| 44 | 7 | .012 " | .02694 " | .02445" | .05 ' | .10 ' | .098 | .206 | .18 |
| 44 | 8 | .0112 " | .02734 " | .0212 " | .049 " | .104 " | .095 " | .196 | .1707 |
| 44 | 9 | .0104 " | .0264 " | .02126" | .04825" | .110 ' | .095 | .190 | .163 |
| 44 | 10 | .0107 " | .022 " | .0211 " | .048 " | .100 ' | .088 ' | .186 | .174 |
| 44 | 11 | .0109 " | .0236 " | .020 " | .043 " | .0906 " | .088 " | .180 ' | .1551 " |
| 44 | 12 | .01003" | .022 " | .020 " | .046 ' | .10032" | .0865 " | .1730 " | .162 ' |
| 44 | 13 | .0105 " | .022690" | .01861" | .047 " | .094 " | .088 " | .180 | .158 |
| 44 | 14 | .0103 " | .0206 " | .018 ' | .0446 " | .09094" | .08303" | .16606" | .16 |
| 44 | 15 | .0093 " | .0186 " | .0189 " | .0414 " | .0828 " | .07671" | .15342" | .15 |
| 44 | 16 | .0104 " | .0214 " | .018 " | .0423 ' | .0926 " | .079 " | .170 | .153 |
| 44 | 17 | .0095 " | .01932 " | .0188 " | .0419 " | .0868 " | .082 | .164 | .15 |
| 44 | 18 | .0087 " | .020 ' | .0186 " | .0423 ' | .0846 ' | .0802 " | .1604 " | .15 |
| 44 | 19 | .0083 " | .01990 ' | .0182 ' | .04181" | .090 " | .074 " | .1602 ' | .144 |
| 44 | 20 | .00813" | .0210 " | .0183 " | .044 " | .0904 ' | .08 ' | .16 ' | .154 |
| 44 | 21 | .0084 " | .020 " | .0184 " | .043 ' | .0906 " | .081 | .166 ' | .150 |
| 44 | 22 | .00892" | .01784 " | .0177 ' | .043 ' | .088 ' | .081 " | .162 " | .15 |
| 44 | 23 | .0092 " | .0186 ' | .0184 ' | .043 " | .08816' | .0729 ' | .1458 ' | .1348 |
| 44 | 24 | .0093 ' | .01978 ' | .01687" | .0391 " | .0782 " | .0771 | .1542 | .142 |
| 44 | 25 | .00896" | .0186 ' | .01764" | .040 ' | .080 ' | .076 ' | .152 ' | .144 |
| 44 | 26 | .00874" | .0186 " | .0173 ' | .039 " | .082 ' | .0754 ' | .1508 ' | .145 |
| 44 | 27 | .00956" | .01922 ' | .0167 " | .0398 ' | .0796 ' | .076 ' | .152 ' | .1417 |
| 44 | 28 | .0088 ' | .0176 ' | .0157 " | .040 | .080 | .074 " | .1590 " | .1435 |
| 44 | 29 | .0086 " | .0182 ' | .01695" | .03887' | .0814 ' | .0749 ' | .1498 ' | .145 |
| 44 | 30 | .00886" | .01802 " | .0181 ' | .0394 ' | .0788 ' | .079 | .158 | .138 |
| 44 | 31 | .0086 ' | .01754 ' | .01698' | .039 ' | .078 ' | .0767 ' | .1534 ' | .14065" |
| 44 | 32 | .0079 " | .01776 ' | .01595' | .0394 ' | .0788 ' | .0758 ' | .1516 ' | .146 |
| 44 | 33 | .00865' | .01770 ' | .0167 ' | .0375 " | .0804 | .06826" | .1556 ' | .1385 |
| 44 | 34 | .0088 ' | .0176 ' | .0164 ' | .03893' | .080 ' | .074 | .1526 | .1313 |
| 44 | 35 | .00809' | .0170 ' | .0155 ' | .03815' | .0802 ' | .07533 | .15066 | .137 |
| 44 | 36 | .0088 ' | .0176 ' | .01639' | .0349 | .0806 ' | .0774 | .1548 | .1398 |
| 44 | 37 | .00711' | .0184 ' | .01732' | .038 ' | .0790 | .06926' | .140 | .14 |
| 44 | 38 | .00862' | .01724 ' | .016 ' | .0391 ' | .0782 ' | .073 ' | .146 ' | .1248 |
| 44 | 39 | .0087 ' | .0186 ' | .0169 ' | .0361 ' | .07358' | .073 | .154 ' | .135 |
| 44 | 40 | .0082 ' | .0164 ' | .01559 | .0389 ' | .0810 ' | .0702 ' | .1404 ' | .136 |
| 44 | 41 | .00844' | .0182 ' | .01681' | .03434' | .06868' | .073 | .154 | .1252 |
| 44 | 42 | .00823' | .01706 ' | .0153 ' | .0385 ' | .0806 ' | .0669 ' | .1338 ' | .1347 |
| 44 | 43 | .0086 ' | .0180 ' | .0171 ' | .0340 ' | .0680 ' | .072 | .1492 | .141 |
| 44 | 44 | .00855' | .01710 ' | .01562' | .038 | .076 | .0672 | .1344 | .135 |
| 45 | 1 | – | .06 " | .03 " | .05 " | .18 | .09 | .34 | .17 |
| 45 | 2 | .010 " | .040 " | .020 " | .06 " | .20 | .10 | .36 ' | .18 ' |
| 45 | 3 | .014 " | .052 " | .026 " | .053 " | .188 | .094 | .26 ' | .181 ' |
| 45 | 4 | .012 " | .052 " | .026 " | .05391 | .138 " | .11 | .22 | .19 " |
| 45 | 5 | .0128 " | .038 " | .0241 " | .057 " | .114 " | .102 " | .212 | .179 ' |
| 45 | 6 | .012 " | .032 " | .02215" | .052 " | .112 " | .100 | .200 | .1813 |
| 45 | 7 | .012 " | .030 " | .022 " | .0525 " | .122 " | .095 " | .2052 | .17 |
| 45 | 8 | .0120 " | .0270 " | .021 " | .048 " | .114 " | .0898 " | .1836 ' | .17 |
| 45 | 9 | .011 " | .0238 " | .020 " | .050 " | .104 " | .088 ' | .176 ' | .164 " |
| 45 | 10 | .0115 " | .0244 " | .0192 " | .0464 " | .1012 " | .089 " | .182 ' | .170 |
| 45 | 11 | .01023" | .02252 " | .0198 " | .0446 " | .1020 " | .085 ' | .17702" | .16938' |

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| Sample sizes | | Unconditional level of significance (one or two sided) : one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 45 | 12 | .0114 " | .0228 " | .0201 " | .044 " | .088 " | .0856 ' | .182 | .158 |
| 45 | 13 | .01043 " | .02136 " | .0199 " | .04527" | .0972 " | .086 ' | .1770 ' | .156 |
| 45 | 14 | .0099 " | .024 " | .0193 " | .0412 " | .094 " | .086 | .180 ' | .157 |
| 45 | 15 | .010 " | .0224 " | .0175 " | .0465 " | .0930 " | .082 " | .172 ' | .148 |
| 45 | 16 | .0096 " | .02006 " | .0167 " | .043 " | .0904 " | .082 " | .166 ' | .15 |
| 45 | 17 | .010 ' | .020 ' | .019 " | .0439 ' | .0878 ' | .0840 | .1680 | .148 |
| 45 | 18 | .0096 " | .0192 " | .0188 " | .0415 ' | .0830 ' | .075 " | .160 ' | .1506 |
| 45 | 19 | .0102 " | .02070 " | .0175 " | .041 " | .082 " | .080 " | .160 " | .145 |
| 45 | 20 | .010 " | .020 " | .0173 " | .0411 " | .084 " | .081 " | .162 " | .15 |
| 45 | 21 | .00958 " | .020 " | .0176 " | .0402 ' | .0804 ' | .0778 ' | .162 " | .144 |
| 45 | 22 | .0093 " | .0208 " | .0176 " | .040 ' | .0816 " | .077 ' | .16326" | .146 |
| 45 | 23 | .00966 " | .01932 " | .0180 " | .0413 " | .0836 " | .0813 " | .1626 " | .145 |
| 45 | 24 | .0087 ' | .0174 ' | .0174 " | .0406 " | .0850 " | .0775 ' | .166 | .1460 |
| 45 | 25 | .00805 " | .01924 ' | .0156 " | .0413 " | .0846 ' | .0736 ' | .152 | .1378 |
| 45 | 26 | .00896 " | .01948 " | .0164 " | .03995" | .07990" | .076 | .152 | .142 |
| 45 | 27 | .0088 ' | .0176 ' | .0173 ' | .042 ' | .084 ' | .07884" | .158 ' | .1405 |
| 45 | 28 | .0092 " | .0188 " | .01705 " | .0394 " | .0788 " | .078 | .156 | .141 |
| 45 | 29 | .00772 " | .0178 ' | .017 " | .0372 " | .0840 ' | .0761 " | .1522 " | .145 |
| 45 | 30 | .0088 " | .01904 " | .0164 ' | .0395 ' | .0790 ' | .080 | .160 | .138 |
| 45 | 31 | .00867 ' | .0182 " | .0176 ' | .03887' | .07774' | .07614 | .1554 | .1410 |
| 45 | 32 | .00856 ' | .01810 ' | .014386" | .039 ' | .0856 | .0747 ' | .1512 ' | .142 |
| 45 | 33 | .00863 " | .01766 ' | .01654 " | .0403 | .084 | .0744 ' | .1488 ' | .143 |
| 45 | 34 | .00873 ' | .01746 ' | .017 ' | .0383 ' | .07868" | .07092" | .152 ' | .143 |
| 45 | 35 | .0088 ' | .0180 ' | .0164 ' | .0394 ' | .0794 ' | .072 | .154 | .1349986 |
| 45 | 36 | .0086 ' | .01762 ' | .0163 ' | .0387 ' | .0806 | .0742 | .150 | .137 |
| 45 | 37 | .00837 ' | .01674 ' | .0164 ' | .0366 | .078 ' | .076 | .1534 ' | .139 |
| 45 | 38 | .00768 ' | .0154 ' | .0144 ' | .0386 | .0772 | .0696 | .1438 " | .137 |
| 45 | 39 | .00852 ' | .017538' | .016 ' | .0397 ' | .07946' | .074 | .148 | .1276 |
| 45 | 40 | .00715 ' | .0170 ' | .0165 ' | .0373 ' | .0746 ' | .0736 ' | .1552 ' | .1337 |
| 45 | 41 | .0083 ' | .0174 ' | .0158 ' | .03980' | .0834 ' | .0704 ' | .1408 ' | .136 |
| 45 | 42 | .00699 ' | .0172 ' | .01706 ' | .0358 ' | .0716 ' | .074 | .1564 ' | .1278 |
| 45 | 43 | .0083 ' | .01728 ' | .0156 ' | .0384 ' | .0794 ' | .0688 ' | .1376 ' | .135 |
| 45 | 44 | .00719 ' | .01438 ' | .01684 ' | .03536' | .07134' | .074 ' | .1518 ' | .12267 |
| 45 | 45 | .0085 ' | .0170 ' | .0157 ' | .039 | .078 | .068 | .136 | .134 |
| 46 | 1 | – | .06 " | .03 " | .05 " | .18 | .09 | .38 | .19 |
| 46 | 2 | .010 " | .03730 " | .01865 " | .05 " | .194 | .097 | .34 ' | .17 |
| 46 | 3 | .013 " | .0492 " | .0246 " | .0616 " | .18 | .106 | .246 ' | .18 |
| 46 | 4 | .011 " | .048 " | .024 " | .057 " | .126 " | .104 ' | .234 | .19 |
| 46 | 5 | .0131 " | .0452 " | .0227 " | .051 ' | .12126" | .099 " | .22 | .186 |
| 46 | 6 | .013 " | .0288 " | .025 " | .052 " | .128 " | .0968 " | .22 | .180 |
| 46 | 7 | .0115 " | .02640 " | .024 " | .050 " | .110 " | .093 | .202 ' | .183 |
| 46 | 8 | .0117 " | .028 " | .0213 " | .0527 " | .1054 " | .087 | .184 ' | .17036 |
| 46 | 9 | .0107 " | .028 " | .020 " | .048 " | .098 " | .090 " | .1972 | .174 |
| 46 | 10 | .0107 " | .0228 " | .0216 " | .0469 " | .098 ' | .092 " | .192 " | .16 |
| 46 | 11 | .0105 " | .0246 " | .0208 " | .045 " | .0930 ' | .086 " | .180 " | .1584 |
| 46 | 12 | .0102 " | .0204 " | .0184 " | .047 " | .0972 " | .0837 " | .172 ' | .153 |
| 46 | 13 | .009479" | .0228 " | .0185 " | .0444 " | .08962" | .08147 | .178 ' | .1480 |
| 46 | 14 | .0102 " | .02138 " | .0174 " | .044 " | .0930 " | .087 | .174 | .1508 |
| 46 | 15 | .00974 " | .0204 " | .019 " | .04336" | .08672" | .0787 ' | .1574 ' | .156 |
| 46 | 16 | .0091 " | .0182 " | .0192 " | .042 " | .0896 " | .083 ' | .172 " | .153 |

If the chi-square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not-rejection (needless not-rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2-tables (Fisher's test).

| Sample sizes | | Unconditional level of significance (one or two sided) : one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 46 | 17 | .00976 " | .01952 " | .0179 " | .0439 ' | .092 | .080 | .170 | .152 |
| 46 | 18 | .0095 " | .0206 " | .0178 " | .0434 " | .0868 " | .078 | .162 | .148 |
| 46 | 19 | .0093 " | .0194 " | .0166 " | .0403 " | .084 ' | .07982" | .160 " | .15 |
| 46 | 20 | .0092 " | .0184 " | .0185 " | .04230' | .08460' | .0773 " | .160 | .148 |
| 46 | 21 | .00948 " | .01896 " | .0181 ' | .0435 " | .0870 " | .0734 " | .1652 ' | .1386 |
| 46 | 22 | .00926 " | .01852 " | .016 " | .0417 ' | .0872 " | .0722 ' | .1444 ' | .13351 |
| 46 | 23 | .0094 " | .0194 " | .0161 " | .041 ' | .088 ' | .07344" | .14688" | .134 |
| 46 | 24 | .0095 " | .0190 " | .0164 " | .0386 ' | .0772 ' | .0757 " | .1542 ' | .1401 ' |
| 46 | 25 | .0092 " | .0184 " | .01729 " | .04083' | .08166' | .078 ' | .156 ' | .143 |
| 46 | 26 | .0087 " | .0174 " | .0180 " | .042 " | .084 " | .079 ' | .158 ' | .144 |
| 46 | 27 | .00896 " | .0184 " | .0166 ' | .0385 " | .0776 " | .076 ' | .1548 " | .1443 |
| 46 | 28 | .0082 ' | .01794 ' | .016742" | .0397 ' | .0794 ' | .0752 | .1504 | .144 |
| 46 | 29 | .00889 ' | .01778 ' | .0155 " | .0386 ' | .080 ' | .0735 " | .1550 " | .147 |
| 46 | 30 | .00816 " | .0172 ' | .01696 " | .039 " | .0798 ' | .0730 " | .1460 " | .140956" |
| 46 | 31 | .00868 " | .01906 " | .0173 ' | .038 ' | .076 ' | .076 ' | .156 | .14305 " |
| 46 | 32 | .0088 ' | .01766 ' | .01716 ' | .0404 ' | .082 ' | .0743 " | .1540 | .14 |
| 46 | 33 | .0075 " | .0176 ' | .01545 " | .041 ' | .082 ' | .075 | .150 | .142 |
| 46 | 34 | .0086 ' | .01736 ' | .0170 " | .0350 ' | .082 | .0737 ' | .150 ' | .140 |
| 46 | 35 | .0086 ' | .0172 ' | .0173 ' | .038 ' | .07710 | .07298" | .148 | .140 |
| 46 | 36 | .00754 ' | .0168 ' | .01458 ' | .039 ' | .078 ' | .073 | .1522 | .137 |
| 46 | 37 | .0086 ' | .0176 ' | .0161 ' | .040 | .080 | .0731 | .150 | .138 |
| 46 | 38 | .0085 ' | .0170 ' | .01647 ' | .037 | .0770 ' | .0643 ' | .1518 ' | .141 |
| 46 | 39 | .00818 ' | .01670 ' | .0153 ' | .0394 | .0790 ' | .071 | .1470 | .138407' |
| 46 | 40 | .00856 ' | .0176 ' | .0164 ' | .0331 ' | .0762 ' | .0718 ' | .1436 ' | .1296 |
| 46 | 41 | .00770 ' | .0162 ' | .0140 ' | .03732' | .07464' | .064 | .1474 ' | .134 |
| 46 | 42 | .0085 ' | .01802 ' | .0164 | .0381 ' | .0810 ' | .071 ' | .142 ' | .13834 |
| 46 | 43 | .00752 ' | .01504 ' | .01347 ' | .0366 ' | .0732 ' | .072 | .1524 ' | .129 |
| 46 | 44 | .0084 ' | .017126' | .01637 ' | .0383 ' | .0818 ' | .0697 ' | .1412 ' | .136 |
| 46 | 45 | .00765 ' | .01544 ' | .01364 ' | .0366 ' | .07352' | .0751 ' | .1502 ' | .1251 |
| 46 | 46 | .00902 ' | .01804 ' | .0164 ' | .038 ' | .076 ' | .070 | .140 | .135 |
| 47 | 1 | – | .06 " | .03 " | .05 " | .18 | .09 | .370 | .185 |
| 47 | 2 | .015 " | .050 " | .025 " | .05 " | .186 | .093 | .34 ' | .17 ' |
| 47 | 3 | .013 " | .048 " | .024 " | .053 " | .20 | .10 | .26 | .176 ' |
| 47 | 4 | .014 " | .052 " | .026 " | .056 " | .130 " | .097 ' | .208 | .176 ' |
| 47 | 5 | .0134 " | .040 " | .0243 " | .056 " | .126 " | .10 | .218 ' | .187 " |
| 47 | 6 | .013 " | .032 " | .022 " | .05 " | .118 " | .094 " | .206 ' | .177 ' |
| 47 | 7 | .012 " | .028 " | .022 " | .054 " | .1160 | .1055 " | .2110 " | .17 ' |
| 47 | 8 | .0116 " | .0232 " | .01969 ' | .0506 " | .114 " | .093 " | .186 " | .18 |
| 47 | 9 | .0112 " | .024 " | .0217 " | .0478 " | .108 " | .091 | .182 | .167 ' |
| 47 | 10 | .0111 " | .026 " | .0202 " | .048 ' | .104 " | .0883 | .1766 | .156 |
| 47 | 11 | .0103 " | .02158 " | .0205 " | .0469 ' | .0938 ' | .0893 " | .1786 " | .165 |
| 47 | 12 | .0104 " | .024 " | .020 " | .0447 " | .0894 " | .084 ' | .180 " | .16 |
| 47 | 13 | .0105 " | .0210 " | .019 " | .046 " | .092 " | .086 ' | .172 ' | .160 |
| 47 | 14 | .010117" | .020234" | .019 " | .04432" | .092 " | .0823 " | .1646 " | .162 |
| 47 | 15 | .0095 " | .0230 " | .0175 " | .047 " | .0954 " | .082 " | .1692 " | .15 |
| 47 | 16 | .010 " | .020 " | .0182 " | .0442 " | .090 " | .0816 ' | .1648 ' | .159 |
| 47 | 17 | .0100 " | .0202 " | .0190 " | .0434 " | .0868 " | .079 " | .1594 " | .15 |
| 47 | 18 | .0093 " | .0196 " | .0163 " | .0415 " | .088 " | .0792 ' | .162 ' | .15 |
| 47 | 19 | .00887 " | .020 ' | .0194 " | .0421 ' | .0842 ' | .080 " | .160 " | .15 |
| 47 | 20 | .0083 " | .0184 ' | .0176 ' | .042 " | .084 " | .079 " | .158 " | .140 |

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Raised conditional level of significance for 2×2-tables (Fisher's test).

Unconditional level of significance (one or two sided) :

| Sample sizes | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s .10 |
|---|---|---|---|---|---|---|---|---|---|
| 47 | 21 | .0081 " | .0190 ' | .01782" | .0426 ' | .086 ' | .0842 ' | .1684 ' | .1467 |
| 47 | 22 | .00817" | .01988" | .0179 " | .0412 ' | .086 ' | .0796 " | .166 | .147 |
| 47 | 23 | .00849" | .01698" | .019 " | .041 " | .086 " | .078 ' | .1610 | .145 |
| 47 | 24 | .00893" | .01786" | .019 " | .0404 " | .084 " | .0768 ' | .162 ' | .147 |
| 47 | 25 | .0088 ' | .0184 ' | .0155 " | .0413 " | .0856 " | .0703 ' | .1570 ' | .145 |
| 47 | 26 | .00813" | .0190 ' | .0174 " | .0387 ' | .0774 ' | .0756 | .1512 | .141 |
| 47 | 27 | .00840" | .01856" | .0167 " | .040 ' | .0812 " | .0776 | .1552 | .14 |
| 47 | 28 | .0084 ' | .0186 " | .01575' | .043 " | .086 " | .0752 ' | .1554 | .1437 |
| 47 | 29 | .0093 " | .01870" | .0177 ' | .03815' | .080 ' | .0776 ' | .1552 ' | .1391 |
| 47 | 30 | .00846' | .0170 ' | .0163 " | .040 | .0826 " | .075382" | .150764" | .143 |
| 47 | 31 | .0084 " | .0180 " | .0162 ' | .039 " | .078 " | .076 ' | .15630 ' | .1436 |
| 47 | 32 | .0086 ' | .0182 ' | .0167 ' | .0397 ' | .0812 ' | .0736 ' | .152 | .141 |
| 47 | 33 | .0085 ' | .0176 ' | .0166 ' | .04036' | .08072' | .0736 ' | .1472 ' | .141 |
| 47 | 34 | .00804' | .01724' | .0160 ' | .040 ' | .080 ' | .0737 | .154 ' | .138 |
| 47 | 35 | .0084 ' | .01758' | .0167 ' | .0371 " | .080 | .0674 " | .1486 ' | .138 |
| 47 | 36 | .0085 ' | .0170 ' | .017 ' | .0387 ' | .082 ' | .07266 ' | .14532 ' | .1417 |
| 47 | 37 | .00815' | .0166 ' | .0154 ' | .038 ' | .076 ' | .073 | .148 | .1385 |
| 47 | 38 | .00876' | .0178 ' | .0166 ' | .0339 ' | .0756 ' | .074 | .148 | .1378 |
| 47 | 39 | .00701' | .0176 ' | .0163 ' | .0381 | .078 ' | .06666 | .148 | .1394 |
| 47 | 40 | .00826' | .01730' | .01574' | .03785' | .07570' | .071 | .146 | .1371 |
| 47 | 41 | .00859' | .0174 ' | .017 | .0346 ' | .0762 ' | .072 ' | .144 ' | .1317 |
| 47 | 42 | .00821' | .01642' | .0149 ' | .0381 ' | .0762 ' | .06632 ' | .138 | .135 |
| 47 | 43 | .00865' | .01796' | .0161 ' | .0387 ' | .0774 ' | .0708 ' | .144 ' | .1384 |
| 47 | 44 | .00800' | .01600' | .0143 ' | .0365 ' | .0752 ' | .073 | .146 | .131 |
| 47 | 45 | .0087 ' | .0178 ' | .016 ' | .039 ' | .0790 ' | .0694 ' | .1446 | .137 |
| 47 | 46 | .00807' | .01614' | .01445' | .0371 | .0744 ' | .0746 ' | .1508 | .1271 |
| 47 | 47 | .0086 ' | .0172 ' | .01606' | .039 | .078 | .070 | .140 | .136 |
| 48 | 1 | – | .06 " | .03 " | .05 " | .18 | .09 | .36 | .18 |
| 48 | 2 | .014 " | .046 " | .023 " | .05 " | .18 | .09 | .366 | .183 |
| 48 | 3 | .012 " | .0454 " | .0227 " | .05 " | .192 | .10 | .244 | .185 |
| 48 | 4 | .0135 " | .052 " | .026 " | .055 " | .1218 " | .106 " | .230 | .18 |
| 48 | 5 | .012 " | .0448 " | .024 " | .052 " | .120 " | .103 | .22 | .18 |
| 48 | 6 | .0119 " | .0286 " | .0244 " | .053 " | .118 ' | .10 | .2130 " | .1759 |
| 48 | 7 | .0116 " | .02594" | .0231 " | .052 " | .1104 ' | .094 ' | .1996 " | .174 |
| 48 | 8 | .0123 " | .026 " | .023 " | .052 " | .1096 " | .0965 " | .1942 " | .17 |
| 48 | 9 | .01056" | .0270 " | .0216 " | .0498 " | .0996 " | .09854 " | .19708 " | .16 |
| 48 | 10 | .0122 " | .0244 " | .0200 " | .0476 " | .1010 " | .0835 ' | .182 " | .167 |
| 48 | 11 | .0097 " | .0248 " | .0196 " | .04866" | .09732" | .0837 " | .1732 ' | .1624 |
| 48 | 12 | .010 " | .02208" | .0202 " | .044 " | .096 " | .086 " | .172 " | .162 |
| 48 | 13 | .01063" | .02222" | .0216 " | .044 " | .088 " | .0814 ' | .18 | .162 |
| 48 | 14 | .0100 " | .0208 " | .0192 " | .047 " | .094 " | .08433 ' | .178 ' | .155 |
| 48 | 15 | .0100 " | .0208 " | .0198 " | .0436 " | .0896 " | .0816 " | .166 " | .154 |
| 48 | 16 | .0097 " | .0194 " | .01924" | .0409 " | .0818 " | .0847 " | .1706 ' | .153 |
| 48 | 17 | .009 " | .018 " | .01735" | .0427 " | .0908 " | .08 ' | .172 ' | .1493 |
| 48 | 18 | .00872" | .0198 ' | .01865" | .0454 " | .0908 " | .078 " | .164 | .148 |
| 48 | 19 | .0089 ' | .0190 " | .0183 " | .043 " | .086 " | .0745 " | .1608 | .153 |
| 48 | 20 | .00913" | .01826" | .0177 " | .041 " | .0840 " | .0788 " | .158 " | .15 |
| 48 | 21 | .0095 " | .0190 " | .0174 " | .040 " | .084 | .0754 ' | .1622 ' | .144 |
| 48 | 22 | .0094 " | .0188 " | .0168 " | .0388 " | .078 ' | .0764 " | .1528 " | .1432 |
| 48 | 23 | .0093 " | .0192 " | .0170 " | .0385 " | .0770 " | .0751 | .152 | .1383 |

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Raised conditional level of significance for 2×2-tables (Fisher's test).

| Sample sizes | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| | | Unconditional level of significance (one or two sided) : | | | | | | | |
| 48 | 24 | .0097 " | .02008" | .0173 " | .0393 " | .07902' | .0766 | .1532 | .138 |
| 48 | 25 | .0081 ' | .0162 ' | .0163 " | .0404 " | .0808 " | .0784 ' | .15774' | .1420 ' |
| 48 | 26 | .0088 ' | .0176 ' | .0177 " | .0410 " | .0858 " | .077 | .1618 ' | .145 |
| 48 | 27 | .0087 " | .0192 ' | .0160 ' | .039 ' | .0872 " | .0723 ' | .1470 ' | .1343 ' |
| 48 | 28 | .0089 " | .0182 " | .017 ' | .0387 " | .0806 ' | .0773 | .1546 | .143 |
| 48 | 29 | .0088 ' | .0182 " | .01685 " | .039 ' | .08052" | .0713 ' | .14946" | .1395 ' |
| 48 | 30 | .0090 " | .0180 " | .0152 " | .0402 ' | .0808 ' | .077 | .154 | .145 |
| 48 | 31 | .0082 " | .01766' | .01684 ' | .0382 " | .080 | .0747 ' | .1564 " | .13606' |
| 48 | 32 | .0090 " | .01876' | .0170 " | .0398 ' | .084 ' | .074 ' | .154 ' | .143 |
| 48 | 33 | .00882 " | .01764" | .0161 ' | .03935' | .08014" | .074 ' | .148 ' | .1397 |
| 48 | 34 | .00825 ' | .0172 ' | .01473 " | .0391 ' | .080 ' | .072 ' | .15466" | .138 |
| 48 | 35 | .00838 ' | .01682' | .0163 ' | .0397 ' | .0804 ' | .0754 ' | .1528 ' | .138 |
| 48 | 36 | .00827 ' | .0170 ' | .016508 ' | .0383 | .0786 | .070 " | .152 | .142 |
| 48 | 37 | .008423' | .01692' | .0167 ' | .039 ' | .0810 ' | .073 | .1474 | .1321 |
| 48 | 38 | .008203' | .0166 ' | .0161 ' | .038 ' | .076 ' | .0735 ' | .1488 ' | .138 |
| 48 | 39 | .0085 ' | .01756' | .0167 ' | .0354 ' | .07486' | .073 | .146 | .136 |
| 48 | 40 | .00753 ' | .0168 ' | .0140 ' | .03755' | .07826' | .0686 ' | .1470 | .139 |
| 48 | 41 | .00863 ' | .01726' | .01569 ' | .038 ' | .076 ' | .072 | .1472 | .1384 |
| 48 | 42 | .00687 ' | .0176 ' | .0162 ' | .03595' | .0726 ' | .0728 | .1456 | .133 |
| 48 | 43 | .0084 ' | .0168 ' | .0154 ' | .03733' | .0778 ' | .0678 | .13736' | .134 |
| 48 | 44 | .00854 ' | .0176 ' | .0166 ' | .03328' | .0760 ' | .0714 ' | .1482 | .138 |
| 48 | 45 | .0081 ' | .01690' | .0149621' | .0375 ' | .0776 ' | .06345' | .146 | .131 |
| 48 | 46 | .00862 ' | .01790' | .0166 ' | .03219' | .078 ' | .0709 ' | .1476 | .1354 |
| 48 | 47 | .0081 ' | .01680' | .01504 ' | .0366 ' | .0768 ' | .06209' | .12418' | .1285 |
| 48 | 48 | .00691 ' | .01382' | .0165 ' | .0328 ' | .0656 ' | .071 | .142 | .137 |
| 49 | 1 | – | .050 " | .025 " | .05 " | .170 | .085 | .354 | .177 |
| 49 | 2 | .013 " | .0440 " | .0220 " | .055 " | .20 | .10 | .34 ' | .17 ' |
| 49 | 3 | .011 " | .048 " | .024 " | .058 " | .20 | .10 | .260 | .177 ' |
| 49 | 4 | .0129 " | .04956" | .02478 " | .056 " | .132 " | .10 " | .208 | .18 |
| 49 | 5 | .013 " | .0410 " | .025 " | .054 " | .126 " | .1029 " | .22 | .186 ' |
| 49 | 6 | .0132 " | .032 " | .0226 " | .052 " | .1130 ' | .096 ' | .2052 | .185 |
| 49 | 7 | .0114 " | .028 " | .0215 " | .051 " | .116 ' | .0935 " | .212 | .18 |
| 49 | 8 | .0112 " | .026 " | .023 " | .049 " | .114 ' | .091 " | .186 ' | .1748 ' |
| 49 | 9 | .0103 " | .024 " | .0202 " | .047 " | .110 " | .0904 ' | .190 " | .169 ' |
| 49 | 10 | .0105 " | .0258 " | .022 " | .047 " | .098 " | .084 " | .180 ' | .161 |
| 49 | 11 | .011 " | .022 " | .0208 " | .045 " | .094 " | .090 " | .180 " | .154 ' |
| 49 | 12 | .0103 " | .0246 " | .0182 " | .0461 " | .0922 " | .085 " | .186 " | .151 |
| 49 | 13 | .010 " | .0218 " | .0174 " | .0442 " | .096 " | .085 " | .170 " | .16 |
| 49 | 14 | .0105 " | .0214 " | .0174 " | .046 " | .092 " | .082 " | .174 ' | .151 |
| 49 | 15 | .0095 " | .0222 " | .0186 " | .04114" | .088 " | .083 ' | .166 ' | .156 |
| 49 | 16 | .010 " | .02190" | .01794 " | .0452 " | .09066" | .0823 ' | .1646 ' | .16 |
| 49 | 17 | .0091 " | .0206 " | .018 " | .0427 " | .0882 " | .079 ' | .158 ' | .158 |
| 49 | 18 | .0099 " | .0208 " | .0188 " | .042 ' | .084 ' | .0777 " | .1564 " | .153 |
| 49 | 19 | .0096 " | .0194 " | .0182 " | .0439 " | .0878 " | .078 ' | .1604 " | .146 |
| 49 | 20 | .0094 " | .0188 " | .01666 " | .0396 " | .0848 ' | .078 " | .1594 " | .150 |
| 49 | 21 | .0094 " | .0194 " | .0177 " | .040 ' | .080 ' | .075 " | .156 ' | .1425 |
| 49 | 22 | .0091 " | .0184 " | .0180 ' | .0421 ' | .0842 ' | .070 " | .156 | .147 |
| 49 | 23 | .00911 " | .01822" | .0173 ' | .0416 ' | .086 ' | .079 | .162 ' | .148 |
| 49 | 24 | .0088 " | .0184 " | .0173 ' | .042 ' | .0866 " | .0779 " | .1626 | .149 |
| 49 | 25 | .0091 " | .0188 " | .0160 ' | .0408 " | .08646" | .0697 " | .1394 " | .1496 |

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| Sample sizes | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 49 | 26 | .0091 " | .0182 " | .0172 " | .03778" | .07556" | .0742 " | .1484 " | .13385 |
| 49 | 27 | .00815 " | .0164 ' | .0173 " | .0396 " | .0798 " | .074 | .154 ' | .140 |
| 49 | 28 | .0086 " | .0172 " | .0170 " | .039 ' | .08106" | .0746 " | .1574 " | .139 |
| 49 | 29 | .0085 ' | .01746 ' | .0169 ' | .03891' | .07782' | .075 ' | .154 ' | .144 |
| 49 | 30 | .0086 ' | .01750 ' | .0160 ' | .0386 " | .080 ' | .076 ' | .1534 ' | .1416 |
| 49 | 31 | .0085 ' | .0178 ' | .0164 " | .039 ' | .07992" | .07346" | .152 | .1402 |
| 49 | 32 | .00859 " | .01760 " | .0160 ' | .038 " | .076 " | .07494' | .1506 " | .1427 |
| 49 | 33 | .0090 ' | .0180 ' | .0164 ' | .0401 ' | .0808 ' | .073 ' | .148 ' | .138 |
| 49 | 34 | .0085 ' | .0172 ' | .0174 " | .0384 ' | .0794 ' | .0711 ' | .152 | .138 |
| 49 | 35 | .0078 " | .01590 ' | .01569 " | .03936" | .07872" | .0744 | .1488 | .141 |
| 49 | 36 | .0082 ' | .01664 ' | .0160 ' | .0355 " | .078 ' | .074 ' | .148 ' | .139 |
| 49 | 37 | .0083 ' | .0174 ' | .01675 ' | .0383 " | .0786 ' | .0719 " | .148 | .1392 |
| 49 | 38 | .0076 ' | .01626 ' | .0145 ' | .03937' | .0794 ' | .0725 " | .1466 | .134 |
| 49 | 39 | .008244' | .016488' | .0160 ' | .038 ' | .076 ' | .073 ' | .14706" | .138 |
| 49 | 40 | .0087 ' | .0176 ' | .01615 ' | .0367 ' | .0740 ' | .073 | .146 | .138 |
| 49 | 41 | .00804 ' | .01636 ' | .01487 ' | .0380 ' | .0760 ' | .069 | .1424 ' | .138 |
| 49 | 42 | .00840 ' | .01680 ' | .016185' | .0385 | .0770 | .0713 | .146 | .124 |
| 49 | 43 | .00739 ' | .0156 ' | .0153 ' | .0362 ' | .0752 ' | .0732 | .1464 | .132 |
| 49 | 44 | .00833 ' | .01746 ' | .0155 ' | .0375 ' | .0792 ' | .0694 ' | .14096' | .1362632' |
| 49 | 45 | .007090' | .0158 ' | .0158 | .0347 ' | .072 ' | .072 ' | .1502 ' | .1213 |
| 49 | 46 | .0083 ' | .01730 ' | .0156 ' | .03706' | .0794 ' | .0654 ' | .1308 ' | .1323 " |
| 49 | 47 | .00709 ' | .01418 ' | .0161 ' | .0336 ' | .0672 ' | .0721 | .1486 | .136 |
| 49 | 48 | .0083 ' | .01728 ' | .0154 ' | .0377 | .0762 ' | .06405' | .12810' | .1296 |
| 49 | 49 | .0074 ' | .0148 ' | .0165 ' | .0341 ' | .0682 ' | .070 | .140 | .139 |
| 50 | 1 | – | .048 " | .024 " | .05 " | .16 | .08 | .346 | .173 |
| 50 | 2 | .013 " | .048 " | .024 " | .053 " | .188 | .094 | .32 ' | .18 |
| 50 | 3 | .014 " | .044 " | .022 " | .05 " | .18 | .099 | .24 | .18 ' |
| 50 | 4 | .014 " | .052 " | .026 " | .052 " | .124 " | .101 " | .22 | .19 ' |
| 50 | 5 | .01222 " | .0372 " | .0234 " | .057 " | .128 " | .103 | .216 | .185 ' |
| 50 | 6 | .0122 " | .0288 " | .0228 " | .053 ' | .114 " | .1005 " | .218 | .179 ' |
| 50 | 7 | .013 " | .0270 " | .021 " | .052 " | .110 " | .0945 " | .2042 ' | .18 |
| 50 | 8 | .011 " | .0310 " | .0215 " | .048 " | .112 ' | .098 " | .2034 | .166 ' |
| 50 | 9 | .0115 " | .0262 " | .0218 " | .051 " | .1036 " | .0878 " | .1892 " | .163 ' |
| 50 | 10 | .011 " | .02618 " | .0207 " | .049 " | .098 " | .09 ' | .192 ' | .167 ' |
| 50 | 11 | .0106 " | .0246 " | .0199 " | .046 " | .098 ' | .0895 " | .1790 " | .16 |
| 50 | 12 | .0103 " | .0216 " | .0199 " | .044 " | .096 ' | .087 " | .178 " | .162 |
| 50 | 13 | .0109 " | .0238 " | .0186 " | .0436 " | .0890 " | .0807 ' | .1766 ' | .154 |
| 50 | 14 | .00972 " | .0214 ' | .0188 " | .0454 " | .0912 " | .082 " | .164 " | .1468 ' |
| 50 | 15 | .0100 " | .02092 " | .0182 " | .0438 " | .094 " | .083 ' | .166 ' | .148 |
| 50 | 16 | .009885" | .0208 " | .01847 " | .0427 " | .0854 " | .076 ' | .1734 " | .152 |
| 50 | 17 | .0095 " | .0190 " | .018 " | .040 " | .0920 " | .081 " | .170 ' | .1463 |
| 50 | 18 | .0090 " | .0180 " | .01856 " | .0422 ' | .088 " | .0793 " | .166 ' | .14283 |
| 50 | 19 | .0088 " | .02018 " | .0165 " | .0418 " | .0886 " | .077 | .1612 " | .1475 |
| 50 | 20 | .0090 " | .018136" | .0177 " | .042 ' | .086 ' | .0788 " | .1590 ' | .147 |
| 50 | 21 | .00841 " | .0190 ' | .0177 " | .041 " | .086 " | .0795 " | .1590 " | .150 |
| 50 | 22 | .0080 " | .0188 " | .0178 " | .041 | .082 | .0804 " | .1608 " | .145 |
| 50 | 23 | .007947" | .02100 " | .017 " | .0407 ' | .0814 ' | .0791 ' | .1582 ' | .143 |
| 50 | 24 | .0081 " | .0192 " | .0169 " | .03943" | .0812 " | .077 | .1594 " | .142 |
| 50 | 25 | .0085 " | .0170 " | .0178 " | .04045" | .0814 ' | .0776 " | .156 | .141 |
| 50 | 26 | .0087 " | .01846 " | .0165 " | .040 " | .0850 " | .0774 " | .160 ' | .1447 |

If the chi-square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not-rejection (needless not-rejection or unjustified rejection) of the null hypothesis.

Raised conditional level of significance for 2×2-tables (Fisher's test).

Unconditional level of significance (one or two sided) :

| Sample sizes | | one s. .005 | two s. .01 | one s. .01 | one s. .025 | two s. .05 | one s. .05 | two s. .10 | one s. .10 |
|---|---|---|---|---|---|---|---|---|---|
| 50 | 27 | .00864 ' | .01876 " | .01577" | .042 " | .084 " | .0783 | .1566 | .142 |
| 50 | 28 | .00885 " | .0184 ' | .0172 " | .0386 ' | .0772 ' | .0748' | .1496 ' | .1384 |
| 50 | 29 | .00862 " | .0176 " | .017 ' | .0392 " | .0794 ' | .077 | .154 | .141 |
| 50 | 30 | .0092 " | .0190 " | .0163 ' | .0366 ' | .0810 ' | .073 ' | .1478 ' | .140 |
| 50 | 31 | .0082 ' | .0172 ' | .01495" | .040 ' | .080 ' | .075 ' | .150 ' | .139 |
| 50 | 32 | .0080 " | .01674 ' | .0163 ' | .03731 " | .0784 ' | .0771" | .1542 " | .144 |
| 50 | 33 | .008396' | .016792' | .0163 " | .0404 " | .0820 " | .0744' | .150 ' | .139 |
| 50 | 34 | .0087 ' | .01764 ' | .0165 ' | .03927 ' | .07854 ' | .071 ' | .142 ' | .145 |
| 50 | 35 | .0083 ' | .0166 ' | .0168 ' | .038 ' | .078 ' | .0735" | .152 ' | .138 |
| 50 | 36 | .008204" | .01688 " | .01605" | .0382 ' | .0768 ' | .0720' | .154 | .139 |
| 50 | 37 | .00826 ' | .01652 ' | .0157 ' | .0370 " | .0770 ' | .067 " | .1442 ' | .138 |
| 50 | 38 | .00868 ' | .01736 ' | .0165 ' | .0384 ' | .0778 ' | .072 | .14698" | .138 |
| 50 | 39 | .008035' | .01632 ' | .01536' | .0389 ' | .0786 ' | .0721' | .148 | .1357 |
| 50 | 40 | .0082 ' | .0164 ' | .01593' | .03315 " | .0750 ' | .072 ' | .146 ' | .137 |
| 50 | 41 | .0072 ' | .0178 ' | .0163 ' | .03706 ' | .0760 ' | .0643 | .144 | .137 |
| 50 | 42 | .00817 ' | .01646 ' | .0152 ' | .038651' | .077302' | .070 ' | .146 ' | .137 |
| 50 | 43 | .00816 ' | .01728 ' | .0166 ' | .03301 ' | .07756 ' | .0715' | .14692' | .1272 |
| 50 | 44 | .00788 ' | .01588 ' | .01415' | .03728 ' | .07652 ' | .0735' | .1470 ' | .132 |
| 50 | 45 | .0086 ' | .0172 ' | .0161 ' | .0385 ' | .0804 ' | .0694 | .1408 ' | .1363 |
| 50 | 46 | .0076 ' | .0152 ' | .01332' | .0355 ' | .0710 ' | .073 ' | .152 ' | .1236 |
| 50 | 47 | .0085 ' | .01768 ' | .0156 ' | .0376 ' | .07986 ' | .0666' | .1332 ' | .1334 |
| 50 | 48 | .00753 ' | .0152 ' | .01316' | .03473 ' | .0696 ' | .0706' | .1496 | .136 |
| 50 | 49 | .00819 ' | .0170 ' | .01548' | .0388 ' | .07836 ' | .0658' | .1318 ' | .130 |
| 50 | 50 | .00786 ' | .01572 ' | .01362' | .0351 | .0702 | .071 | .142 | .136 |

If the chi-square approx. with correction for continuity is used, the tabulated raised significance levels marked ' ( " ) may cause needless not-rejection (needless not-rejection or unjustified rejection) of the null hypothesis.