

16th March 1934.

Professor Weinberg,
Uferstrasse 9,
Tubingen,
Germany.

Dear Professor Weinberg,

I think I understand, now, the material you have as Peter's school notes and see that the 9×5 contingency table, if used to compare the observed frequencies with those to be expected on the hypothesis of independence, using the existing marginal totals would give 32 degrees of freedom. Some of the cells of the table are unoccupied and it would be necessary to put these together in some way appropriate to the hypothesis to be tested so as to make the expectation in every cell equal at least to 5 units, since the χ^2 distribution is not very reliable when the expectations are less than this.

I do not see in any case how the number of degrees of freedom can be brought to the fractional value $3952 \times \frac{32}{45}$, or about 2, 544 but perhaps I have not understood which hypothesis it is you wish to test.

Yours sincerely,