

10.4: Chapter 10 Formulas

Goodness of Fit Test

$H_0 : p_1 = p_0, p_2 = p_0, \dots, p_k = p_0 .$

$H_1 : \text{At least one proportion is different.}$

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

$df = k - 1, p_0 = \frac{1}{k}$ or given %

TI-84: χ^2 GOF-Test

Test for Independence

$H_0 : \text{Variable 1 and Variable 2 are independent.}$

$H_1 : \text{Variable 1 and Variable 2 are dependent.}$

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

$df = (R - 1)(C - 1)$

TI-84: χ^2 -Test

One of the major selling points of that wholly remarkable travel book, the Hitchhiker's Guide to the Galaxy, apart from its relative cheapness and the fact that it has the words DON'T PANIC written in large friendly letters on its cover, is its compendious and occasionally accurate glossary. The statistics relating to the geo-social nature of the Universe, for instance, are deftly set out between pages nine hundred and thirty-eight thousand and twenty-four and nine hundred and thirty-eight thousand and twenty-six; and the simplistic style in which they are written is partly explained by the fact that the editors, having to meet a publishing deadline, copied the information off the back of a packet of breakfast cereal, hastily embroidering it with a few footnotes in order to avoid prosecution under the incomprehensibly tortuous Galactic Copyright laws.

(Adams, 2002)

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