Acerca de la enseñanza del teorema de Bayes [

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text (article)

Analítica

In most probability texts for undergraduates, exercises on Bayes theorem are solved by applying directly. This arid way of present-ing the subject makes unatractive and difficult to understand, and instead of capturing the interest of the students, a lack of motivation is the result. As a result there will be no interest on knowing what this theorem can offer in solving real life problems. The aim of this paper is to present an alternative and effective way to introduce Bayes theorem. To this end, we first use tree diagrams, which naturally generate Bayes theorem. Additionally, through the use of two-way tables the student can immediately verify the answer to the problem, since the same results are generated. To illustrate the proposed methodology, we solve the problem of determining the probability that a person infected with AIDS got the virus through one of three possible ways: sexual transmission, blood transfusions or needles in drug use, when the respective infection probabilities are known. Finally, the results of this methodology showed a positive impact on student response, because they developed greater ability, interest and motivation in the subject. Furthermore, it was possible to introduce the first step towards learning decision trees, which are an application of Bayes' Theorem
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