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The concept of the derivative of a function in the first year of university. (La concepción de derivada de una función en primer curso de universidad.)

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Summary: The learning of differential equations requires the mastering of some other mathematical concepts such as function, derivative of a function or integral. This paper presents the analysis of a questionnaire on the concept of derivative, used as a tool to establish the level of knowledge of first year students of the degree in chemistry from the University of La Laguna. This questionnaire was provided to students before the development of a teaching sequence based on problem solving, that had been elaborated to introduce the concept of ordinary differential equation. The analysis is focusing on the different uses of the concept and on the heuristic element and cognitive strategies that the students use when solving the questionnaire tasks.

Classification: I75 I45 I55 D45

Keywords: derivatives; integrals; differential equations