



# Ações do professor para a promoção do raciocínio matemático em aulas de cálculo diferencial e integral [

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text (article)

Análítica

Considering the development of reasoning as a central aspect in the process of learning mathematics, understanding ways to promote it and actions performed by the teacher in this process are important issues for investigations. In order to deepen these discussions, this article aims to understand how teacher's actions can contribute to mathematical reasoning students' development who study differential and integral calculus. Assuming a qualitative perspective of interpretative nature, we analyzed a class of this subject, in which it was promoted a discussion about an exploratory task involving a water and salt mixture concentration varying by the time, and, from it was introduced the concept of rational function and its long-run behavior. Six class excerpts are analyzed, based on a framework which classifies teacher's actions from four categories (inviting; guiding/ supporting; informing/suggesting; and challenging). As results, we recognized a continuous and increasing movement in the teacher's actions during the conduct of the discussion, highlighting the implications for the mathematical reasoning students' development and the concept of rational function understanding

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