Abstract: In this research, we examine how problem solving frameworks differ between Mathematics and Software Development. Our methodology is based on the assumption that the words used frequently in a book indicate the mental framework of the author. We compared word frequencies in a sample of 139 books that discuss problem solving. The books were grouped into three categories: Traditional Math, Applied Math, and Software Development. We obtained a list of the most frequent words in each category, and used these lists to describe three problem solving frameworks. Applied Math uses models and algorithms to solve problems. Traditional Math is more concerned with proving theorems. In the Software Development framework, customers provide the problem, and models and algorithms are used to create a software solution. Our findings have relevance in the development of approaches for teaching problem solving in Mathematics and Software Development courses.

Keywords: algorithm, Framework, model, problem, Software, solution, mathematics