

Abstract: This thesis deals with practical problems when solving tasks of linear programming using mathematical software Mathematica, Gams, R and Matlab. It describes the basic properties of solvers, packages and optimizing functions of these programs. The aim of the thesis is to compare computer times needed to solve problems of different sizes using the considered programs. We consider these time efficiencies with and without the time consumed by loading the input data. At the end of the thesis we find the most suitable program for each of the problems sizes and we give some recommendations for the practical use of these products when solving problems of linear programming.