

In practice we often have to solve optimization problems with several criteria. These problems are called multicriteria optimization problems. Such problems are presented in this thesis. It is important, whether parameters take unknown values at the moment of making decision. If these parameters are random variables, resulting problem is called stochastic multiobjective problem, otherwise it is called deterministic multiobjective problem. We describe how to choose some "good" solutions of deterministic problem. We investigate their relations as well. In the stochastic case we have to convert such problem to deterministic one. We introduce some possibilities how to do it. Then we are able to solve the problem. These concepts are demonstrated using examples. We present a numerical illustration as well (the Portfolio Selection problem).