

The thesis consists of two sections, the theoretical and the practical one. Theoretical part deals with 1. convex analysis, its important theorems including those concerning extreme points of convex sets, and also 2. mathematical solutions of fair division problems. It is shown whether and in what way are these areas related. The practical part of the work follows on results of the previous one with various exercises. Attempts have been made so as no theoretical knowledge is required to understand the formulation of the exercises.