

The diploma thesis describes four less known mathematical topics, which could be part of mathematical seminars at the secondary schools or mathematical camps, 1 Hippocrates lunes, Golden section, tangram and Columbus egg. Each topic is elaborated into a didactic material, which should function as a source of information for teachers. Two of the topics were trialled with secondary school students, which is dealt with in one of the chapters. The main part of the thesis focuses on the preparation and description of worksheets, which consist of a set of solved and commented upon tasks. The thesis also contains the results of a questionnaire aimed at finding out the content of mathematical seminars at some secondary schools in the Czech Republic.