

Abstract

This thesis examines the role of angle in the course of history of mankind. The introductory part of this thesis presents the historically first mentions of angles. The second and the third part pay attention to the development of tools and devices allowing practical measurement of angles. The fourth part follows the issue of introducing angle in textbooks of primary and secondary schools in the Czech Republic. It observes whether the topic of angle is imported in individual textbooks correspondingly or if the process in a textbook or textbooks differs considerably. The following parts of this thesis concentrate on various types of angles and pairs of angles and operations with them. Both arithmetic and graphic operations with angles are inspected. A substantial part of this thesis deals with trigonometric functions. This work comprises different manners of implementation and defining of trigonometric functions. Based on examples, this thesis demonstrates usage and significance of trigonometric functions and their properties in practical tasks. The penultimate chapter studies complex numbers. In this chapter, this thesis focuses primarily on complex numbers in trigonometric format and calculations with them. The final chapter holds a collection of exercises. This thesis is concluded by solutions and results to the exercise collection. One part referring to an English author, Edwin Abbott's book called *Flatland*, is also included in this thesis as means of curiosity and diversification. The book popularises geometry and provides non-traditional view not only on angle itself, but also on other flat structures.