

Abstract

The first chapters of this thesis deal not only with the history, but also with the present of the golden section. It details the first references on record, describe the beginning of its intuitive and later also intentional usage, designation and terminology, and examines its application into the modern world. It also relates the lives of several personalities, too, above all Euclid, Plato, Leonardo Fibonacci and Leonardo da Vinci.

Then the thesis describes the theoretical part aspects – expressions of the golden proportion and the golden number, as well as geometrical constructions on the basis of different default parameters. It investigates the golden figures and those which are derived from them and it shows connections between the golden section and Fibonacci numbers. In the following chapters the solid figures related to the golden section are examined.

The next part deals with practical application and contains my own research. It analyses the so-called 'magical aspect' of the golden section, i.e. if the figures designed according to this ratio are really the most delightful and the most appreciated ones.

Finally, few specimen exercises for the secondary students are shown.